Planning Commission
Special Meeting Agenda

Tuesday, January 18, 2022 at 5:30 pm

City of Carpinteria, Council Chamber

5775 Carpinteria Avenue

In-Person Meeting

IN RESPONSE TO THE GOVERNOR'S ISSUANCE OF EXECUTIVE ORDER N-07-21, WHICH FORMALLY RESCINDED CALIFORNIA'S STAY-AT-HOME ORDER ISSUED LAST IN MARCH 2020, EXECUTIVE ORDER N-08-21, AND SANTA BARBARA COUNTY HEALTH OFFICER ORDER 2021-10.3, THE CITY OF CARPINTERIA HAS MADE THE DECISION TO PROVIDE IN-PERSON ATTENDANCE AND PARTICIPATION OPTIONS FOR THIS MEETING.

To minimize the potential spread of the COVID-19 virus, the County of Santa Barbara is requiring all individuals to wear face coverings while inside the City Council Chambers, regardless of vaccination status.

Attendance/Viewing Options:

- Attend the in-person meeting in City Council Chambers at City Hall (5775 Carpinteria Ave.) Please note that, per Health Officer Order 2021-10.3, the County of Santa Barbara requires all individuals to wear face coverings while indoors, regardless of vaccination status.
- View the meeting live through the City's website (https://carpinteria.ca.us/city-hall/agendas-meetings) on your computer, tablet or smartphone.
- View the meeting on Government Access Television Channel 21 (broadcast live and rebroadcast on the Wednesday and the Saturday following the meeting at 8:00 p.m. and 5:00 p.m., respectively).

Public Comments:

- Provide a live public comment during the in-person meeting in City Council Chambers at City Hall (5775 Carpinteria Ave.). Please note the City has the discretion to limit the speaker's time for any meeting or agenda matter. Typically, the practice has been three minutes per speaker on each item. Regardless of vaccination status, individuals providing in-person public comment are required to

wear face coverings while inside the City Council Chambers, including while providing public comment. If you fall under the exemption criteria for wearing a face covering indoors per Heath Officer Order 2021-10.3, the City strongly recommends you provide public comment through one of the alternative means provided below.

- Submit a written comment (as either a general public comment or on a specific agenda item) to be distributed to Planning Commissioners by **12:00 P.M. on the day of the meeting** by either submitting your comment via (1) email to PublicComment@ci.carpinteria.ca.us, or (2) the **eComment** link on the City's agenda website (https://carpinteria.ca.us/city-hall/agendas-meetings). Please reference the agenda item to which your comment pertains. Note that written comments will not be read into the record during the meeting.

Please note that the City will make every effort to make the meeting accessible; however, if one of the above attendance/viewing or public comment options is unavailable due to technological issues, you are invited to take advantage of one of the other participation options outlined above (including attending and providing public comment in-person in the City Council Chambers). Additional options may be made available at the meeting.

As the situation with COVID-19 continues to evolve, the City will provide updates on any changes to this policy as soon as possible. The public is referred to the City's website at www.carpinteria.ca.us for the latest COVID-19 policies and information. The City of Carpinteria thanks you in advance for taking all precautions to prevent spreading the COVID-19 virus.

THE PLANNING COMMISSION RESERVES THE RIGHT TO CHANGE THE ORDER IN WHICH ITEMS ARE HEARD. APPLICANTS NOT IN ATTENDANCE WHEN THEIR ITEM IS CALLED MAY HAVE THEIR ITEM CONTINUED TO THE NEXT REGULAR MEETING.

Any information presented to the Planning Commission by the public on any agenda item and during Public Comment using electronic materials must be arranged with staff. Electronic materials must be provided to staff a minimum of two business days prior to the meeting.

Any written, printed or electronic material and/or exhibit presented at this meeting becomes the property of the City, and a copy must be provided to City staff.

Planning Commissioners
Jane L. Benefield, Chair
Glenn La Fevers, Vice-Chair
John Callender
John Moyer
David Allen

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

INTRODUCTIONS, PRESENTATIONS, ANNOUNCEMENTS

PUBLIC COMMENT

This time on the agenda provides an opportunity for the public to address the Planning Commission on items within the jurisdiction of the Commission and not listed on other sections of the agenda. Please limit comments to no more than five minutes. Depending on the number of speakers wishing to make comments, the Chair may further limit the time available to each speaker to control the amount of time spent on this part of the agenda. If you wish to speak on a CONSENT CALENDAR item, please do so during this part of the meeting.

Please be advised that California law does not allow the Planning Commission to discuss or take action on any issue presented by the public during this portion of the meeting. The Commission may ask a question for clarification, provide a brief response to public comment, refer the matter to staff for review and a later report or direct staff to place an item on a future agenda.

The City is not responsible for the content of statements made during the public comment period or the factual accuracy of any such statements.

CONSENT CALENDAR

Items on the Consent Calendar are considered to be routine and are normally enacted by one unanimous vote of the Commission. Individual items may be removed and considered separately at the request of a Commissioner. Any item removed from the Consent Calendar will be added to another section of the agenda.

1) Minutes of the regular Planning Commission meeting held December 6, 2021

NEW PUBLIC HEARING

If you have questions regarding any project listed below, please contact the Community Development Department at (805) 755-4410.

Review Procedure:

- Disclosure of Ex Parte Communications
- Staff Presentation
- Public Hearing
- Planning Commission Action

2) Project: Rincon Trail, Project # 19-2015-CUP/CDP
Location: Connection of the east end of Carpinteria Avenue to Rincon Beach County Park
Applicant: Matt Roberts, Parks, Recreation and Public Facilities Director,
Planner: Nick Bobroff

Hearing on the request of Matt Roberts, Parks, Recreation and Public Facilities Director for the City of Carpinteria to consider Project 19-2015-CUP/CDP (application filed October 17, 2019) for a Conditional Use Permit and a Coastal Development Permit to allow the construction of the 850-linear foot segment of the proposed Rincon Trail project located in the City of Carpinteria (the remaining 1,900 feet of the proposed trail is located within the jurisdiction of the County of Santa Barbara); and to certify the Environmental Impact Report (EIR) prepared for the entirety of the project pursuant to the California Environmental Quality Act (CEQA) Guidelines. The EIR and all documents referenced therein may be reviewed at the Community Development Department, 5775 Carpinteria Avenue, Carpinteria. The EIR is also available for review on the City website at: https://carpinteriaca.gov/public-works/engineering-division/rincon-multi-use-trail/ . The application involves City and Caltrans rights-of-way located at the eastern end of the City of Carpinteria, and parcels owned by Union Pacific Railroad and County of Santa Barbara, located outside of the City of Carpinteria in unincorporated Santa Barbara County (APNs 001-220-032, 001-220-092, 001-220-100, and 001-220-101).

OTHER BUSINESS

MATTERS PRESENTED BY COMMISSIONERS

DIRECTOR'S REPORT - None

ATTENDANCE OF PLANNING COMMISSIONERS FOR THE NEXT MEETING of February 7, 2022

ADJOURNMENT

NOTES

All actions of the Planning Commission may be appealed to the City Council. Appeals must be filed with the City Clerk within 10 calendar days of the Commission's action.

If you challenge any of the Planning Commission's decisions related to the agenda items above in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence to the Planning Commission prior to the public hearing.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact Lorena Esparza in the Community Development Department at (805) 755-4410 (LorenaE@ci.carpinteria.ca.us) or the California Relay Service at (866) 735-2929. Notification 2 business days prior to the meeting will enable the City to make reasonable arrangements for accessibility to this meeting.

This agenda was posted on Thursday, February 3, 2022 in the Community Development Department, on the City Hall Public Notices Board, and on the Internet.

MINUTES, PLANNING COMMISSION
CITY OF CARPINTERIA
CARPINTERIA, CALIFORNIA

DRAFT

December 6, 2021
Regular Meeting
5:30 P.M.

CALL TO ORDER and ROLL CALL The meeting was called to order at 5:30 p.m. by Chair Benefield. **Commissioners Present:** Jane L. Benefield, Chair Glenn La Fevers, Vice-Chair John Callender John Moyer David Allen **Others Present:** Steve Goggia, Community Development Director Nick Bobroff, Principal Planner Fred Luna, Caltrans Shawn Kowalewski, MNS Engineers	CALL TO ORDER & ROLL CALL
PLEDGE OF ALLEGIANCE – Chair Benefield led the flag salute.	PLEDGE
INTRODUCTIONS, PRESENTATIONS, ANNOUNCEMENTS - None	ANNOUNCEMENTS
PUBLIC COMMENT - None	PUBLIC COMMENT
CONSENT CALENDAR 1) Minutes of the regular Planning Commission meeting held October 4, 2021 MOTION Upon a motion by Commissioner Allen, seconded by Commissioner Moyer, the Planning Commission voted 4-0-1to approve the minutes of the regular Planning Commission meeting held October 4, 2021, as presented (Moyer, La Fevers, Allen and Benefield voted yes; Callender abstained).	CONSENT CALENDAR
NEW PUBLIC HEARING 2) Project: Santa Claus Lane Bike and Pedestrian Path, 21-2122-CUP/CDP Project Location: US Highway 101 right-of-way and 4100 block of Carpinteria Ave right-of-way Applicant: Erinn Silva, GPA Consulting for Caltrans Planner: Nick Bobroff Hearing on the request of Erinn Silva, GPA Consulting, on behalf of California Department of Transportation (Caltrans), District 5, to	NEW PUBLIC HEARING

consider Project 21-2122-CUP/CDP (application filed August 12, 2021) for a Conditional Use Permit and a Coastal Development Permit to allow the construction of a 0.8-mile Class 1 multi-use path along the southern edge of the US Highway 101 southbound right-of-way and the 4100 block of Carpinteria Avenue to allow for a dedicated bike and pedestrian path connection between the City of Carpinteria and Santa Claus Lane in unincorporated Santa Barbara County under the provisions of the Commercial Planned Development and Transportation Corridor Wetland Overlay Zone Districts; and to accept the Final Mitigated Negative Declaration (MND) prepared (CEQA) Guidelines. The certified Final MND may be reviewed at the Carpinteria City Hall, Community Development Department, 5775 Carpinteria Avenue, Carpinteria. The Final MND is also available for review on the Caltrans website at https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/santa-claus-lane-bike-path

DISCLOSURE OF EX-PARTE COMMUNICATIONS – None

Principal Planner Nick Bobroff presented the staff report and said staff is recommending approval as presented. He provided additional details in response to questions related to maintenance, parking and safety.

Commissioner Allen brought to attention that some bike paths prohibit motorized vehicles by ordinance. Commissioner Benefield said electric bikes are racing through the marsh when the purpose is to protect the habitat. She said there is no enforcement against this.

PUBLIC HEARING OPENED – Chair Benefield opened the public hearing.

Fred Luna on behalf of Caltrans and Shawn Kowalewski of MNS Engineers provided an overview of the project. They began with a review of the timeframe and said if the project starts next summer it should be completed by Spring 2023. Regarding ARB feedback, Mr. Kowalewski said it liked the metal stain not being gray and use of solar. He provided many details about the project, such as that hardscape will be used for hard to maintain areas, the barrier will be open timber-looking railing, and a retaining wall will be up to 8 feet high in some areas. There will be features to slow the offramp down, three islands where parking is lost, stone pines that will be saved, enhanced pedestrian crosswalks and pavement rehabilitation. He noted the landscaping plant palette received a good review from ARB. He clarified that e-bikes are not considered motorized vehicles, making them okay to operate on the facilities. Regarding

maintenance, he said there will be MOUs between the County and Caltrans.

Helen O'Neill, representing Bike Ventura and Bike Club, said the bike path looks exciting. She thanked them for their hard work.

Mr. Bobroff said letters from Steven Kent and Brian Ehler had been circulated to the commissioners.

PUBLIC HEARING CLOSED – Chair Benefield closed the public hearing.

Commissioner La Fevers said the path will benefit the community and make it easier to access coastal areas. He made the following comments: It makes perfect sense to build it along with the highway project to minimize construction impacts. He thinks the change in offramp configuration and narrowing of lanes will have a significant impact on traffic calming. The character of Carpinteria Avenue will change but the slowing effect of incoming traffic will be good. He's glad stop signs or other impediments to traffic flow haven't been added. He reviewed the Mitigated Negative Declaration and has no issues with it and is comfortable with the Conditions of Approval and Findings. La Fevers expressed support for the project and said he likes it a lot.

Commissioner Allen agreed with La Fevers' points. He expressed that he was a little sad the connection from the southern side of the tracks leading into the salt marsh didn't take. He said it's a good project.

Commissioner Moyer also agreed with La Fevers' points. He spoke about how he used to commute on a bike to work in Santa Barbara on Via Real and it was boring and dangerous. He said this will save time and be less auto travel miles. He described the project as great and said he's proud he has been a part of it since the beginning.

Commissioner Callender said he is generally supportive of the project and described it as interesting compared to what we normally get. He made the following comments: It's a small piece but a significant change to that area of the city. He's interested in seeing how potential bike and pedestrian traffic through it affects Santa Claus Lane businesses. He's glad there are mitigation measures to offset impacts to the Salt Marsh. He expressed his support to accept the MND and approve the CUP with conditions described in the staff report.

Chair Benefield said she is impressed with the coordination efforts and good outcome. She added that she read the Mitigated Negative Declaration and Conditions of Approval and agrees. She recommended acceptance of the Conditional Use Permit with MND and Coastal Development Permit.

MOTION Commissioner Moyer moved that the Planning Commission adopt the attached Resolution PC-21-007, thereby approving Project 21-2122-CUP/CDP to grant a Conditional Use Permit and Coastal Development Permit to allow the described multi-use path project and accept the previously certified MND pursuant to CEQA guidelines. Commissioner Allen seconded it and added to the motion that they adopt the Findings of Approval and Conditions of Approval with the revised Public Works letter. Commissioner Moyer agreed and the motion was passed 5-0 by the following roll call vote: Commissioner Allen voted yes, Commissioner Moyer voted yes, Commissioner Callender voted yes, Commissioner La Fevers voted yes, and Chair Benefield voted yes.	
OTHER BUSINESS Community Development Director Steve Goggia said staff is working with our attorneys to present an update to the City Council regarding new housing bills. He spoke about Senate Bill 9 (SB-9), explaining it was part of a suite of housing bills to get more housing built in California. He noted its two primary mechanisms. First, with some exceptions, owners of single-family dwellings can add a second unit or turn an existing house into a duplex through ministerial review. Secondly, it allows a homeowner to split a lot into two lots. This means they could essentially have four units where there was one if the homes were converted to duplexes. Lot splits would be ministerial and projects would bypass the CEQA process, public meetings and discretionary permits. He noted there are limitations on the approvals. For lot splits, owner occupancy of one of the units is required for a minimum of 3 years. In addition, local agencies must require any rental units be for a term of 30 days or more, meaning no short-term rentals. He explained a city may implement objective zoning, subdivision and design review standards, provided they don't conflict with SB-9 standards or preclude construction of two 800 square-foot or larger units on a lot. He said the lot size minimum is 2400 square feet. He said SB-9 recognizes the Coastal Act and will not take effect in the city come January 1st because a local coastal program amendment would need to be initiated and brought to City Council first. We will initiate a review and what standards can be applied that fit Carpinteria and amend our Zone Code to allow this in the way we are doing with ADUs. He said we need to act quickly in the first quarter of next year.	OTHER BUSINESS
MATTERS PRESENTED BY COMMISSIONERS Commissioner Allen said that within our parks and places where people walk, we should be proactive in looking at e-bikes, perhaps with enforcement of speed limits. He commented it's difficult to distinguish	MATTERS PRESENTED

between e-bikes and motor bikes.

He added that we need to be moving forward with a dedicated dog park. He said he is seeing more disturbances between people with dogs and wildlife such as egrets. He commented it doesn't feel safe at times with unleased dogs, noting he has three scars from encounters. He feels Code Enforcement is stretched and off-leash dogs are not a high priority and suggested more enforcement and signage. Chair Benefield stated she is receiving more phone calls about this.

Commissioner Allen also asked for an update on any projects on the King property on Bluffs 3, as well as a timeline on Tee Time's agricultural fields.

Commissioner Moyer referred to a project on Linden Avenue that he had supported because it was affordable by design. He described it as a disaster and apologized to the public for supporting it.

Chair Benefield said some of us would like to see a pocket park in the area of the apartments owned by Dario Pini near Concha Loma. She said it would benefit an awful lot of people and we should move forward sooner than later. Commissioner Allen agreed and said if we talk about social justice, it should be one of our first priorities.

Commissioner Callender apologized to fellow commissioners and staff for missing the October meeting. He said he reviewed the ADU Ordinance discussion and would have spoken appreciatively of staff's decision to bring new legal language for input. He said let's recognize that due to catastrophic flooding impacts, we should look at not zoning residential (re: Beach Neighborhood).

Community Development Director Steve Goggia responded to some of their questions. About the King property at the end of Carpinteria Ave., the AutoCamp group is coming forward with a proposal for an airstream Development Plan and application within a couple months that may include an area for hang gliders to take off. For Tee Time Property Bluffs 1, he's expecting a concept review application but doesn't see it happening before the end of this year or early next year. Regarding a pocket park by Dario Pini's apartments, he believes Parks and Recreation has a design concept laid out and it's in the work plan.

Commissioner Allen spoke about the importance of not losing memories of Conditions of Approval and why some are placed on projects. He pointed out there had been an extensive argument with Best Western Hotel about using a nice-looking enclosure for garbage, yet years later when they needed an additional enclosure, over the counter approval for a chain link

fence was granted. He also noted approved colors don't get enforced. He asked if there are increased efforts to keep track of these things.	
DIRECTOR'S REPORT 3) Action Minutes of the Architectural Review Board meetings of October 14, 2021and October 28, 2021 4) City calendar for the month of December 5) Planning Activity Report as of November 30, 2021 6) Building Permit Report as of November 30, 2021 Community Development Director Steve Goggia reviewed the distributed information.	DIRECTOR'S REPORT
ATTENDANCE OF PLANNING COMMISSIONERS FOR THE NEXT MEETING OF JANUARY 18th, 2022 – Commissioner Allen said he may not be available and asked if he could phone in.	ATTENDANCE FOR NEXT MEETING
ADJOURNMENT - Chair Benefield adjourned the meeting at 7: 13 p.m. _____ Secretary, Planning Commission **ATTEST:** _____ Chair, Planning Commission	ADJOURNMENT

PLANNING COMMISSION STAFF REPORT

MEETING DATE: January 18, 2022

ITEM FOR CONSIDERATION

Conditional Use Permit and Coastal Development Permit, and Certification of the Environmental Impact Report for the Rincon Trail Project

19-2015-CUP/CDP

Request to accept and certify the Environmental Impact Report for the Rincon Trail project, and to grant a Conditional Use Permit and Coastal Development Permit for the 850-foot long portion of the trail project located in the City of Carpinteria. The entirety of the proposed approximately 2,800-foot long multi-use trail would connect the east end of Carpinteria Avenue to Rincon Beach County Park in unincorporated Santa Barbara County.

Report prepared by: Nick Bobroff, Principal Planner
Community Development Department

SIGNATURE

Reviewed by: Steve Goggia, Director
Community Development Department

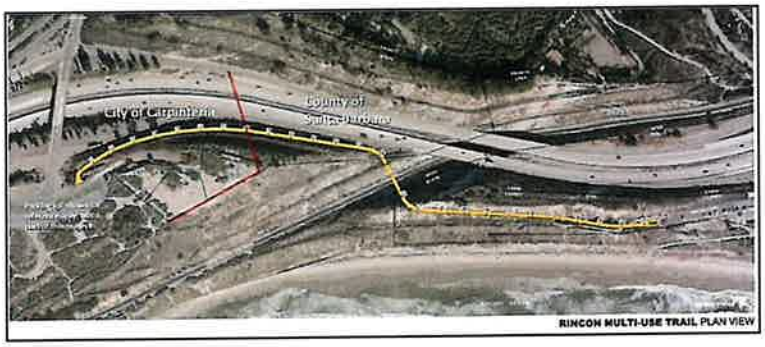
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Owners: City of Carpinteria, County of Santa Barbara, CA Department of Transportation, Union Pacific Railroad

Applicant: City of Carpinteria Parks, Recreation and Facilities Department

Project Location: Eastern terminus of Carpinteria Avenue to Rincon Beach County Park

APNs: City/Caltrans rights-of-way; 001-220-032; -092; -100; -101



I. RECOMMENDATION

Adopt the attached Resolution PC-22-001, thereby acting on behalf of the City of Carpinteria as the Lead Agency as defined by the California Environmental Quality Act ("CEQA"), accepting and certifying the Environmental Impact Report ("EIR") for the Rincon Trail project as having satisfied the procedural and statutory requirements of CEQA; selecting the Steeper Slopes/Reduced Earthwork Alternative ("Alternative 3") as the preferred project; and approving the Conditional Use Permit and

Coastal Development Permit for the portion of the proposed Rincon Trail project located in the City of Carpinteria.

II. PROPOSED PROJECT DESCRIPTION

Project Overview

Proposed Project

The Rincon Trail is a public multi-use trail that would connect the eastern end of the City of Carpinteria to Rincon Beach County Park located in unincorporated Santa Barbara County near the Ventura County line. The proposed trail would originate from Carpinteria Avenue in the City of Carpinteria, just east of the intersection with State Route ("SR") 150, and proceed easterly for approximately 2,800 linear feet, terminating at the western terminus of the Rincon Beach County Park parking lot. The proposed trail would be finished in a concrete pavement and feature a usable width of 16 feet (comprised of a five-foot wide "travel lane" in each direction and three-foot wide shoulders on each side). A six-foot wide shallow concrete v-ditch would run along the inside of the trail length for the purposes of capturing and conveying stormwater to onsite drainage facilities. Protective fencing would be provided along the trail alignment to keep trail users on the improved path. The trail project also includes a new 14-foot wide, 160-foot clear-span pre-fabricated bridge crossing over the Union Pacific Railroad ("UPRR") alignment.

Grading and earthwork quantities necessary to cut an Americans with Disability Act ("ADA")-compliant trail bench, stabilize slopes, and control stormwater runoff through the project area are estimated at 96,040 cubic yards ("CY") of cut. Approximately 10,519 CY of the cut material would be used for fill onsite; the remaining 85,521 CY of cut material would be exported offsite. Approximately 45% of the estimated earthwork (equivalent to ~43,200 CY of cut) is expected to occur on the inland side of the UPRR alignment; and the remaining 55% (~52,800 CY) on the ocean side of the UPRR alignment. A storm drain collection system is proposed for the trail alignment, which would utilize a combination of repaired existing and new piped storm drains on the bluff face and drain outlets onto the sandy beach below the bluff. A habitat restoration plan is included to restore areas disturbed during construction and to mitigate for permanent removal of vegetation to accommodate the new trail.

The westernmost approximately 850 linear feet of the trail, running roughly parallel to U.S. Highway 101 from the trailhead just east of the Carpinteria Avenue/SR 150 intersection and north of the UPRR alignment falls within the jurisdiction of the City of Carpinteria. The remainder of the trail alignment (approximately 1,950 linear feet), including the new bridge over the UPRR alignment, would fall within the permitting jurisdiction of the County of Santa Barbara. As part of the project, the City will obtain an easement from UPRR for the bridge crossing over, and trail improvements within, the UPRR alignment. The City is also anticipating the acquisition of right-of-way from the California Department of Transportation ("Caltrans") to accommodate the trail alignment.

The purpose of the Rincon Trail project is to close an existing critical gap in the California Coastal Trail between the Carpinteria Bluffs and the Pacific Coast Bikeway (i.e., bike path from Bates Road to just south of Mussel Shoals along U.S. Highway 101), that would serve to enhance opportunities for public coastal access and recreation, and support alternative means of transportation. The Rincon

Trail project also is intended to provide a safe and attractive alternate route to the existing unsanctioned, informal use trails connecting the Carpinteria Bluffs to Rincon Beach County Park, which trespass through UPRR property, and reduce the unprotected use of the U.S. Highway 101 shoulder between SR 150 and Bates Road by cyclists. With the recent acquisition by the City of Carpinteria of the majority of the Bluffs III area for the new Rincon Bluffs Preserve, the proposed trail would also function as a critical connection between existing public recreation amenities in the area.

A more complete project description is included in "Section 2, Project Description," of the Draft EIR included as Exhibit 2 to this report. Minor revisions to the project description are reflected in "Section 3, Changes to the Draft EIR," of the Proposed Final EIR included as Exhibit 3. Proposed 100% plans for the trail and bridge are included as Attachment B to Exhibit 1. Perspective renderings and other supporting materials are included as Exhibit 4.

Environmentally Superior Alternative: Steeper Slopes/Reduced Earthwork Alternative ("Alternative 3")

The Proposed Final EIR identifies the Steeper Slopes/Reduced Earthwork Alternative ("Alternative 3") as the environmentally superior alternative, as it would have the same or slightly less severe impacts compared to the proposed project by achieving further reductions in earthwork quantities through minor adjustments to the proposed trail width and surface slope, while still achieving all project objectives. The Alternative 3 design is substantially similar to the proposed project except that for a portion of the trail alignment south of the UPRR crossing, an approximately 690-foot length of the trail has been reduced in width from 16 feet to 14 feet, and the trail pathway surface slope has been slightly steepened from a maximum five percent (5%) grade to a maximum six percent (6%) grade. The steeper slope results in the trail alignment intersecting the existing abandoned historic railroad bench at a more westerly point and re-using a longer portion of this existing historic bench to reach the Rincon Beach County Park trail terminus as compared to the proposed project.

These minor adjustments to the design of the trail segment south of the UPRR crossing result in a further net reduction of 121 CY of exported material compared to the proposed project (from 85,521 CY to 85,400 CY), which in turn account for slight reductions in the severity of identified potential impacts related to air quality, energy, greenhouse gas emissions, hydrology/water quality, noise, and recreation. As part of the action to adopt and certify the project EIR, staff recommends the Planning Commission select Alternative 3 as the preferred project as it meets all project objectives while reducing environmental impacts compared to the proposed project and other alternatives.

A more complete description of Alternative 3 is included in "Section 6, Alternatives," of the Draft EIR (Exhibit 2); minor refinements to the description of the Alternative 3 project are described in "Section 6.6.3, Steeper Slopes/Reduced Earthwork Alternative (Alternative 3)" of the Proposed Final EIR (Exhibit 3). A current conceptual design of the revised alignment for Alternative 3 is included as Figure 6.2 in the Proposed Final EIR.

Proposed Final Environmental Impact Report

Pursuant to the California Environmental Quality Act ("CEQA"), the City of Carpinteria is acting as the Lead Agency in accordance with CEQA Guidelines Sections 15050-15051, and is responsible for preparing this environmental document for the Rincon Trail project. The purpose of the CEQA

analysis is to determine whether the proposed project may have significant effects on the environment, to identify possible mitigation measures to reduce the severity of any significant effects, and to disclose the findings of this analysis to the public and decision makers. The prepared Proposed Final Environmental Impact Report ("EIR") is intended to provide the factual basis for finding that the project will not have a significant effect on the environment with the inclusion of the identified mitigation measures.

The Planning Commission is responsible for accepting and certifying the Proposed Final EIR as having: 1.) Adequately and accurately described and disclosed all potential project impacts; 2.) Satisfactorily reducing all identified potentially significant environmental effects to less than significant levels through the implementation of appropriate mitigation measures; and 3.) Satisfying the procedural and statutory requirements of CEQA. As part of the action in certifying the EIR, the Planning Commission must also select the preferred project from amongst the proposed project or project alternatives.

The Proposed Final EIR under consideration is included with this report as Exhibit 3.

Additional Permit Approvals

Following acceptance and certification of the EIR by the Planning Commission, acting on behalf of the City of Carpinteria as Lead Agency, as having satisfied the requirements of CEQA, additional permits and/or approvals for the Rincon Trail project are required from the following jurisdictions:

- County of Santa Barbara – Development Plan, Conditional Use Permit and Coastal Development Permit ("DP/CUP/CDP") for the portion of the trail construction located within the unincorporated area of Santa Barbara County;
- California Department of Transportation ("Caltrans") – permit authority and easement, or fee simple acquisition, for portions of the trail located within U.S. Highway 101 right-of-way;
- California Public Utilities Commission ("CPUC") – Authorization to construct a grade-separated pedestrian trail crossing over the UPRR Santa Barbara Subdivision main line;
- Union Pacific Railroad ("UPRR") – granting of easement and approval for railway crossing and portions of the trail on UPRR-owned property;
- State Water Resources Control Board ("SWRCB") – Coverage under the General Construction Activity Permit; and
- National Environmental Policy Act ("NEPA") clearance – Due to some of the project funding coming from federal sources through Caltrans, the project must demonstrate compliance with NEPA. Staff is drafting a Categorical Exclusion ("CE") for review and certification by Caltrans as having satisfied all pertinent NEPA requirements.

III. BACKGROUND

Site Characteristics

The project site is located near the eastern terminus of Carpinteria Avenue and extends eastward to the western terminus of the Rincon Beach County Park parking lot located in unincorporated Santa Barbara County. The project area appears to be a semi-natural setting at first glance, however, the proposed trail alignment is located upon a series of highly altered, manufactured slopes resulting from

earthwork activities associated with the 1960s re-alignment of U.S. Highway 101 (formerly SR 2) and the UPRR corridor inland away from the coastal bluffs. Remnants of the past SR 2 and UPRR alignments are visible in the project area, including the former rail bench along the coastal bluff face, abandoned retaining walls and storm drains associated with the past highway alignment, and remnant sections of highway paving. The existing slopes and soil conditions in the project area are highly dynamic, subject to erosive effects of runoff and areas of remnant historic landslides that further contribute to slope instability. It is expected the area may become vulnerable to coastal bluff retreat from the effects of sea level rise in the future as well.

North of the current UPRR alignment, the proposed trail would be located on a new bench cut into the face of the existing manufactured slope overlooking U.S. Highway 101 and the southbound on-ramp from SR 150. After crossing the UPRR alignment just west of where U.S. Highway 101 crosses the railroad tracks, the proposed trail alignment would round the western shoulder of the ridge located south of the UPRR alignment (sometimes referred to as the "Bates Bluff" or "Rincon Bluff"), and traverse across the steep south-facing, or ocean side, of the coastal bluff face on a new cut trail bench located above the abandoned former UPRR rail bench, gradually descending toward the existing turn-around at the western end of the Rincon Beach County Park parking lot where the trail would terminate. In the Alternative 3 project scenario, the proposed trail alignment would descend to the existing former UPRR rail bench at a more westerly point, utilizing some of the existing bench to reach the terminus of the proposed trail at the Rincon Beach County Park parking lot.

Various transportation-related infrastructure and underground utilities run through the project area, including but not limited to U.S. Highway 101, which runs just to the north of the proposed trail alignment, major storm drain facilities associated with U.S. Highway 101 which crosses the trail alignment, a four-inch force sewer main serving the homes on Rincon Point which roughly parallels the westerly portion of the trail alignment, the UPRR rail corridor which crosses the trail alignment, an underground communications line which approximately parallels the easterly portion of the trail alignment, and an abandoned in place underground oil pipeline that also crosses the trail alignment just north of the railroad tracks.

Public recreational amenities in the area include the newly acquired Rincon Bluffs Preserve located on Bluffs III, just southwest of the proposed westerly terminus of the trail, Rincon Beach County Park located at the eastern terminus of the proposed trail, and Rincon Point State Beach, located just east of the vehicular entrance into Rincon Beach County Park. The Pacific Coast Bikeway begins immediately adjacent to the entrance to Rincon Point State Beach and continues southward paralleling U.S. Highway 101. Public beaches are located seaward of the coastal bluff face and proposed trail alignment. Informal use trails crisscross the bluffs in the project area and have provided historic, unsanctioned public access to, and across, the UPRR alignment between the Carpinteria Bluffs and the Rincon Beach County Park. The area is also informally used by members of the soaring community (e.g., hang gliders, paragliding, etc.), who take off from an unimproved launch point, located on private property, at the southeastern tip of the Carpinteria Bluffs on flights toward Rincon Point or along the Carpinteria Bluffs.

Vegetation in the area is characterized as a mix of native and non-native/disturbed vegetative communities. Several large swatches of undisturbed native vegetation are present in the project area, including several areas with concentrations of identified sensitive species. The extent, types, and sensitivity of Biological resources located in the project area are discussed in more detail in "Section 3.3, Biological Resources" of the Proposed Final EIR, included with this report as Exhibit 3.

The project area within the City is not assigned to a zoning designation on the City's Zoning Map, however, the immediately adjacent privately-owned parcels to the south are zoned Resort District ("RES") and have a Visitor-serving Commercial ("VC") land use designation. The U.S. Highway 101 corridor immediately to the north of the project site has a Transportation Corridor ("TC") land use designation. For the portion of the trail project located in the County's jurisdiction, the project area is zoned Transportation Corridor ("TC") and Recreation ("REC"), and has corresponding TC and Recreation/Open Space land use designations. The project area is also subject to several Overlay Districts including Environmentally Sensitive Habitat Area ("ESH"), and Coastal Appeals ("CA") in the City, along with the County's Hwy 101 Corridor Zoning Overlay, and View Corridor Overlay.

California Coastal Trail

According to the State Coastal Conservancy, the California Coastal Trail ("CCT") is "*an interconnected public trail system being developed along the California coastline that will span over 1,230 miles from Oregon to Mexico.*" The CCT is "*designed to make the coast more accessible, foster appreciation and stewardship of the scenic and natural resources of the coast, provide recreational opportunities, and encourage non-motorized transportation. The CCT is developed as close to the ocean as possible, and where feasible, within sight, sound, and smell of the ocean. The CCT is considered a braided network, meaning there can be parallel routes that accommodate different experiences, such as a sandy beach route for beach visitors, a bluff top dirt hiking path providing scenic views, and a paved path for bikers, wheelchair users, and people needing firmer footing.*" Statewide, approximately 70% of the CCT is currently completed. The CCT was designated as a federal Millennium Legacy Trail in 1999.

According to the Coastal Conservancy's "California Coastal Trail Mapping Viewer," the primary CCT route follows the Coastal Vista Trail through the Carpinteria Bluffs, terminating for now, at the start of the Bluffs III property (now the Rincon Bluffs Preserve). The primary CCT route picks back up in Rincon Beach County Park and continues from there southeast along the Pacific Coast Bikeway. The missing trail segment through Bluffs III to Rincon Beach County Park represents a key gap in the coastal trail system for the region. With the recent acquisition of the majority of the Bluffs III property by the City (and official trail and park improvement planning underway) and with the completion of the Rincon Trail project, this critical local gap in the CCT could be filled in, providing significant coastal access, recreation, and alternative transportation benefits to the surrounding communities.

It is for this reason that the Rincon Trail project has been specifically called out in the Open Space, Recreation and Conservation Element of the City's General Plan/Coastal Land Use Plan as a future public trail improvement for the City to pursue as a capital project, and why the project was identified as one of two key regional alternative transportation projects that were required to be completed as a condition of approval for Caltrans' "South Coast Highway 101 HOV Lanes" projects (discussed below). The project objectives developed for the Rincon Trail project, which are described in Section 2.4.3, Objectives, of the Draft EIR, also reflect the emphasis placed on providing a coastal trail project that meets the design intentions of the CCT.

Project History

Local Coastal Program Amendment for the Linden Avenue and Casitas Pass Road Interchanges, Via Real Extension , South Coast HOV Lanes, and the Coast Route Bike Path Projects

The Rincon Trail project was initially conceived as part of a suite of transportation improvement projects associated with Caltrans' U.S. Highway 101 interchange and widening projects in Carpinteria. Working in close collaboration with Caltrans and the California Coastal Commission ("CCC"), the City received approval and certification of a Local Coastal Program Amendment ("LCPA") in October 2015 (LCP-4-CPN-15-0018-1 / City Project 09-1522-LCPA/ORD) to, among other things, create the new Transportation Corridor Wetland Overlay ("TCWO") (Carpinteria Municipal Code ("CMC") §14.45) and Whitney Site Agriculture Overlay (CMC §14.41) Districts to carve out specific exceptions for limited unavoidable impacts to wetlands and prime soils/agriculture associated with the U.S. Highway 101 projects necessary to complete these critical infrastructure projects, subject to specific mitigation measures to reduce impacts to the maximum extent feasible and other beneficial coastal resource enhancement project components.

One of the applicable development standards for the U.S. Highway 101 projects subject to the new TCWO District is to *require of Caltrans* (emphasis added) the construction of two "*regionally important improvements to alternative transportation modes for the purpose of increasing access to coastal resources for all members of the public*" (CMC §14.45.030[7]); the two identified projects being the Coast Route Bike Path (i.e., Santa Claus Lane to Carpinteria Avenue, previously approved by the Planning Commission in December 2021) and the subject Rincon Coastal Trail (SR 150/Carpinteria Avenue to Rincon Beach County Park). The Coast Route Bike Path project is required to be completed no later than completion of the adjacent phase of construction for the South Coast HOV Lanes project; the Rincon Coastal Trail project is required to be completed no later than completion of the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension project construction.

Following certification of the LCPA to create the necessary new Overlay Districts, the City took action on the Conditional Use Permit and Coastal Development Permit ("CUP/CDP") application (Project 09-1522-CUP/CDP) for Caltrans' Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension project in November 2015. Condition no. 3.7.15 of the adopted project conditions of approval requires Caltrans to complete construction of the Rincon Trail project as a required coastal access and recreation component of the larger project as depicted in the City of Carpinteria Planning Commission's approval of Project 15-1760-CUP/CDP (discussed below), and subject to approval by the County of Santa Barbara and California Public Utilities Commission. The condition stipulates that while construction of the trail is the sole responsibility of Caltrans acting as the project applicant, the City, County of Santa Barbara, Santa Barbara County Association of Governments ("SBCAG") and Caltrans are to work cooperatively to complete construction of the trail project. As documented in a Memorandum of Understanding ("MOU") at the time, the City agreed to take the lead role in the design and environmental permitting work for the Rincon Trail project, and SBCAG took on the primary role of administering funding for the project as part of the larger U.S. Highway 101 projects. The condition also provides that if the trail cannot be completed along the route described in the Mitigated Negative Declaration ("MND") prepared for Project 15-1760-CUP/CDP, then the applicant shall provide an alternative route. Finally, the condition requires that the trail be open to the public prior to completion of the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension improvements.

Carpinteria Rincon Trail Project, 15-1760-CUP/CDP

In anticipation of the CCC's certification of the LCPA establishing the TCWO District and the City's subsequent approval of the CUP/CDP application for the Linden Avenue and Casitas Pass Road Interchange and Via Real Extension project, the City initiated a separate CEQA process for the Rincon Trail project in 2012 and its own CUP/CDP application for the anticipated trail in March 2015 (Project 15-1760-CUP/CDP). This initial iteration of the Rincon Trail Project followed a similar alignment from Carpinteria Avenue to the UPRR corridor crossing as the current proposed project, but then incorporated a major switchback element after crossing the railroad tracks to move the trail off the shoulder of the ridge south of the railroad tracks (i.e. "Bates Bluff") and onto the existing abandoned former railroad bench located along the lower ocean-side bluff face. This existing bench was to accommodate the remainder of the new trail and connect to Rincon Beach County Park. This initial project description also called for additional project components including a new trailhead parking area on Carpinteria Avenue, the need for approximately 1,000 linear feet of retaining walls up to 14 feet in height throughout the "switchback" portion of the trail alignment, a rainwater cistern to collect runoff for use in irrigation of mitigation plantings, and trail lighting. This same trail alignment is included in the current EIR as Alternative 2.

This initial version of the project required preparation of a Mitigated Negative Declaration ("MND") to satisfy the requirements of CEQA, and was reviewed and recommended to the Planning Commission for approval by the City's Environmental Review Committee ("ERC") in June 2012, with only minor revisions to the proposed environmental document. Following formal submittal of the CUP/CDP application, the project was reviewed and recommended for approval by the City's Architectural Review Board ("ARB") in April 2015 as submitted. The City's Planning Commission reviewed and approved the CUP/CDP application for the City's portion of the Rincon Trail project, and acting as Lead Agency for the project, accepted and certified the MND as having satisfied all CEQA requirements in May 2015.

A companion DP/CUP/CDP application for the portion of the trail within the jurisdiction of the County of Santa Barbara was subsequently submitted in 2017, but was deemed incomplete pending submittal of additional information. In May 2017, while the project design team continued to develop the proposed design and construction plans, the City's entitlements for the Rincon Trail project expired due to failure of the project to initiate construction within the allotted two-year timeframe from project approval.

Since that time, the project design team continued to work on the project plans, completing necessary geotechnical and drainage studies to more completely assess the site conditions and understand how these conditions would affect the construction of the trail, with the intention of obtaining a reauthorization of the City's approval of the trail project and completing the County's permitting process. However, after further study, the more detailed understanding of the site conditions along with further refinement of the trail alignment and design revealed that the initial trail alignment described in the 2012 MND and approved by the City in 2015 was no longer preferable, or possibly even feasible from a constructability standpoint due to a variety of site constraints. These site constraints include but were not limited to, conflicts with major U.S. Highway 101 storm drain infrastructure, unstable geologic conditions within the original trail alignment, more extensive encroachments of improvements into the UPRR corridor, and inability to build the trail in a manner consistent with Americans with Disabilities Act ("ADA") design guidelines.

Further study revealed that an alternative, more direct alignment was available that could avoid interference with critical storm drain infrastructure, avoid the need for construction of costly and unsightly retaining walls, shorten the overall trail length, minimize construction in areas of geologic instability, reduce the extent of work within the UPRR alignment, and provide an ADA-compliant path profile for the entire trail length. This alternate alignment was also found to better achieve the stated project objectives.

Despite being found to be preferable to the original trail alignment, this new alignment was determined to be significantly different from what was previously considered under the original MND, and identified possible new significant environmental impacts not previously disclosed, such that a new environmental review for the revised alignment was deemed necessary in order to comply with the requirements of CEQA.

Carpinteria Rincon Trail Project, 19-2015-CUP/CDP, Subsequent Mitigated Negative Declaration

A revised CUP/CDP application was submitted to the City in October 2019 for the current proposed alignment. A Subsequent Mitigated Negative Declaration ("SMND") was prepared for the current project alignment in fall 2019 to describe the potential impacts of the revised trail and circulated for public review over November/December 2019. The SMND was reviewed and recommended for approval to the Planning Commission by the City's ERC in November 2019, following which, the City also held a public informational workshop to review the proposed project and answer questions from the public in December 2019. The SMND was considered and certified by the Planning Commission at its January 6, 2020 hearing.

An appeal of the Planning Commission's decision was filed by a member of the public during the 10-day appeal period following the Planning Commission's action, citing allegations of having "*started construction (and) used funds and/or equipment, which may conceal, the true costs of the project*;" of having "*not considered, in the Mitigated Negative Declaration Report, the dynamics, of further destabilization, of the Pacific Ocean facing bluff, we call, "Little Diamondhead," both during, and after, attempts, at construction*;" and of being "*a path, which does not safely connect to the existing path, (Carpinteria to Ventura), as it terminates into a Santa Barbara County parking lot and violates the City of Carpinteria, 2013 Final Bicycle Master Plan.*" Consideration of the appeal by the City Council was postponed due to the onset of the COVID-19 global pandemic.

In September 2020, the City Council elected to not hear the appeal and instead move forward with the preparation of an EIR as the appropriate CEQA environmental review document in order to allow for a more in-depth analysis of key issue areas identified during consideration of the SMND. A letter was sent to the appellant in October 2020 notifying him of the City's decision to not grant an appeal hearing and to instead proceed with the preparation of an EIR for the proposed project. The appellant was invited to participate in the public review of the new EIR.

IV. ANALYSIS

Environmental Impact Report

As discussed in the project background section (above), at the direction of the City Council in September 2020, staff amended their contract with the environmental consultant, Dudek, to prepare an EIR for the current version of the proposed project. The intention in preparing an EIR was to allow for a more in-depth analysis of key issue areas (e.g., biological resources, geologic resources, water quality, and recreation) and to identify a suite of project alternatives for consideration that could be feasibly expected to meet all or most of the stated project objectives.

The EIR is an informational document intended for the use by the City, other public agencies, and members of the general public in evaluating the potential environmental effects of the proposed project. The CEQA requires that the EIR identify the significant effects of the project on the environment and provide measures or alternatives that can mitigate or avoid these effects. The EIR also includes an examination of the effects of cumulative development.

A Notice of Preparation ("NOP") was circulated by the City on October 30, 2020 to initiate a 30-day public scoping period to gather input from other public agencies and the general public concerning the scope and content of the EIR. During the 30-day scoping period, the City also hosted a public scoping meeting on November 17, 2020 to gather additional public input. The NOP and comments received during the scoping period are included as Appendix A to the Draft EIR (Exhibit 2). Based on the proposed project as described in the NOP and comments received during the scoping period, the following issue areas were identified as being potentially significant and were addressed in the detailed analysis of the EIR: *Aesthetics; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Emissions; Hydrology and Water Quality; Land Use Planning; Noise; Recreation; Transportation; Tribal Cultural Resources; and Utilities and Service Systems.*

The Draft EIR described the proposed revised project, outlined some of the key differences as compared to the original project, and evaluated the potential for environmental impacts resulting from the revised project. The Draft EIR also identified four project alternatives and broadly evaluated the potential for environmental impacts of these alternative designs compared to those impacts anticipated for the proposed project.

The four alternatives, which are described in more detail in Section 6.0 of the Draft EIR (Exhibit 2) and Proposed Final EIR (Exhibit 3), can be summarized as follows: Alternative 1. No Project/No Build Alternative (i.e., maintain the existing condition); Alternative 2. Maximize Existing Benchwork/Topography Alternative (i.e., the original 2015 version of the project); Alternative 3. Steeper Slopes/Reduced Earthwork Alternative (i.e., substantially similar to the proposed project, but utilizes a slightly narrower trail width and steeper trail surface slope for a segment of the trail south of the UPRR crossing to further reduce earthwork quantities); and Alternative 4. Freeway Adjacent Trail Avoiding Bluff Face Alternative (which utilizes the same alignment as the proposed project up to and including the UPRR crossing, but then shifts the trail to the north side of the ocean front ridge south of the UPRR alignment, roughly parallel and adjacent to the U.S. Highway 101 corridor). Alternative 3, Steeper Slopes/Reduced Earthwork Alternative, was identified as the environmentally superior

alternative as it was found to meet all of the project objectives while resulting in the same or slightly less severe environmental effects as compared to the proposed project.

The Draft EIR identified no Class I (significant, unavoidable) impacts associated with the project. However, Class II impacts (significant, but feasibly mitigated) were identified in the following categories: *Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Tribal Cultural Resources, and Utilities and Service Systems*. With the incorporation of identified mitigation measures, all of these impacts would be reduced to a less than significant level. Additional Class III (less than significant) impacts were identified for *Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hydrology and Water Quality, Noise, Public Services, Recreation, Transportation, and Utilities and Service Systems*.

The Draft EIR was made available for public review for a 45-day public review period, beginning on March 12, 2021 and concluding on April 26, 2021. At the start of the public review period, a Notice of Completion ("NOC") was submitted to the State Clearinghouse and a Notice of Availability ("NOA") was distributed to interested parties and also filed with the State Clearinghouse. The Draft EIR, and NOA were also published to the City website.

During the 45-day public review period, the City's Environmental Review Committee ("ERC") held a public hearing on the Draft EIR on April 13, 2021 to receive comments on the adequacy of the document. Approximately 40 members of the public attended. Public comments received at the ERC meeting included, but were not limited to, the following:

- Disagreement with the findings and conclusions of the wind flow study, and with the EIR's categorization of recreational impacts to soaring activities as "less than significant;"
- Disagreement over language in the EIR concerning legal rights to use of the launch site and compliance of soaring activities in the area with various local and federal regulations;
- Request for the project team to consult with the soaring community on project alternatives that would better preserve existing wind conditions;
- Concerns over the safety of terminating the east end of the trail into the Rincon Beach County Park parking lot; and
- A preference for Alternative 4, Freeway Adjacent Trail Avoiding Bluff Face Alternative, over the proposed project alignment;

During deliberations by the ERC, key comments, questions and recommendations included:

- Stated concerns over the adequacy of proposed erosion control measures during construction throughout the rainy season given the extent and steepness of the affected slopes;
- Identified the need to address impacts from concrete work during the rainy season in the Water Quality and Hydrology section of the EIR;
- Skepticism about the viability of the mitigation measures calling for woodrat and legless lizard relocation ahead of vegetation clearing;
- Recommended the bird nesting survey measure be updated to require compliance with applicable state and federal regulations;
- Stated concerns about the severity of the anticipated impacts to soaring activities and skepticism over the findings of the air flow study;

- Disagreement about the emphasis placed on establishing a trail alignment that maximizes ocean views at the expense of increased earthwork;
- Raised questions about the design and alignment of Alternative 4 relative to the bridge crossing of the UPRR alignment and estimated earthwork quantities;
- Requested additional information and details about the design of Alternative 4;
- Raised safety concerns about the eastern end of the trail terminating in the Rincon Beach County Park parking lot; and
- A stated preference by several of the ERC members for Alternative 4 over the proposed project.

The ERC took action on two separate motions related to the Draft EIR: In Motion 1, the ERC voted 4-0 (Committee member Ilasin abstained) to recommend revisions to the EIR to address the ERC's comments, recommendations, clarifications, additional mitigation measures and corrections, including providing additional project details for "Alternative 4." In Motion 2, the ERC again voted 4-0 with Committee member Ilasin again abstaining, to recommend approval of the EIR to the Planning Commission with an expressed preference for "Alternative 4," and with an understanding that the previous motion's comments would be incorporated into the Proposed Final EIR. The Minutes from the April 13, 2021 ERC Meeting and, where appropriate, responses to comments from the ERC, are included in Section 2. Responses to Comments, of the Proposed Final EIR (Exhibit 3).

Comment letters submitted during the 45-day public review period were received from the County of Santa Barbara, County of Ventura, SBCAG, Carpinteria Sanitary District, California Coastal Commission ("CCC"), California Public Utilities Commission ("CPUC"), California Department of Fish and Wildlife ("CDFW"), Southern California Gas Company, Northern Chumash Tribal Council, and Friends of Bates Beach. Approximately 41 comment letters were also received from members of the public, the majority of which came from members of the soaring community.

Copies of all received comment letters from the 45-day public review period are included as Section 2. Responses to Comments, of the Proposed Final EIR (Exhibit 3). Responses were prepared for all received comment letters, and are also included in Section 2 of the Proposed Final EIR. Comments of greatest significance that required an in depth response and/or that resulted in revisions to the Proposed Final EIR can be summarized as follows:

- A number of commenters suggested that the Recreation Section of the EIR should not have included a discussion on the fundamentals of soaring or Federal Aviation Administration ("FAA") regulations pertaining to soaring activities, and also expressed skepticism regarding the conclusions of the airflow analysis study and the determination of a less than significant project impact on existing soaring opportunities;
- Several commenters highlighted concerns with the volume of earthwork necessary to implement the proposed project and indicated that additional effort should be completed to identify alternatives for trail development that could further reduce earthwork volumes and landform modification;
- Commenters have indicated that the biological field surveys failed to detect some plant and wildlife species that are present within the project alignment, and that further alternatives should be developed and studied in order to avoid or minimize project impacts upon environmentally sensitive habitat areas ("ESHA");

- A substantial number of commenters expressed support for implementation of Alternative 4 instead of the proposed Project. Due to this expression of interest by members of the public, Santa Barbara County requested each of the alternatives identified in the EIR include sufficient depth of analysis to support a potential approval based on any of the alternatives;
- Under the Biological Resources section, permanent impacts to ESHA should include not just those areas displaced by the proposed trail, but also areas of vegetation removal. Further, the anticipated extent of temporary and permanent impacts to ESHA should be described in greater detail, and mitigation ratios revised to reflect the new totals of temporary and permanent impacts;
- Under the Biological Resources section, a more detailed analysis of the impacts to specific sensitive plant species is required;
- Under the Biological Resources section, some mitigation measures require additional specificity and/or need to be augmented with additional measures or more robust requirements (e.g., addressing areas used for offsite mitigation; inclusion of a weed management plan, higher replacement ratios, require approval of the habitat restoration plan by CDFW, use of more stringent performance criteria for restoration areas, etc.);
- Concerns were shared about the safety of cyclists and pedestrians utilizing the Rincon Beach County Park parking lot;
- Concerns were raised about the proximity of trail construction to the Carpinteria Sanitary District's four-inch force main serving the Rincon Point homes, and the need to preserve access to the force main during construction. Similarly, concerns were raised about preserving access to the District's wastewater lift station located in the Rincon Beach County Park parking lot, particularly as it relates to the Alternative 4 scenario; and
- Inclusion of additional policies from the County of Santa Barbara Comprehensive Plan were requested to be included and addressed in appropriate sections of the EIR.

To address the above comments, additional and/or revised analysis was included in the Proposed Final EIR in an errata format, including but not limited to, providing a more detailed overview of the methodologies and findings of the air flow study relied upon in the EIR; a re-writing of portions of the Biological Resources impact analysis and refinements to some of the Biological Resources mitigation measures to address comments from CDFW and CCC staff; and a more detailed analysis of the project alternatives and the severity of their respective impacts relative to the proposed project. All revisions to the EIR are shown in ~~strikeout~~ and underline in Section 3, Changes to the Draft EIR, of the Proposed Final EIR (Exhibit 3).

In addition to addressing the above comments, either in the Responses to Comments (Section 2) of the Proposed Final EIR and/or in revisions to the EIR itself (Section 3 of the Proposed Final EIR), the changes to the EIR also reflect a pair of key revisions to the design of the proposed project and the environmentally superior alternative (Alternative 3, Steeper Slopes/Reduced Earthwork Alternative):

- In an effort to address concerns about the quantity of earthwork along the bluff face south of the UPRR corridor, the design of the proposed project was refined to eliminate the need for a new bench above the proposed trail pathway. Elimination of this previously proposed additional bench above the trail resulted in a reduction of total earthwork from 107,386 CY to 96,040 CY, a reduction in total cubic yards of fill from 14,860 CY to 10,519 CY, and a reduction in total export from 92,526 CY to 85,521 CY. Overall, this revision resulted in an

approximately eleven percent (11%) reduction in total earthwork as compared to the proposed project described in the Draft EIR.

Along with this revision to the proposed project grading, the total number of storm drains needed to serve the project was reduced from five down to four. The existing deteriorated storm drains, of which there are two, would be removed and replaced along with the net addition of two new storm drains to serve the proposed trail. This revision to the proposed project design resulted in modest reductions to other previously identified impacts related to air quality, geology/soils, and water quality/erosion resulting from the reduced quantity of anticipated earthwork.

- The above described revision to the project design was also carried over into Alternative 3, the Steeper Slopes/Reduced Earthwork Alternative design. Alternative 3 was then further updated to replace a portion of the new trail alignment south of the UPRR crossing with a slightly narrower trail pathway (14 feet wide rather than 16 feet) and a slightly steeper pathway profile (six percent maximum slope rather than five percent maximum slope) in an effort to further reduce earthwork as much as possible, achieve compliance with resource protection policies, and to minimize the environmental impacts of the project. The revision to the trail surface slope would evidently exceed ADA design guidance (i.e., 5% maximum slope), however, the trail may qualify for a design exception from the U.S. Access Board ("USAB") where compliance is not practicable due to terrain.

  The design revisions would result in an additional net reduction in total earthwork quantities of 121 CY compared to the updated proposed project. The revision would also allow the trail alignment to intersect the existing abandoned historic rail bench at a more westerly point and utilize a longer segment of this historic bench to connect to the eastern terminus of the proposed trail at Rincon Beach County Park. Overall, this revision to the Alternative 3 design can be found to result in a slight lessening of some of the environmental effects of the project as compared to the proposed project. Section 6.6.3, Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) of the Proposed Final EIR provides a more detailed summary of the revised alternative 3 description and minor revisions to the Alternative 3 impact analysis.

With the incorporation of the above-described revisions into the Proposed Final EIR, staff believes the EIR can be found to have satisfied all requirements of CEQA, and can be adopted and certified as such by the Planning Commission. As part of the Planning Commission's action, the Commission must also select a preferred project from amongst the proposed project or Alternatives 1 through 4. As previously noted earlier in the staff report, staff recommends the Commission select Alternative 3 as the preferred project in their actions to adopt and certify the EIR for the project.

Responses to Common Soaring Community Issues

The soaring community (i.e., paragliders and hang-gliders) have been active participants in the City's preparation of the Draft EIR and Proposed Final EIR, and the prior SMND. The following section endeavors to address anticipated questions from the Planning Commission and public regarding issues raised by the soaring community.

CEQA requires an analysis of physical impacts to the environment; it does not require analysis of social and economic impacts resulting from a project. (*Preserve Poway v. City of Poway* (2016) 245 Cal.App.4th 560, 566, 579-580; CEQA Guidelines, § 15064(e).) This concept is reflected in CEQA Guidelines Appendix G: Environmental Checklist form which agencies use to identify potential recreation environmental impacts. According to Appendix G of the CEQA Guidelines, a significant impact related to recreation occurs if a project would:

a. *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.*
b. *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*
c. *Result in cumulatively considerable recreation impacts.*

Section 3.11, Recreation, of the Draft EIR, and Section 2, Global Response 1 and Section 3.11, Recreation, of the Proposed Final EIR evaluate the project's potential environmental impacts related to recreation and conclude that the project would have less than a significant effect on the environment.

Notwithstanding, in response to soaring community comments, the City commissioned an Airflow Analysis Report (Appendix I of the Draft EIR) by an expert in fluid dynamics to analyze the proposed project's potential impacts to wind uplift patterns above the bluff face to assess the impacts on the environment and soaring activities. Using two different modeling techniques, the Airflow Analysis Report concludes that project re-grading could conservatively result in a vertical wind speed reduction of up to 20 to 30 percent above the project alignment, which the EIR concluded was a less than significant impact on the environment. Moreover, the Airflow Analysis Report indicates that any potential adverse impacts on the usability of air space above the proposed trail alignment are unlikely to generate significant physical impacts consistent with the standards in Appendix G of the CEQA Guidelines. (See, e.g., *Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839 [reasoning that loss of convenience is merely an example of a social problem, and without an accompanying physical change to the environment, CEQA does not require its analysis]; CEQA Guidelines, § 15131(a).) Accordingly, staff believes that the Draft EIR and Proposed Final EIR more than comply with the requirements of CEQA.

Architectural Review Board

The proposed project was referred to the City's Architectural Review Board ("ARB") for preliminary review at its October 28, 2021 meeting. The ARB and public were asked to focus their review and comments on: 1.) the design of the portion of the trail located in the jurisdiction of the City of Carpinteria; and 2.) the design of trail amenities/features common to the entirety of the trail (e.g. fencing and railings).

In general, the Boardmembers were in support of the proposed project but had various suggestions for simplifying and consolidating the styles of fencing and railings used throughout the project, the color/treatment of the bridge over the UPRR corridor, trail maintenance considerations, and trail safety concerns. More specifically, comments included a recommendation to utilize a railing style on the bridge wing walls at each end of the bridge that mimics the truss style railing used on the bridge itself; utilizing a natural galvanized finish for the bridge structure (and integrated railings/fencing); use of a concrete post and rail style fence for long-term durability; consideration of low intensity

solar lighting, where needed for safety, along the trail route; and concerns over the safety of the east end of the trail terminating into the Rincon Beach County Park parking lot.

Seven members of the public addressed the ARB at the meeting. All speakers raised objections to the proposed project, including but not limited to, safety concerns with the eastern terminus of the trail at the Rincon Beach County Park parking lot; concerns that the trail project would negatively impact soaring conditions over the area; allegations that elements of the project have begun construction without permits; allegations that the project is violating multiple City rules and claims that the plans are too tentative or preliminary at this stage to receive ARB approval; and concerns about the quantity and extent of earthwork in the area. Three public comment letters were submitted prior to the meeting, including two letters of support for the proposed project.

The ARB ultimately unanimously recommended preliminary approval of the project to the Planning Commission with their comments attached. A copy of the approved Minutes and received public comment letters from the October 28th meeting are attached as Exhibit 5.

The project has also been conceptually reviewed by the County of Santa Barbara's South Board of Architectural Review ("SBAR") in May 2021. The SBAR was generally in support of the project, but provided the following comments for further study:

- Four different railings are shown. Study ways to make the proposed railings more consistent and compatible. Look to wave-patterned fencing design on the southern portion of the freeway as a potential reference. Fourth "vertical picket" design may be inappropriate.
- Consider a rust-red color for the bridge instead of green for bridge railing design.
- Return with a comprehensive landscape plan showing how disturbed areas will be revegetated.
- Provide signage information.
- Look into safety lighting, at least at the bridge.
- Chain-link fencing is not appropriate and is underwhelming. Provide a proper architectural fencing solution that is integrated with other fencing styles.

The project design team has since been working on refinements to the bridge finish, and fencing/railing design in an attempt to respond to and satisfy both ARB and SBAR comments. Following approval by the Planning Commission, the project has been conditioned to return to the ARB for final review. Likewise, the portion of the project located in the County's jurisdiction would continue through preliminary review with SBAR prior to consideration by the County Planning Commission.

Carpinteria Municipal Code, Title 14. Zoning

Conditional Use Permit

Pursuant to CMC §14.62.030, Conditional uses, including "buildings, structures and uses of a public works, public service or public utility nature" are permissible in any zoning district, subject to the approval of a Conditional Use Permit ("CUP"). A CUP may be granted by the Planning Commission for such a project upon a determination that all of the following criteria (CMC §14.62.040.8) have been met:

a. *The site for the proposed use is adequate in size and shape to accommodate the use;*
b. *The site for the proposed use is served by streets and highways that are properly designed to carry the type and quantity of traffic generated by the subject use;*
c. *The granting of the permit will not materially adversely affect such necessary community services as sewage disposal, fire protection, water supply, and police protection;*
d. *The granting of the permit will not be detrimental to the health, safety, and general welfare of the neighborhood;*
e. *The proposed use is consistent with the coastal plan, general plans, and applicable specific plan(s);*
f. *The proposed use will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;*
g. *The proposed development will not conflict with recorded easements acquired by the public-at-large for access through or use of the property within the proposed development or any easements granted to any public agency or required as a condition of approval;*
h. *Any other conditions which are reasonably necessary to protect the public peace, health, safety, and general welfare.*

The proposed public trail project qualifies as a public works project that is permissible with approval of a CUP. The City segment of the proposed project would be located entirely within existing public rights-of-way and would establish a new public multi-use pathway connecting the City of Carpinteria with Rincon Beach County Park in unincorporated Santa Barbara County. The project would provide a more direct and safer cyclist and pedestrian path connection than the existing setting, which relies upon use of the U.S. Highway 101 shoulder or informal use trails that trespass through the UPRR corridor, and connect public recreational areas at each end. Advanced coordination with utility service providers will ensure that construction of the proposed project would not interrupt services to surrounding land uses. Impacts to sensitive habitats would be minimized to the maximum extent feasible and mitigated with appropriate compensatory habitat restoration/enhancement efforts. All other identified potentially significant environmental effects would be similarly mitigated to less than significant levels, as documented in the EIR prepared for the proposed project. The analysis provided herein demonstrates the project's consistency with the City's General Plan and Coastal Land Use Plan, including but not limited to the requirements of the Transportation Corridor Wetland Overlay District. A more complete analysis of the proposed project's consistency with the above criteria is provided in Exhibit 1, Attachment A, Findings for Approval.

Transportation Corridor Wetland Overlay District

As discussed in the Background discussion, above, the City of Carpinteria adopted the Transportation Corridor Wetland Overlay ("TCWO") District (Ordinance No. 703) to allow for specific transportation improvements within the U.S. Highway 101 corridor as part of the larger South Coast Highway 101 HOV Lanes project that would otherwise result in unavoidable impacts to wetlands and/or a required protective wetland buffer, subject to specific development standards. Included amongst these development standards is a requirement that the subject multi-use path project be completed and open to the public no later than the completion of the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension construction.

Condition 3.7.15, Coastal Access and Recreation, of the adopted conditions of approval for the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension project placed this

requirement to complete the Rincon Trail on Caltrans, consistent with the provisions of the TCWO District. The condition clarifies that while construction and completion of the trail remains the sole responsibility of Caltrans, the City, County, SBCAG, and Caltrans will work cooperatively to complete the project. Further, the condition stipulates that if the project cannot be completed as originally described in the certified May 4, 2015 MND, then the applicant shall provide an alternative route.

While the need to develop and design an alternative route and complete the necessary environmental studies for the new route have delayed construction of the Rincon Trail project beyond the timing specified in the TCWO development standards and project conditions, completion of the Rincon Trail project would, nevertheless, achieve compliance with the intent of these requirements.

Environmentally Sensitive Habitat Area (ESH) Overlay District

According to the Biological Resources section of the EIR prepared for the project, portions of the proposed trail route would be located in areas of the City designated as ESHA and therefore subject to the requirements of the ESH Overlay District (CMC §14.42). Consistent with those requirements, the EIR provides a complete description of flora and fauna found, or potentially expected to be found, in the project area, describes and quantifies the extent and severity of potential impacts to sensitive species, and where appropriate, provides mitigation measures intended to avoid, minimize and/or offset those impacts to less than significant levels.

The trail project has been designed in an effort to minimize impacts to ESHA to the maximum extent feasible while still achieving the stated project objectives. Nevertheless, impacts to ESHA cannot be entirely avoided and mitigation is necessary, including but not limited to compensatory habitat restoration, which would occur both onsite in disturbed areas and offsite, as needed, to meet required replacement ratios. If the project is approved, the adopted conditions of approval, which incorporate the mitigation measures from the EIR, require development of a detailed habitat restoration plan subject to approval by CDFW.

Coastal Appeals (CA) Overlay District

Pursuant to CMC §14.48, CA Coastal Appeals Overlay District, the proposed project is located within the appeals jurisdiction of the CCC. Thus, the proposed project must be considered at a public hearing, and the Planning Commission's decision may be appealed to the City Council. The City Council's final decision also is appealable to the CCC. There is no filing fee required for an appeal of a project located within the CA Overlay District.

General Plan/Coastal Land Use Plan

The project site has a General Plan/Coastal Land Use Plan designation of Transportation Corridor (TC) and is adjacent to the Bluffs III area, which is currently designated Visitor-serving Commercial (VC). The project is located within Subarea 6, The Bluffs, as identified in the Community Design Element of the General Plan/Coastal Land Use Plan.

The following is a list of relevant objectives and policies contained in the City's General Plan/Coastal Land Use Plan that pertain to the proposed project, and an analysis of the project's conformance to those objectives and policies.

Land Use Element

Objective LU-1: *Establish the basis for orderly, well planned urban development while protecting coastal resources and providing for greater access and recreational opportunities for the public.*

Objective LU-3: *Preserve the small beach town character of the built environment of Carpinteria, encouraging compatible revitalization and avoiding sprawl development at the City's edge.*

Policy LU-3h: *Develop land uses that encourage the thoughtful layout of transportation networks, minimize the impacts of vehicles in the community, and encourage alternative means of transportation.*

Policy LU-3i: *Ensure the provision of adequate services and resources, including parking, public transit and recreational facilities, to serve proposed development.*

The proposed project would establish a new public coastal access route and bike/pedestrian path connecting the eastern end of the City of Carpinteria to unincorporated areas southeast of the City. The portion of the project within the City of Carpinteria's jurisdiction would be located entirely within existing Caltrans and City rights-of-way. The intent is to create a more direct, safe, convenient and attractive alternative transportation option that completes a critical missing gap in the California Coastal Trail and dissuades the continued dangerous and/or illicit use of the U.S. Highway 101 shoulder or informal use trails that trespass through the UPRR corridor to travel from Carpinteria to the Rincon Beach County Park, Rincon Point State Beach, and the Pacific Coast Bikeway. The proposed path will also afford new public vantage points of the adjacent Rincon Beach County Park and Pacific Ocean. The trail can be reached from the existing Class II bike path along Carpinteria Avenue or the trail network along the Carpinteria Bluffs. Informal public on-street parking at the east end of Carpinteria Avenue can also serve the trail. Additional parking and pedestrian/cyclist access to the trail is available from Rincon Beach County Park at the eastern terminus of the proposed trail. Thus, the project can be found to be consistent with the above objectives and policies.

Community Design Element

Objective CD-3: *The design of the community should be consistent with the desire to protect views of the mountains and the sea (California Coastal Act of 1976 §30251).*

The project would enhance public views toward the ocean and mountains by establishing a new multi-use trail situated along the face of the coastal bluffs between the U.S. Highway 101 corridor and the shoreline. North of the UPRR crossing, the trail would provide expansive views over the highway toward the Santa Ynez Mountains. South of the UPRR corridor (and outside of the City's jurisdiction), the proposed trail would be set into the face of the existing coastal bluff and provide unobstructed views over the adjacent shoreline and Pacific Ocean, below. The proposed railing/barrier materials are designed to meet applicable safety requirements while remaining visually permeable. The path would be situated such that it is not expected to have a negative impact on existing views from the highway toward the ocean, or from the beach/shoreline back toward the coastal bluffs. As the project would have beneficial impacts on public coastal and mountain views, the project can be found consistent with this objective.

Objective CD-8: *To encourage and facilitate pedestrian and bicycle pathways.*

Policy CD-8a: *All streets should be designed with safe and pleasant pedestrian ways at their edge. Pedestrian ways shall be spatially separated from vehicular traffic by elements such as trees, other plantings, streetlights, and/or parked cars.*

Policy CD-8b: *To provide convenient pedestrian routes, the existing network of automobile lanes, trails and pedestrian ways in the Downtown District and adjacent neighborhoods should be preserved, reinforced and extended into other neighborhoods. This pedestrian network should be in addition to, not in lieu of, pedestrian ways on the streets.*

The proposed multi-use path would provide a physically separated bicycle and pedestrian path from the east end of Carpinteria Avenue to Rincon Beach County Park, staying on the ocean side of U.S. Highway 101. The new path would fill in a critical missing gap in the California Coastal Trail and would dissuade the ongoing dangerous and/or illicit use of the U.S. Highway 101 shoulder or informal use trails that trespass through the UPRR corridor. The proposed trail provides a direct connection from the east end of Carpinteria Avenue, where both the existing Class II bicycle lane along Carpinteria Avenue and the Carpinteria Bluffs trail network terminate, to public recreational areas and facilities located near the Santa Barbara/Ventura County line (i.e., Rincon Beach County Park; Rincon Point State Beach; and the Pacific Coast Bikeway). The trail is intended to support both recreational use and alternative transportation/commuting.

The proposed trail has been designed to be physically and grade separated from adjacent vehicle travel lanes. The trail would be set into the face of the existing manufactured slopes of the ridgeline that separates U.S. Highway 101 from the shoreline. The trail would be 14-16 feet in usable width to safely accommodate two-way bicycle and pedestrian traffic. Disturbed areas adjacent to the trail alignment would be revegetated with native plantings appropriate to the coastal bluff setting. Based on these characteristics, the proposed project can be found to be consistent with the above objective and policies.

Objective CD-11: *Existing public spaces should be maintained, and new public spaces should be incorporated into neighborhoods and districts as an important aspect of their design.*

Policy CD-11b: *Public spaces should be located and designed to encourage their use during the day and in the evening. The time and type of use for each space should be planned to be compatible with adjacent land uses, and with any existing flora and fauna that are to be preserved.*

Policy CD-11c: *All public spaces and facilities should reflect quality design.*

The project is unique in that it spans across jurisdictional boundaries, however, the design intention for the project is to develop a plan and design theme that would be mutually supported by both the City and County to ensure the project has a high quality, durable, and consistent appearance. The project has been favorably reviewed by both the City's ARB and the County's SBAR on at least one occasion each, and the design team is currently working to incorporate revised fencing and railing details into the proposed plans based on comments received. The design team is also considering incorporating low level solar lighting along key portions of the proposed trail alignment for safety purposes and to facilitate trail usage in the early morning or evening hours.

Speaking broadly, the proposed trail is intended to provide an attractive, safe, broadly accessible and convenient pedestrian and bicycle connection between the City of Carpinteria and unincorporated areas of Santa Barbara and Ventura Counties to the southeast of the City. Staff believes the proposed plans reflect the intent of the above Objective and Policies to provide for high quality and well-designed public spaces and facilities.

Objective CD-12: *Development should fit quietly into the area's natural and introduced landscape, deferring to open spaces, existing natural features and native and sensitive habitats.*

Policy CD-12a: *Landscape planning shall be respectful of the natural character of the City and enhance existing native plant communities and environmentally sensitive habitat areas.*

CD-12-Implementation Policy 1: *Use of native, locally adapted species shall be encouraged and shall be required within and adjacent to ESHA.*

The proposed trail alignment passes through a disturbed area characterized by remnants of past transportation infrastructure projects, including but not limited to, manufactured slopes, a former railroad bench, a former state highway alignment, and infrastructure serving the current highway and railroad alignments. Nevertheless, pockets of native vegetation communities have colonized and reestablished portions of the project area over the past decades, some of which are considered sensitive and qualify as ESHA based on City policies.

According to the Biological Resources section of the EIR prepared for the proposed project, the construction of the trail would result in approximately 4.32 acres of permanent impacts to sensitive native vegetation communities (i.e., ESHA) in the project area (see Figure 3.3-1 of the Draft EIR for a depiction of areas of anticipated impacts and ESH areas). Of this, approximately 0.76 acres of ESHA would be permanently impacted by the new trail alignment itself; the remaining approximately 3.55 acres of permanent impacts to ESHA are related to vegetated areas that would be cleared/disturbed during earthwork to stabilize the new trail bench and bluff faces above/below the trail alignment. Permanently impacted areas would be mitigated through revegetation and enhancement/restoration of existing degraded coastal bluff scrub habitats in the project area where feasible. Impacts would also be offset through additional offsite compensatory mitigation, ideally within nearby similar habitats, such as at the City's Rincon Bluffs Preserve. Compensatory mitigation replacement ratios would range between 2:1 and 4:1, depending upon the particular species that were impacted.

A habitat mitigation and monitoring plan is required to be developed to guide the restoration efforts and ensure successful rehabilitation of impacted areas, including but not limited to, identifying areas for compensatory mitigation, developing appropriate plant/seed mixes for the affected vegetation community types, defining a detailed maintenance plan, and defining annual and final performance standards. Based on the foregoing, the project can be found to be consistent with the above objective and policies.

Objective CD-13: *Ensure that lighting of new development is sensitive to the character and natural resources of the City and minimizes photopollution to the maximum extent feasible.*

Policy CD-13a: *Lighting for development adjacent to an ESHA shall be designed to further minimize potential impacts to habitat.*

CD-13-Implementation Policy 4: *Lighting along roads and in developed areas within or adjacent to ESHA shall not exceed 0.01 foot-candles five feet inside of any City-identified ESHA area.*

CD-13-Implementation Policy 5: *Spotlights or floodlights in or adjacent to ESHA shall not be permitted.*

Currently, no lighting is proposed as part of the trail project. However, during architectural review, both the City ARB and the County SBAR suggested that at least some low level lighting along portions of the trail could be beneficial for safety purposes during early morning or evening hours. The project design team is considering these comments as they continue to develop the project plans. If lighting is incorporated into the project plans, it would be reviewed for compliance with this objective and policies, and would be subject to review by the ARB and SBAR.

Objective CDS6-2: *Ensure that development is controlled to avoid impacts to significant viewsheds, vistas, and view corridors.*

Policy CDS6-b: *Development on the Bluffs shall not obstruct existing view corridors of the ocean and bluff top edge. In addition, views of the ocean and mountains for users of the Carpinteria Bluffs Nature Park and coastal trail(s), for bluffs area property owners and visitors, and for passing motorists, shall be maintained.*

CDS6-Implementation Policy 57: *New structures shall be low intensity, and reflect the low-rise, small-town feel of the surrounding area. New structures shall be designed to blend into the site and the rest of the city.*

CDS6-Implementation Policy 58: *All structures, including ancillary structures, shall be appropriately placed so as to minimize their obtrusiveness, and to maintain existing view corridors. Existing views from Bailard Avenue, Carpinteria Avenue, and U.S. 101 to the ocean shall be preserved.*

CDS6-Implementation Policy 60: *New development shall maintain existing topographic variations of the Carpinteria Bluffs, such as the ridgeline in Bluffs I and the terracing of Bluffs III. Development of Bluffs I should be designed to respect the viewshed from the bluff trail looking north toward the mountains and from the Bluffs Nature Park looking west. Location and design of buildings shall respect the topography and follow topographic forms whenever possible, visible variations in the ground plane are to be retained, avoiding a flat, mass graded appearance. These variations in the ground plane are also to be reflected in variations in the roof lines of individual buildings.*

Policy CDS6-d: *Landscape Planning shall be respectful of the natural character of the Bluffs and enhance existing native plant communities and environmentally sensitive habitat areas.*

CDS6-Implementation Policy 75: *Use of native, locally adapted species shall be required.*

CDS6-Implementation Policy 83: *Development within the Carpinteria Bluffs should fit quietly into the area's natural and introduced landscape, deferring to open spaces, existing natural features, and native and sensitive habitats.*

As discussed elsewhere in this report, the proposed trail has been designed to be visually subordinate to its setting by setting the trail into the existing bluff faces and not altering the overall height of the ridge. For the portion of the trail located in the City of Carpinteria, the trail alignment would be located above the southbound U.S. Highway 101 on-ramp from the SR 150 interchange, on the face of the existing manufactured slope, and would generally mimic/maintain the appearance of this engineered slope. Placing the trail at this location would have no substantive impact on ocean or mountain views from U.S. Highway 101 or nearby public areas on the bluffs. The trail would, however, provide a new vantage for pedestrian/cyclist views toward both the ocean and the mountains. Permanent ancillary structures associated with the trail project such as protective fencing or railings must be designed to meet respective Caltrans/UPRR safety standards, but are also being designed to be visually unobtrusive and respectful of the naturalized setting in terms of selected colors, and materials. Disturbed areas resulting from trail construction and earthwork would be restored and revegetated with appropriate native plantings that correspond to the sensitive habitats found in the project area. Therefore, the project can be found to be consistent with the above Subarea 6 community design objective and policies.

Circulation Element

Objective C-4: *Improve the Carpinteria Avenue corridor to ensure adequate traffic flow, safe bicycle use and improved aesthetic qualities.*

Objective C-6: *Provide adequate safe railroad crossings and to effectuate community design of buffers that will attenuate rail-related noise.*

Policy C-6a: *Seek funding sources for grade-separated crossings of the rail line to resolve conflicts with urban linkages, where such structures are considered feasible. [10-year]*

Objective C-7: *Build demand for alternative transportation use by increasing ease, effectiveness, and social acceptability, and through foresighted planning.*

Policy C-7b: *Develop safe and direct pedestrian accessibility between residential areas, schools, parks, and shopping areas in both new and existing urban areas.*

Objective C-8: *Support and develop safe, direct and well-maintained bicycle and pedestrian systems and recreational boating facilities that serve all segments of the public.*

Policy C-8a: *Integrate the development of bicycle routes and pedestrian pathways in additional areas of the city, and encourage the utilization of such routes for commuting as well as recreational purposes.*

Policy C-8d: *Encourage integration of the city's bicycle routes with state and countywide programs.*

Policy C-8f: *Encourage pedestrian movement by providing pedestrian facilities that are direct and convenient, particularly in the beach and downtown areas.*

Policy C-8g: *Consider rerouting the Pacific Coast Bikeway to another location parallel to the coastline, such as adjacent to the railroad right of way throughout the city. [5-year]*

Policy C-8h: *Encourage a bike trail link from Carpinteria to Summerland along the railroad right of way and a coastal link to Ventura paralleling U.S. 101.*

The proposed project would provide a new separated Class I bicycle and pedestrian path connecting the City of Carpinteria to the unincorporated Santa Barbara and Ventura County lands southeast of the City, and will also serve to fill in a critical missing link in the California Coastal Trail, a statewide coastal public access trail. The proposed path will allow for a safer, more attractive, convenient, and more direct alternative to the popular but unsafe and/or illicit routes currently used by pedestrians and cyclists to connect Carpinteria to points south. The project includes a new bridge over the UPRR corridor to facilitate a safe, legal crossing of the railroad tracks. The proposed path is intended to support both alternative transportation commuting and recreational activities.

At the western terminus of the multi-use path in the City of Carpinteria, the proposed path will terminate across the street from the newly acquired Rincon Bluffs Preserve and the Class II bike lanes on Carpinteria Avenue. Formalized trails and parking facilities are currently in the preliminary design stage for the Rincon Bluffs Preserve and will help to further improve pedestrian and cyclist connections between public recreational areas in the east end of the City. At the eastern terminus of the proposed path, located in Rincon Beach County Park, the trail would direct cyclists into the existing parking lot. Pedestrians would be able to access the existing walkways in the park. County Parks and SBCAG staff have been exploring options for a future continuation of a dedicated bicycle trail through Rincon Beach County Park to allow cyclists wishing to continue southbound onto the Pacific Coast Bikeway to bypass the county park parking lot.

Open Space, Recreation and Conservation Element

Objective OSC-1: *Protect, preserve and enhance local natural resources and habitats.*

Policy OSC-1a: *Protect Environmentally Sensitive Habitat Area(s) (ESHA) from development and maintain them as natural open space or passive recreational areas.*

Policy OSC-1b: *Prohibit activities, including development, that could damage or destroy ESHA.*

Policy OSC-1f: *Protect and restore degraded wetlands, butterfly habitat, native plant communities, and sensitive, rare, threatened or endangered species habitat on City-owned land to the maximum extent feasible.*

OSC-1-Implementation Policy 8: *Regulate all development, including agricultural development, adjacent to ESHA, in or adjacent to ocean-fronting parks or recreation areas, or contiguous to coastal waters, to prevent adverse impacts on habitat resources. Regulatory measures shall include, but are not limited to: setbacks, buffer zones, grading controls, noise restrictions, lighting restrictions, requirements for wildlife permeable fencing, and maintenance and establishment of native vegetation.*

OSC-1-Implementation Policy 9: *Prior to issuance of a development permit, all projects shall be found to be in compliance with all applicable habitat protection policies of the General Plan/Local Coastal Plan and implementing policies and regulations of the Coastal Access and Recreation*

Program, Carpinteria Bluffs Access Recreation Master Open Space Program, and any other implementing plan for these policies that has been certified as an amendment to the City's LCP.

Objective OSC-2: *Preserve and restore the natural resources of the Carpinteria Bluffs.*

Objective OSC-7: *Conserve native plant communities.*

Policy OSC-7b: *When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. Structures shall be sited and designed to minimize the impact of grading, paving construction of roads, runoff and erosion on native vegetation. Sensitive resources that exhibit any level of disturbance shall be maintained, and if feasible, restored. New development shall include measures to restore any disturbed or degraded habitat on the project site. Cut and fill slopes and all areas disturbed by construction activities shall be landscaped or revegetated at the completion of grading. Plantings shall be of native, drought-tolerant plant species consistent with the existing native vegetation on the site. Invasive plant species that tend to supplant native species shall be prohibited.*

The proposed trail alignment passes through a disturbed area characterized by remnants of past transportation infrastructure projects, including but not limited to, manufactured slopes, a former railroad bench, a former state highway alignment, and infrastructure serving the current highway and railroad alignments. Nevertheless, pockets of native vegetation communities have colonized and reestablished portions of the project area over the past decades, some of which are considered sensitive and qualify as ESHA based on City policies. The project area is severely constrained in terms of locating a trail through the bluffs while avoiding various utility, infrastructure, geologic, and biological constraints, thus it is not possible to plot a trail alignment through the area that would entirely avoid sensitive habitats. Instead, the project design team has attempted to minimize impacts to ESHA while also meeting all other project objectives and design requirements.

Despite these minimization efforts, according to the Biological Resources section of the EIR prepared for the proposed project, the construction of the trail would still result in approximately 4.32 acres of permanent impacts to sensitive native vegetation communities (i.e., ESHA) in the project area (see Figure 3.3-1 of the Draft EIR for a depiction of areas of anticipated impacts and ESH areas). Of this, approximately 0.76 acres of ESHA would be permanently impacted by the new trail alignment; the remaining approximately 3.55 acres of permanent impacts to ESHA are related to vegetated areas that would be cleared/disturbed during earthwork to stabilize the new trail bench and bluff faces above/below the trail alignment. Permanently impacted areas would be mitigated through revegetation and enhancement/restoration of existing degraded coastal bluff scrub habitats in the project area, wherever feasible. Impacts would also be offset through additional offsite compensatory mitigation, ideally within nearby similar habitats, such as at the City's Rincon Bluffs Preserve or natural areas of Rincon Beach County Park. Compensatory mitigation replacement ratios would range between 2:1 and 4:1, depending upon the particular species that were impacted.

A habitat mitigation and monitoring plan is required to be developed to guide the restoration efforts and ensure successful rehabilitation of impacted areas, including but not limited to, identifying areas for compensatory mitigation, developing appropriate plant/seed mixes for the affected vegetation community types, defining a detailed maintenance plan, and defining annual and final performance standards. The habitat mitigation and monitoring plan must be reviewed and approved by CDFW. Additional mitigation measures call for completing sensitive species surveys prior to starting clearing

or earthwork; using protective fencing to delineate the limits of the construction area and avoid impacts to surrounding ESHA; utilizing biological monitors onsite during construction; training workers about sensitive biological resources in the project area; and developing and implementing a weed management plan to be employed during construction and throughout the implementation of the habitat mitigation and monitoring plan. Based on the foregoing, the project can be found to be consistent with the above objective and policies.

Policy OSC-6f: *All development shall be evaluated for potential adverse impacts to water quality and shall consider Site Design, Source Control and Treatment Control BMPs in order to minimize polluted runoff and water quality impacts resulting from development. In order to maximize the reduction of water quality impacts, BMPs should be incorporated into the project design in the following progression: (1) Site Design BMPs, (2) Source Control BMPs, and (3) Treatment Control BMPs.*

Policy OSC-10a: *Minimize the erosion and contamination of beaches. Minimize the sedimentation, channelization and contamination of surface water bodies.*

OSC-10-Implementation Policy 52: *Ensure that soil erosion and the off-site deposition of soils is not exacerbated through development.*

The proposed project would result in 2,800 linear feet of new impervious surfaces along the ridgeline separating U.S. Highway 101 from the ocean. Nonetheless, the project has been designed to reduce or minimize the potential for adverse impacts on stormwater quality. Existing slopes along the trail alignment would be stabilized and slightly laid back, and a new drainage channel installed along the inside edge of the trail to make the bluffs less prone to erosive actions, and to capture and direct stormwater flows to replaced/new storm drains (outfitted with filters/inserts to capture pollutants) that are proposed as part of the project. The replaced/additional storm drains are intended to help divide storm water discharges from the drainage area among additional outfalls to minimize discharge volumes at any one outlet. Each outlet is to be outfitted with a horizontal outfall and rock rip rap to act as an energy dissipater to further reduce potential for erosive effects from stormwater runoff. The storm drain facilities are required to be annually monitored and maintained throughout the life of the project.

Additional water quality measures have been identified and will be employed during construction to avoid or minimize erosion and other water quality impacts during construction. These include obtaining permit coverage for the project from the State Water Resources Control Board, developing and implementing a stormwater pollution prevention plan, developing and implementing an erosion and sediment control plan, and revegetating all impacted areas as soon as practicable following completion of trail construction. Additional details about the project's potential water quality impacts and avoidance/mitigation measures are discussed in Section 3.8 of the Draft EIR (Exhibit 2) and of the Proposed Final EIR (Exhibit 3). Based on the careful design of the project and implementation of the identified mitigation measures, the project can be found to be consistent with the above policies.

Objective OSC-11: *Carpinteria will conduct its planning and administrative activities so as to maintain the best possible air quality.*

Policy OSC-11a: *Carefully review development that will significantly impact air quality.*

Policy OSC-11b: *Promote the reduction of mobile source emissions related to vehicular traffic (e.g., promote alternative transportation, vanshare, buses).*

The proposed project is anticipated to result in short-term construction-related impacts to air quality and greenhouse gas emissions resulting from earth work and use of vehicles and equipment during construction. Compliance with standard Santa Barbara County Air Pollution Control District ("APCD") air quality measures, which are required of all discretionary projects, would ensure these temporary construction-related impacts remain less than significant. Consistent with Policy OSC-11b, the proposed project creates a new multi-use path connecting the City of Carpinteria with unincorporated areas to the south of the City. Operationally, such a path may help to facilitate alternative transportation between these areas in lieu of car trips, which could help to incrementally reduce air quality impacts and greenhouse gas emissions.

Objective OSC-13: *Preserve Carpinteria's visual resources.*

Policy OSC-13a: *Preserve broad, unobstructed views from the nearest public street to the ocean, including but not limited to Linden Avenue, Bailard Avenue, Carpinteria Avenue, and U.S. Highway 101. In addition, design and site new development on or adjacent to bluffs, beaches, streams, or the salt marsh to prevent adverse impacts on these visual resources.*

Policy OSC-13g: *Require new development to protect scenic resources by utilizing natural landforms and native vegetation for screening structures, access roads, building foundations, and cut and fill slopes in project design which otherwise complies with visual resource protection policies.*

Policy OSC-13h: *Plans for development shall minimize cut and fill operations. Plans that do not minimize cut and fill shall be denied.*

The proposed project alignment is located along both sides of a narrow ridge that separates the current U.S. Highway 101 alignment from the coastline. The entire area, including the ridge in question, was altered and manipulated first by previous alignments of the railroad and State Route 2 (precursor to current U.S. Highway 101), and then again even more significantly during the excavation and construction of the current UPRR and U.S. Highway 101 alignments through the project area. The resulting ridge in question is characterized by over-steepened, manufactured and terraced slopes that have become "naturalized" in the intervening decades through colonization by native and nonnative vegetation, and by natural erosion/weathering activities.

Establishing a multi-use trail across this ridge to connect the east end of Carpinteria Avenue to Rincon Beach County Park necessitates cutting a new bench into the bluff face and stabilizing the bluff face above/below the trail alignment to ensure the long-term safety and viability of the trail. Importantly, the trail has been designed to traverse the bluff face, gradually descending in elevation from west to east at an ADA-compliant slope while avoiding the need to alter the overall height of the ridge.[1] Cutting the new trail benches into the bluff faces would generally maintain and mimic the appearance and character of the existing bluff faces, which are similarly interrupted by existing

[1] If selected as the preferred project, the Alternative 3 design includes a section of trail located in the County of Santa Barbara's jurisdiction that would slightly exceed ADA design standards (i.e., a six percent maximum slope rather than a five percent maximum slope); however this section may be eligible for a design exception from the USAB where strict conformance with ADA design standards is not practicable due to terrain.

terraces/benches. The bluff profile would be slightly laid back to ensure long term stability and to better control for runoff/erosion. Laying back the slope would also be more conducive to planting of native vegetation as part of the revegetation/habitat enhancement work required to offset anticipated biological resource impacts. Protective fencing and railings along the trail alignment, and the bridge crossing over the UPRR alignment are being designed to be visually unobtrusive in this setting with guidance from the City ARB and the County SBAR, while still meeting the respective safety standards of Caltrans and UPRR.

Over the course of the development of the trail project, various revisions and redesigns have occurred to avoid and address geologic hazards, as well as to further minimize earthwork and landform modifications of the coastal bluffs, both for policy consistency purposes as well as to reduce projected construction costs and reduce impacts on air flow conditions over the ridge. Most recently, the proposed project description was modified to eliminate a new terraced bench that was previously proposed upslope of the new trail bench. Removal of this new upslope bench from the plans resulted in an eleven percent (11%) reduction in earthwork quantities as compared to the project design described in the Draft EIR and results in one less bench traversing the face of the coastal bluff. Alternative 3, as described in the Proposed Final EIR, goes one step beyond and nets a slight further reduction in earthwork quantities by slightly narrowing and steepening a segment of the trail located in the County's jurisdiction south of the UPRR alignment to descend the bluff face at a more westerly point and utilize more of the existing abandoned former railroad bench to reach Rincon Beach County Park. By further reducing earthwork and thus the corresponding severity/extent of some of the anticipated environmental effects (i.e., geology/soils, water quality, air quality, etc.), the Alternative 3 design was found to be the environmentally superior alternative and is recommended by staff to be selected as the preferred project in the EIR. Alternative 3 would also be the most consistent with the above objective and policies.

Objective OSC-14: *Provide for adequate park and recreation facilities to meet the needs of the community and visitors.*

Policy OSC-14a: *Increase coastal and recreational access for all segments of the population, including the disabled and elderly, while protecting natural resources, particularly environmentally sensitive habitat areas.*

Objective OSC-15: *Maintain the existing trail system and provide additional recreation and access opportunities by expanding the trail system.*

Policy OSC-15c: *Pursue development of a trail and/or boardwalk system along the coastline.*

OSC-15-Implementation Policy 70: *Continue the development of a coastline trail to extend from Carpinteria City Beach to Rincon Beach Park with vertical access points placed as frequently as possible to encourage public access.*

The proposed project enhances coastal public access and recreational opportunities, providing a safer, attractive, more convenient and direct pedestrian and bicycle link between the City of Carpinteria and the unincorporated areas of Santa Barbara and Ventura Counties to the southeast of the City. Depending upon which of the design alternatives of the trail is selected, all or most of the trail would be designed to be compliant with accessibility requirements. In either case, the proposed trail would enhance coastal and recreational access for all segments of the population and would achieve the

intent of the above objectives and policies, in particular OSC-15 Implementation Policy 70, which specifically describes the continuation of a coastal trail extending from the City of Carpinteria to Rincon Beach County Park.

While the bluffs area in question is regularly used by cyclists and pedestrians to reach recreational areas and facilities located south of the City of Carpinteria (e.g., Rincon Beach County Park; Rincon Point State Beach; Pacific Coastal Bikeway, etc.), the project area has also been informally used by members of the soaring community (i.e., para-gliders and similar free flight apparatus) for the past several decades. Pilots launch from private property located on Bluffs III, cross over the UPRR alignment and rely upon uplift from the coastal bluffs to gain altitude and continue their flights. The use of the area for soaring has never been officially recognized or sanctioned by the City of Carpinteria or the County of Santa Barbara, and in addition to the questionable nature of access to the launch points on Bluffs III, the flying activities in the area pose other safety, liability and potential regulatory concerns given the close proximity of the railroad tracks and U.S. Highway 101 to the common flight paths.

Nevertheless, the EIR analyzed to what extent the proposed trail project could impact the air flow conditions relied upon by the soaring community to continue their flying activities in the area. As discussed in Section 3.11, Recreation, of the Draft EIR, Section 2, Global Response 1, and Section 3.11, Recreation, of the Proposed Final EIR, an Airflow Analysis Report was commissioned by an expert in fluid dynamics to provide an understanding of the change in wind uplift patterns above the bluff face resulting from the proposed project. Using two different modeling techniques, the Airflow Analysis Report concludes that project re-grading could conservatively result in a vertical wind speed reduction of up to 20 to 30 percent above the project alignment, which the EIR concluded was less than significant, and would not be expected to result in a substantial decrease in soaring opportunities. In light of this conclusion, staff believes the proposed project strikes a reasonable balance between preserving opportunities for soaring in the project area while also providing a critical multi-use path through the area that is of regional benefit to nearby communities. See additional discussion above regarding soaring.

Objective OSC-16: *Preserve Carpinteria's cultural resources.*

Policy OSC-16a: *Carefully review any development that may disturb important archaeological or historically valuable sites.*

OSC-16-Implementation Policy 77: *Prior to the city granting a development permit, all archaeological sites (or areas near known archeological sites that have been determined though Phase 1 investigation to potentially include cultural or paleontolgical resources) must undergo a subsurface test to determine the integrity and significance of the site. Through the project environmental review process, the disposition and/or preservation of any archaeological sites deemed to have significance as a result of the subsurface testing shall be determined. Preservation of cultural/paleontological resource sites through avoidance shall be preferred, however, other methods of disposition may be approved through the environmental review process as identified in the city's Guidelines for the Implementation of CEQA.*

OSC-16-Implementation Policy 78: *A qualified archaeologist and Native American observer (acceptable to the city) shall be retained to monitor grading activities on identified archeological sites and in the vicinity of identified archaeological resources. If cultural artifacts or similar*

material of potential cultural or paleontological importance, are uncovered during grading or other excavation the following shall occur:

a. *The monitor or archaeologist shall halt the grading or excavation and notify the City.*
b. *A qualified archaeologist shall prepare a report assessing the significance of the find and recommending any actions to be taken by the applicant(s) prior to the city granting permission for grading to resume.*
c. *The removal of cultural artifacts or other materials shall only occur after preparation of the report and in conformance with the recommendations of the report as approved by the City.*

The project area is known to be in the vicinity of previously recorded cultural resource sites, although the bluffs upon which the proposed trail alignment is to be located have been previously significantly disturbed and altered during the construction of the present-day alignment of both the UPRR corridor and the U.S. Highway 101 corridor. Initial "phase I" surveys along the proposed trail alignment and areas of disturbance failed to uncover any cultural resources; nevertheless, the chance remains for there to be subsurface intact cultural resources in the project area that could be impacted during construction. Thus, in order to avoid a potentially significant impact to cultural resources, and to be consistent with the above objective and policies, the project is required to have an archaeological monitor and a Native American observer in place during all periods of ground disturbance and during the initial excavation for the bridge footings/abutments; conduct a training with all personnel participating in tasks that may involve ground disturbance so they are aware of protocols in the event of a discovery of cultural materials; and develop and implement a cultural resource treatment and inadvertent discovery plan.

Safety Element

Objective S-1: *Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from fault rupture in the planning area, from ground shaking due to an earthquake along a fault in the planning area or in the region, from seismically-induced liquefaction in the planning area, and from seismically-induced tsunamis.*

Objective S-2: *Minimize the potential risks and reduce the loss of life, property and economic and social dislocations resulting from seismically-induced and naturally-occurring landslides, from mud and debris flows, from rock falls, and from seacliff retreat.*

Policy S-2a: *Areas identified on Figure S-2 as High Landslide Potential shall either be designated in an open space zoning category or the potential for landslide will be mitigated through avoiding disturbance of the slope area of the site subject to landslide potential.*

Objective S-3: *Minimize the potential risks and reduce the loss of property and the economic and social dislocations resulting from expansive soils, soil settlement, subsidence, and hydrocompaction.*

Policy S-3b: *All new development will comply with the Uniform Building Code, local City building ordinances, and geotechnical recommendations related to construction in areas identified as having a high potential for expansive soils or soil settlement.*

According to Figures S-2 and S-3 of the Safety Element of the City's General Plan/Coastal Land Use Plan, the proposed project is located in an area with high potential for soil settlement. According to the project-specific EIR, the project area is also located in a geologically active area in the vicinity of

the Rincon Creek fault, the Carpinteria fault, and the Red Mountain fault. The portion of the trail south of the UPRR corridor located in the County's jurisdiction is also subject to areas affected by unstable soils and vulnerable to coastal bluff retreat. The project does not entail any new buildings or other critical infrastructure; nevertheless, the project is required to be designed in compliance with the recommendations of the project engineer and geotechnical report, including any measures necessary to ensure the long-term viability of the pathway, bridge foundations, and slope stability in light of the potential geologic conditions known to be present in the area (see Mitigation Measures GEO-1 through GEO-3). The portion of the trail located in the City's jurisdiction is not threatened by bluff retreat; the portion of the trail located in the County's jurisdiction has been sufficiently located back from the bluff edge to account for average rates of bluff retreat over the expected lifespan of the project.

Objective S-4: *Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from flooding.*

The project area is not located in a flood hazard zone according to the most recent FEMA Flood Insurance Rate Map for the area. However, the general project area located along the bluffs has been identified as being an area vulnerable to erosion/bluff face retreat impacts from future sea level rise (beginning to become vulnerable with as little as 1-2 feet of sea level rise when periodic flooding may reach the terminus of the storm drain outlets and/or toe of the coastal bluff), according to both the City's and County's respective vulnerability assessments. Nevertheless, the proposed trail alignment has been located sufficiently far inboard from the bluff face, such that the closest portion of the trail to the existing sea cliff (located in the County's section of the trail) measures approximately 60 feet back from the bluff edge, which equates to somewhere between 60 and 120 years of erosion based on current and expected bluff retreat rates. A more detailed analysis of the project's vulnerability to potential sea level rise impacts is discussed in section 3.8.4 of the Draft EIR (Exhibit 2). Given this analysis, the EIR found that flood hazards would not be significant.

Objective S-6: *Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from hazardous materials accidents at large industrial facilities, at facilities handling acutely hazardous materials, and along transportation corridors.*

Policy S-6b: *City policies concerning the use, storage, transportation and disposal of hazardous materials, and regarding underground or above-ground storage tanks shall reflect the County of Santa Barbara and the State Regional Water Quality Control Board policies and requirements and shall ensure that the use, storage, transportation and disposal of hazardous materials does not result in hazardous discharge or runoff.*

Policy S-6d: *The City shall support protective measures against the spillage of hazardous materials, including crude oil, gas and petroleum products, and shall support effective containment and cleanup facilities and procedures for accidental spills that occur.*

Given the proximity to U.S. Highway 101, the EIR identified the potential for the presence of aerially deposited lead ("ADL") to be found along the portion of the proposed trail alignment north of the UPRR crossing. To avoid potential exposure to ADL, the soils within the trail alignment north of the UPRR crossing are required to be tested to determine if such soils may be used as fill or must be disposed of in a properly licensed landfill. Testing for, and proper disposal of, any ADL contaminated soil would ensure the project is consistent with the intent of the above objective and policies. Further, as part of

any required stormwater pollution prevention plan, the project contractor will need to develop and implement standard practices to avoid and contain accidental spills or leaks of any hazardous materials used during construction activities.

Noise Element

Objective N-5: *The City will minimize the effects of nuisance noise effects on sensitive land uses.*

Policy N-5b: *The City will require that construction activities adjacent to sensitive noise receptors be limited as necessary to prevent adverse impacts.*

Policy N-5c: *The City will require that construction activities employ techniques that minimize the noise impacts on adjacent uses.*

The proposed project has the potential to create short-term construction-related noise impacts for the nearest sensitive receptors, which are some of the homes in the Rincon Point neighborhood located approximately 775 feet from the eastern terminus of the proposed trail. Residences and commercial developments across the highway from the proposed project location are not expected to be negatively impacted, as the construction noise should not be audible above the existing U.S. Highway 101 noise. Proposed mitigation measures follow standard construction noise reduction strategies: limit construction hours to Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m.; and require all construction equipment to be equipped with the manufacturer's original muffling devices and all stationary equipment to be physically buffered from sensitive receptors. With the incorporation of these measures, noise impacts would be reduced to less than significant levels and the project can be found to be consistent with this objective and policies.

Public Facilities and Services Element

Objective PF-5: *To provide a high quality and broad range of public services, facilities and utilities to meet the needs of all present and future residents of the Carpinteria Planning Area.*

Objective PF-6: *To ensure that new development is adequately served by utilities and does not impact existing service areas in the community.*

As discussed elsewhere, the proposed project would provide a new safer, more convenient, direct and attractive pedestrian/cyclist route between the City of Carpinteria and unincorporated areas of Santa Barbara and Ventura Counties located to the southeast of the City. The project would enhance coastal access, recreational opportunities, and the ease of alternative transportation throughout the area, consistent with the intent of Objective PF-5, above.

As currently designed, the project does not require any new permanent utilities with the exception of upgrading and supplementing existing storm drainage facilities along the ocean-facing bluff face of the trail alignment (for the unincorporated County portion of the trail) to manage storm water runoff from the bluff face and new trail surface. These upgraded storm water facilities would help to ensure the long term stability of the trail and the bluff face upon which the trail is to be placed. Other existing infrastructure/utilities located in or near the project area would be protected in place and where necessary, marked or otherwise identified, to avoid unintended impacts or disruptions to service during construction. With the exception of water quality measures related to

erosion/sedimentation control and the design/maintenance of the new storm drain facilities, the project would not result in any adverse significant impacts to utilities or public facilities. Likewise, the water quality measures identified in the EIR would reduce the identified potentially significant water quality and public utility impacts to less than significant levels.

VII. ACTION OPTIONS

1. Adopt Resolution PC-22-001, thereby accepting and certifying the EIR for the Rincon Trail Project as having satisfied the procedural and statutory requirements of CEQA; selecting Alternative 3 as the preferred project; and approving Project 19-2015-CUP/CDP to allow construction of the proposed 850-foot long portion of the Rincon Trail project located in the City of Carpinteria; and adopt the Findings in Exhibit 1, Attachment A. (staff's recommendation)

2. Direct staff to prepare revisions to the Proposed Final EIR and/or to the proposed project, and return to the next Commission meeting.

3. Conceptually deny the project as proposed. Direct staff to return with findings for denial to the Planning Commission's next meeting.

VIII. ATTACHMENTS

Exhibit 1 Resolution PC-22-001
- Attachment A – Findings for Approval
- Attachment B – Proposed Plans
- Attachment C – Recommended Conditions of Approval

Exhibit 2 Draft Environmental Impact Report

Exhibit 3 Proposed Final Environmental Impact Report

Exhibit 4 Supporting Project Exhibits and Graphics

Exhibit 5 October 28, 2021 ARB Meeting Minutes and public comment letters submitted to the ARB

Exhibit 1

Resolution PC-22-001

Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022

RESOLUTION NO. PC-22-001

A RESOLUTION OF THE CITY OF CARPINTERIA PLANNING COMMISSION TO ADOPT AND CERTIFY THE ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE RINCON TRAIL PROJECT; AND TO APPROVE THE CONDITIONAL USE PERMIT AND COASTAL DEVELOPMENT PERMIT 19-2015-CUP/CDP TO ALLOW THE CONSTRUCTION OF THE 850-FOOT SEGMENT OF THE CLASS I MULTI-USE PATH LOCATED IN THE CITY OF CARPINTERIA. THE ENTIRETY OF THE PROPOSED 2,800-FOOT TRAIL WOULD CONNECT THE EAST END OF CARPINTERIA AVENUE TO RINCON BEACH COUNTY PARK IN UNINCORPORATED SANTA BARBARA COUNTY. THE PROJECT IS LOCATED IN CITY AND CALTRANS RIGHT-OF-WAY AT THE EASTERN END OF THE CITY OF CARPINTERIA.

REQUESTED BY MATT ROBERTS, DIRECTOR, CITY OF CARPINTERIA PARKS & RECREATION DEPARTMENT

WHEREAS, in October 2015, the California Coastal Commission certified City of Carpinteria Local Coastal Plan Amendment (LCPA) LCP-4-CPN-15-0018-1 / City Project 09-1522-LCPA/ORD to establish the Transportation Corridor Wetland Overlay (TCWO) District, which required completion of the Rincon Trail Project as a condition of approval for the Linden Casitas Interchanges and Via Real Extension Project, as a balancing provision to offset unavoidable wetland impacts through completion of one of two regionally important improvements to alternative transportation modes for the purpose of increasing access to coastal resources for all members of the public; and

WHEREAS, the City of Carpinteria Planning Commission previously certified a Mitigated Negative Declaration (MND), and considered and approved a Conditional Use Permit and Coastal Development Permit for an earlier iteration of the Rincon Trail Project in May 2015; and

WHEREAS, in May 2017, the previously granted entitlements for the Rincon Trail project expired due to failure to initiate construction within the allotted two-year timeframe from project approval while construction drawings and specifications were still in development; and

WHEREAS, the City of Carpinteria Planning Commission considered a new application for a Conditional Use Permit and Coastal Development Permit filed by Matt Roberts, City of Carpinteria Parks and Recreation Department, on October 17, 2019 to allow for the construction of a 850-foot segment of the larger 2,800-foot class I multi-use path between the east end of the City of Carpinteria and Rincon Beach County Park in unincorporated Santa Barbara County; and

WHEREAS, the current application was subsequently deemed complete and accepted by the City as being consistent with the applicable submittal requirements on November 15, 2019; and

WHEREAS, the Planning Commission previously accepted and certified a Subsequent Mitigated Negative Declaration (SMND) for the project in January 2020; and

WHEREAS, the acceptance and certification of the SMND by the Planning Commission was appealed to the City Council, and while the appeal was never taken up by the City Council, the Council directed staff in September 2020 to proceed with the preparation of an Environmental Impact Report in order to allow for a more in-depth analysis of key issue areas identified during consideration of the SMND; and

WHEREAS, in response to direction received from the City Council, and in accordance with the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) dated December 2021 was prepared for the project and has been noticed and subject to public review as required under CEQA; and

WHEREAS, the Community Development Director has provided public notice of the intent of the Planning Commission, acting on behalf of the City of Carpinteria as Lead Agency, to accept and certify the EIR prepared for the project as having fulfilled all procedural and statutory requirements of CEQA; and

WHEREAS, the Planning Commission has reviewed and considered the EIR, together with any comments received during the public review process; and

WHEREAS, the City of Carpinteria Architectural Review Board considered the proposed project at their October 28, 2021 meeting wherein the project was recommended for preliminary approval; and

WHEREAS, the Planning Commission has conducted a hearing and received evidence regarding the application for the Conditional Use Permit and Coastal Development Permit; and

WHEREAS, the Planning Commission has reviewed the policies of the General Plan/Coastal Land Use Plan and the Zoning Code standards that are relevant to the project.

NOW THEREFORE, THE PLANNING COMMISSION HEREBY RESOLVES AS FOLLOWS:

1. The foregoing recitals are true and correct and are incorporated herein by reference.

2. The EIR prepared for the project is accepted and certified as having satisfied the requirements of CEQA;

3. The Planning Commission has reviewed and considered the EIR, together with any comments received during the public review process;

4. The Planning Commission finds that the EIR reflects the City of Carpinteria's independent judgment and analysis;

5. The Alternative 3, Steeper Slopes/Reduced Earthwork Alternative, has been selected as the preferred project in the EIR;

6. The Conditional Use Permit and Coastal Development Permit are approved, making the Findings for approval outlined in Attachment A; and

7. The Conditional Use Permit and Coastal Development Permit for the project shown in Attachment B are approved subject to the conditions of approval set forth in Attachment C.

PASSED, APPROVED AND ADOPTED this 18th day of January 2022, by the following called vote:

AYES: COMMISSIONERS:

NOES: COMMISSIONER(S):

ABSENT: COMMISSIONER:

_____
Jane Benefield, Chair

ATTEST:

_____
Steve Goggia, Secretary

I hereby certify that the foregoing Resolution was duly and regularly introduced and adopted at a regular meeting of the Planning Commission of the City of Carpinteria held the 18th day of January, 2022

Exhibit 1

Attachment A: Findings for Approval

Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022

ATTACHMENT A: FINDINGS FOR APPROVAL

PLANNING COMMISSION HEARING
RINCON TRAIL PROJECT
PROJECT 19-2015-CUP/CDP
JANUARY 18, 2022

FINDINGS PURSUANT TO GOVERNMENT CODE, LOCAL COASTAL PLAN, GENERAL PLAN, AND TITLE 14 OF THE CARPINTERIA MUNICIPAL CODE

1.0 Administrative Findings

The Planning Commission hereby incorporates by reference as though set forth in full all Community Development Department staff reports and attachments thereto presented to the Planning Commission and all comments made or received either orally or in writing at the public hearings on this project and the associated Environmental Impact Report.

1.1 Procedures

Pursuant to the California Coastal Act, the Administrative Regulations of the California Coastal Commission and the City of Carpinteria's ("City") Local Coastal Program, it has been found that the process for public review of the subject Local Coastal Development Permit has been properly conducted as follows:

a. An application for a Conditional Use Permit and Coastal Development Permit was submitted on October 17, 2019, and deemed complete and accepted by the City as being consistent with the applicable submittal requirements on November 15, 2019. Said application and all related material have been available for public review at City offices since the date of submittal.

b. The application has been evaluated and found to conform to the applicable zone districts and to be consistent with the City's Coastal Land Use Plan, the Interpretive Guidelines of the California Coastal Commission and the California Coastal Act.

c. The project has been reviewed by the City's Architectural Review Board at a duly noticed public hearing which included, but is not limited to, mailed notice to all property owners within 300 feet of the subject property and residents within 100 feet of the property.

d. The project has been reviewed by the City's Planning Commission at a duly noticed public hearing which included, but is not limited to, mailed notice to all property owners within

300 feet of the subject property, residents within 100 feet of the property and publication in the local newspaper, the Coastal View News.

1.2 California Environmental Quality Act

California Environmental Quality Act ("CEQA") findings pursuant to CEQA (California Public Resources Code Sections 21081, 21081.6) and State CEQA Guidelines (California Code of Regulations Sections 15090, 15091, 15092, 15097):

a. The Environmental Impact Report ("EIR") dated December 2021 was presented to the Planning Commission and all voting members of the Planning Commission have reviewed and considered the EIR prior to approving this project. The EIR reflects the independent judgment of the Planning Commission and is adequate for this proposed project.

b. The Planning Commission finds and certifies that the EIR dated December 2021 constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Planning Commission further finds and certifies that the EIR has been completed in compliance with CEQA.

c. The Planning Commission selects Alternative 3, Steeper Slopes/Reduced Earthwork Alternative from among the Proposed Project and Alternatives 1-4 as the preferred project, finding that it meets the project objectives and results in the fewest and least severe impacts to the environment.

d. The documents and other materials which constitute the record of proceeding upon which this decision is based are in the custody of the Planning Commission Secretary located at 5775 Carpinteria Ave, Carpinteria, CA.

e. Adoption of Environmental Reporting and Monitoring Program. The project description, and conditions of approval, with their corresponding permit monitoring requirements, are hereby adopted as the reporting and monitoring program for this project to ensure compliance during project implementation.

f. Pursuant to Section 21081(a) of the Public Resources Code and Section 15091(a)(1) of the State CEQA Guidelines, the Planning Commission finds that design features incorporated as part of the project description and mitigation measures applied as conditions of project approval would result in the avoidance or reduction to insignificant levels the following environmental impacts identified in the EIR. These findings are supported by substantial evidence in the record, including the EIR dated December 2021, and associated appendix materials. The EIR identified the potential for Class II, significant but mitigable impacts in the areas of Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Tribal Cultural Resources, and Utilities and Service Systems.

i. Aesthetics: U.S. Highway 101 in the project area is identified as being eligible for scenic highway designation. Additionally, both City and County of Santa Barbara ("County") planning regulations reflect a high concern for protecting visual resources along U.S. Highway 101 in the project area, as well as protecting public views from the project area towards the ocean and mountains. The project would result in visual changes to the area, introducing new human-scale activity from trail users, as well as physical alteration of the area primarily associated with the removal of existing vegetation, earthwork and grading, the construction of the new bridge over the Union Pacific Railroad ("UPRR") crossing, and fencing and barriers along the proposed path alignment. Trail features have been designed to be visually subordinate to the setting, but due to the high scenic value of the area, potentially significant aesthetic impacts may result. Temporary construction activities, such as staging areas and clearing of vegetation, may also degrade the visual quality of the project area.

With the incorporation of the following mitigation measures as project conditions of approval, all impacts would be reduced to a less than significant level. **Measure AES-1** requires the project to be reviewed and approved by both the City Architectural Review Board and the County South Board of Architectural Review to ensure all project elements reflect quality design and are appropriate for their setting. **Measure BIO-5** requires the development and implementation of a Habitat Mitigation and Monitoring Plan, prepared by a qualified biologist, to mitigate for impacts to ESHA vegetation communities. The Plan may include in-kind on-site restoration of impacted areas, and enhancement/restoration of degraded or disturbed areas adjacent to the impacted areas. A total of 4.32 acres of impacts to ESHA vegetation communities will be required to be mitigated at replacement ratios ranging from 2:1 to 4:1, depending upon the habitat types impacted. To the extent feasible, restoration will occur onsite, and any additional mitigation required shall be carried out on areas within adjacent land controlled by the County or City.

ii. Biological Resources: Construction of the trail project would require removal of ESHA vegetation communities that provide potential habitat for two special status species: California legless lizard and San Diego desert woodrat. Construction activities could result in injury or mortality to these special status species, which would be potentially significant absent mitigation.

There are five native vegetation communities found in the project area that are considered to be ESHA by the City, County and California Department of Fish & Wildlife ("CDFW"), and that would suffer permanent impacts as a result of the proposed project: California Brittle Bush – Ashy Buckwheat Scrub Alliance: 0.42 acres; Quailbush Scrub Alliance: 1.73 acres; California Sagebrush – (Purple Sage) Scrub Alliance: 1.29 acres; Coyote Brush Scrub Alliance: 0.71 acres; Lemonade

Berry Scrub Alliance: 0.17 acres. In total, 4.32 acres of ESHA vegetation communities would suffer permanent impacts resulting from the project.

A total of 22 species of native birds were detected on site, including several with the potential to nest there. Nests, eggs, and nestlings of all native birds are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Vegetation clearing and grading, if occurring during the nesting season, could have the potential to destroy nests, eggs and nestlings, in violation of these regulations. Therefore, impacts to nesting birds are potentially significant.

Potential project impacts associated with biological resources would be addressed through the following mitigation measures: **Measure BIO-1** requires an approved biologist to prepare and implement a worker education and awareness program (WEAP) to educate and make workers aware of sensitive habitats and species that may be encountered in the project area, and to inform workers of required actions that must be implemented to avoid or minimize impacts to sensitive species and habitats. **Measure BIO-2** requires the construction limits to be fenced with highly visible fencing to avoid inadvertent impacts to adjacent areas of ESHA vegetation communities, native vegetation, special-status species and common wildlife species. **Measures BIO-3** and **BIO-4** require pre-construction surveys and relocation efforts for California Legless Lizards and San Diego Woodrats located in the project area, prior to initiation of construction.

Measure BIO-5 requires the development and implementation of a Habitat Mitigation and Monitoring Plan, prepared by a qualified biologist, to mitigate for impacts to ESHA vegetation communities. The Plan may include in-kind on-site restoration of impacted areas, and enhancement/restoration of degraded or disturbed areas adjacent to the impacted areas. A total of 4.32 acres of impacts to ESHA vegetation communities will be required to be mitigated at replacement ratios ranging from 2:1 to 4:1, depending upon the habitat types impacted. To the extent feasible, restoration will occur onsite, and any additional mitigation required shall be carried out on areas within adjacent land controlled by the County or City. **Measure BIO-6** requires a qualified biologist to develop and implement a weed management plan during construction and during implementation of the habitat mitigation and monitoring plan required under Measure BIO-5, to control and prevent the spread of invasive weeds in the project area. **Measure BIO-7** requires a pre-construction nesting bird survey to be completed within 30 days prior to any vegetation clearing, ground disturbance or use of noise-generating equipment that would occur during the nesting/breeding season of native birds potentially nesting in the project area. If active nests are found, then work would be postponed or halted in the affected area until the nest is vacated and juveniles have fledged. With the incorporation of these identified mitigation measures as project conditions of approval, all impacts would be reduced to a less than significant level.

iii. Cultural Resources: Previously recorded cultural resource sites are known to be present in and near the project area. There is the potential for subsurface intact or previously displaced cultural resources to be present and impacted during construction, which could result in a potentially significant effect to cultural resources.

Avoidance and minimization of cultural resource impacts would be addressed through the following measures: **Measure CR-1** requires development of protocols for practical adherence to Measures CR-2 and CR-3 (below), prior to and after ground disturbing construction activities, through the preparation and implementation of a Cultural Resource Treatment and Inadvertent Discovery Plan (CRTP) by a qualified archaeologist. **Measure CR-2** requires all personnel participating in tasks that may incur ground disturbance to be briefed by a qualified archaeologist about the archaeological sensitivity of the site, the types of cultural resources that could be encountered, and the procedures to follow in the event cultural resources or human remains are encountered.

Measure CR-3 requires a qualified archaeologist to be present to monitor initial grading and clearing activities until such time that it is determined that no additional cultural resources are located in the area, and to also monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional cultural resources are present in the improvement area. **Measure CR-4** requires that construction activities be suspended and redirected to another area in the event cultural resources are encountered to allow the monitoring archaeologist to assess the nature, extent and significance of any discoveries and develop appropriate management recommendations for treatment of the discovered cultural resource(s). With the incorporation of the identified mitigation measures as project conditions of approval, all impacts would be reduced to a less than significant level.

iv. Geology and Soils: The project area is located in a geologically active area vulnerable to earthquakes and secondary impacts such as landslides and liquefaction. The project includes features, such as the manufactured slopes and bridge crossing over the UPRR corridor, which could be damaged by seismic ground shaking. The project entails earthwork and grading activities to lay back and stabilize slopes in the project area in an effort to reduce potential erosion effects; nevertheless, erosion impacts could be worsened unless proper slope construction techniques are employed.

Potential project impacts associated with geology and soils would be addressed through the following measures: **Measures GEO-1** and **GEO-2** require the design of the bridge and bridge foundation to adhere to the recommendations contained in the

project-specific geotechnical report. **Measure GEO-3** requires the design and construction of manufactured slopes to also adhere to the recommendations contained within the project-specific geotechnical report. With the incorporation of the identified mitigation measures as project conditions of approval and aspects of the project design, all impacts would be reduced to a less than significant level.

v. Hazards and Hazardous Materials: There is the potential for soils along the project alignment adjacent to the U.S. Highway 101 corridor to contain aerially deposited lead (ADL). Soils containing ADL could be used for fill soils for the project, potentially exposing the public to the contaminated soils. Construction activities and equipment use hydrocarbon fuels and lubricants which are considered hazardous materials. Concrete, paint and other surface coatings are also considered hazardous materials, and are anticipated to be used during construction. Spills or leaks of such materials into the storm drain system could pose potentially significant water quality hazards.

With the incorporation of the following identified mitigation measures as project conditions of approval, all impacts would be reduced to a less than significant level: **Measure HAZ-1** requires surface soils within the project alignment north of the UPRR corridor to be tested for potential ADL presence to determine if such soils meet applicable safety standards and can be used for fill or if standards are exceeded, the soils must be disposed of in a properly licensed landfill. **Measure WAT-2** requires the contractor to prepare and implement a Stormwater Pollution Prevention Plan that includes best management practices to be implemented and monitored prior to and during construction to minimize potential construction-related water quality impacts.

vi. Hydrology and Water Quality: Temporary construction activities may result in inadvertent water quality impacts related to soil, dust, paint and/or concrete entering the stormwater drainage system. There is increased potential for stormwater runoff and erosion during construction and until new/replacement vegetation is established. During the operational phase of the project, soil, trash, dog waste, and other impurities have the potential to enter the project's storm drainage systems and could result in potentially significant water quality impacts. Failure to properly maintain new/replaced storm drain infrastructure associated with the project could result in significant erosion of the bluff face.

Avoidance and minimization of hydrology and water quality impacts would be addressed and mitigated to less than significant levels through the following measures which have been incorporated into the project conditions of approval. **Measure WAT-1** requires the project to obtain and maintain coverage under a Construction General Permit from the State Water Resources Control Board. **Measure WAT-2** requires the contractor to prepare and implement a Stormwater

Pollution Prevention Plan that includes best management practices to be implemented and monitored prior to and during construction to minimize potential construction-related water quality impacts. **Measure WAT-3** requires implementation of an Erosion and Sediment Control Plan utilizing best management practices throughout grading and construction activities.

Measure WAT-4 requires replanting of native vegetation and hydroseeding of slope areas with appropriate native seed mixes as soon as practicable following completion of trail construction, in order to provide long-term stabilization of soils disturbed during construction. **Measure WAT-5** requires ongoing periodic inspection and maintenance/repairs of all new and replaced storm water components on an annual basis prior to the start of the rainy season, to ensure all components are in good repair and not blocked by debris or sediment. **Measure WAT-6** requires all project area storm drain inlets to be outfitted with storm drain filters/inserts to minimize pollutants from impacting the ocean. Filters shall be cleaned at least twice a year, once immediately prior to November 1 (start of the rainy season) and once in January.

vii. Land Use and Planning: The City of Carpinteria's and County of Santa Barbara's respective Local Coastal Programs contain a number of policies and regulations concerning resource protection within the Coastal Zone. Project impacts to these resources could result in potentially significant land use and planning impacts unless properly mitigated. Incorporation of all of the mitigation measures identified in the EIR would reduce environmental impacts to less than significant levels, such that the proposed project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project.

viii. Noise: Short-term, temporary noise impacts would occur during construction. Residences closest to the project site (i.e., residences located in the Rincon Point neighborhood) are the only sensitive receptors in the project area and could periodically be exposed to potentially significant noise impacts if not properly mitigated. Construction-related traffic, such as haul trucks, which may pass by the sensitive receptors causing intermittent noise impacts.

Avoidance and minimization of noise impacts would be addressed through the following measures which have been incorporated into the project conditions of approval. **Measure NOI-1** would limit construction hours for the project to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday. No construction is permitted to occur on weekends or state holidays. Construction maintenance shall be limited to the same hours. Non-noise generating construction activities would be exempt from these restrictions. **Measure NOI-2** requires all construction equipment with engines to have original manufacturer's approved muffling devices, and all stationary equipment be physically buffered from nearby sensitive receptors.

ix. Tribal Cultural Resources: No known tribal cultural resources listed in the California Register of Historical Resources or in a local register of historical resources are known to be present within the project site. Nevertheless, given the known presence of sensitive archaeological resources in the general vicinity, there is potential for unknown subsurface tribal cultural resources to be present and to be impacted during construction, resulting in potentially significant impacts to tribal cultural resources.

Measure TCR-1 requires initial ground disturbing activities to be monitored by a Native American observer. The monitor/observer shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed and materials recovered, as appropriate. Measure TCR-1 in coordination with **Measures CR-1** through **CR-4**, previously described above, would reduce potentially significant impacts to unknown tribal cultural resources to a less than significant level, and have been incorporated into the project conditions of approval.

x. Utilities and Service Systems: The project would moderately alter existing drainage patterns in the project area through re-grading of project slopes, short-term removal of vegetation, and introduction of the new impervious trail surface (approximately one acre of new impervious surface), resulting in potentially significant impacts to water quality. New storm drainage infrastructure associated with the project could pose potentially significant erosion impacts if not properly maintained to avoid failure of said infrastructure. Previously identified **Measures WAT-1** through **WAT-5** would address and reduce potentially significant temporary construction-related water quality impacts and storm drainage infrastructure impacts to less than significant levels, and have been incorporated into the project conditions of approval.

1.3 Conditional Use Permit Findings

Pursuant to Carpinteria Municipal Code §14.62.040(8), the Planning Commission shall determine that all of the following criteria have been met prior to approving or approving with conditions a Conditional Use Permit:

a. *The site for the proposed use is adequate in size and shape to accommodate the use.*

The portion of the Rincon Trail project located in the jurisdiction of the City of Carpinteria would fit entirely within the existing Caltrans right-of-way for U.S. Highway 101 and City of Carpinteria right-of-way near the eastern terminus of Carpinteria Avenue. A portion of the Caltrans right-of-way located just east of the City-County boundary would be dedicated and transferred to the City of Carpinteria as part of the project in order to facilitate the City's ongoing ownership and responsibility for this portion of the trail. A temporary construction

easement may need to be acquired from the property owner of the easternmost parcel on Carpinteria Avenue (APN 001-210-016) to facilitate access to, and construction of the new trail alignment. The western trailhead would be located in an existing unimproved shoulder of Carpinteria Avenue, adjacent to the Rincon Road/State Highway 150 intersection. Informal trailhead parking would be available via on-street parallel parking near the cul-de-sac at the end of Carpinteria Avenue and in the remaining portion of the unimproved shoulder.

Use of off-site areas for mitigation of projected permanent biological resources impacts is anticipated to be necessary to meet specified regulatory replacement ratios for loss of sensitive vegetation communities along the trail alignment. The adjacent Rincon Bluffs Preserve and natural areas of the Rincon Beach County Park have been preliminarily identified as the preferred receiver site for offsite compensatory mitigation for native vegetation impacts that cannot be accommodated onsite due to site area constraints. Final site selections for any proposed offsite compensatory mitigation efforts will be included in the required Habitat Mitigation and Monitoring Plan for the project.

b. *The site for the proposed use is served by streets and highways that are properly designed to carry the type and quantity of traffic generated by the subject use.*

This project is designed to improve bicycle and pedestrian travel by providing a dedicated class-I direct coastal route between the eastern terminus of Carpinteria Avenue in the City of Carpinteria and public recreational facilities located southeast of the City in unincorporated Santa Barbara and Ventura Counties (i.e., Rincon Beach County Park; Rincon Point State Beach; and Pacific Coast Bikeway). The project would provide a safer and legal alternative to the current use of the U.S. Highway 101 shoulder and/or informal trails that trespass through the UPRR corridor to connect the City of Carpinteria to points southward for cyclists and pedestrians. The trail project would fill in this existing gap in the California Coastal Trail ("CCT"), consistent with the circulation and bikeway systems outlined in the County of Santa Barbara's Comprehensive Plan, the City of Carpinteria's General Plan/Coastal Land Use Plan, the statewide CCT Map, and the Plan for Improved Agency Partnering (Caltrans and California Coastal Commission, 2016). The project would enhance and improve coastal access and alternative transportation opportunities for bicycles and pedestrians, consistent with local coastal policies and plans.

The project would have no long-term substantive impact on the capacity of roadways in the project area. Completion of the bike path is anticipated to result in an incremental reduction of vehicle trips to access nearby popular coastal destinations. Existing roadways and public parking areas at the trail ends have sufficient capacity to serve any trail-related vehicle traffic.

Temporary construction-related traffic has been estimated in the project EIR and found to be less than significant. Haul trucks used to export cut from the project site on the City's

portion of the trail would utilize US Highway 101 and the State Highway 150 interchange to access the site. The EIR estimates up to three haul truck trips per hour over an eight-hour work day during the earthwork phase of construction. Given the low frequency of haul truck trips and immediate proximity of highway access, haul truck trips are not anticipated to result in any significant disruptions to traffic circulation or capacity.

c. *The granting of the permit will not materially adversely affect such necessary community services as sewage disposal, fire protection, water supply, and police protection.*

A copy of the project application and plans were routed to all applicable agencies and special districts for review and comments. All of these agencies have indicated the project would not have adverse effects upon their ability to continue to serve the population of Carpinteria. The project would enhance public coastal access and opportunities for alternative transportation in the Carpinteria area, providing a benefit to the community. The project would not generate wastewater needing treatment, and would not generate a noticeable increase in demand for fire or police protection services. A negligible amount of water would be required during construction and to establish/maintain the new landscape plantings.

The City's portion of the trail project will tie into and be served by existing storm drain infrastructure that serves U.S. Highway 101, which has sufficient capacity to take on the added storm water flows generated by the new impervious surfaces affiliated with the trail project north of the UPRR crossing (estimated at approximately 0.5 acres). Mitigation Measures WAT-1 through WAT-4 address erosion and sedimentation control during construction to avoid water quality impacts and to not damage or overwhelm existing storm drain infrastructure. Mitigation Measure WAT-5 requires ongoing monitoring and upkeep of project-related storm drain infrastructure to avoid failure or damages.

An existing 4-inch sewer force main is located in the project area, near the proposed trail alignment for the section of trail north of the UPRR crossing. The sewer force main would be protected in place during construction. An abandoned underground oil pipeline passes underneath the trail alignment near the western trailhead located in the City of Carpinteria. The pipeline would be protected in place. Other utilities near the project area, but not within the project footprint include a water main line and underground communication lines, neither of which would be impacted by construction of the City's portion of the trail.

d. *The granting of the permit will not be detrimental to the health, safety, and general welfare of the neighborhood.*

The Rincon Trail project establishes a new dedicated public Class I bicycle and pedestrian trail between the City of Carpinteria and recreational amenities (i.e., public beaches, park and bicycle path) located south of the City in unincorporated Santa Barbara and Ventura

Counties. The project results in beneficial recreational, coastal access, and alternative transportation impacts for the region.

The EIR prepared for the project analyzed potentially significant environmental effects associated with the project and identified appropriate mitigation measures to ensure that all impacts were mitigated to a less than significant level. Mitigation measures were identified for the following issue areas: Aesthetics, Biological Resources, Cultural Resources, Geology/Soils, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Tribal Cultural Resources, and Utilities/Service Systems. In addition, compliance with Santa Barbara County Air Pollution Control District (APCD) standards is required to ensure that impacts to Air Quality, and Greenhouse Gas Emissions are minimized and remain less than significant. The mitigation measures incorporated into the project via the EIR and the project restrictions imposed via conditions of approval ensure that granting the permit will not be detrimental to the health, safety and welfare of the neighborhoods located nearby to project components.

e. *The proposed use is consistent with the coastal plan, general plans, and applicable specific plan(s).*

As discussed in the General Plan/Coastal Land Use Plan policy analysis section of the Staff Report dated January 18, 2022 and herein incorporated by reference, the project would be consistent with the various applicable policies from the Land Use, Community Design, Circulation, Open Space/Conservation/Recreation, Safety, Noise, and Public Facilities/ Services Elements. The project would fill in an existing gap in the California Coastal Trail (CCT), thereby improving public coastal access and alternative transportation opportunities in the project area. The trail and its design elements have been reviewed by the City's Architectural Review Board ("ARB") for consistency with applicable design policies and found to conform. The project incorporates appropriate mitigation measures, consistent with the requirements of the City's General Plan/Coastal Land Use Plan and Zoning Code to address all unavoidable impacts to ESHA and sensitive species, and other appropriate measures and standards are included to avoid potential impacts related to aesthetics, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, noise, tribal cultural resources, and utilities and service systems, consistent with the policies of the City's General Plan/Coastal Land Use Plan.

f. *The proposed use will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

The EIR prepared for the project identified potentially significant impacts on aesthetics, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, noise, and utilities/service systems; the EIR also identified standard Santa Barbara County Air Pollution Control District ("APCD") measures that the project is required to implement to ensure impacts to air quality, and greenhouse gas

emissions are minimized and remain less than significant. The EIR contains mitigation measures to reduce all environmental impacts of the proposal to less than significant levels; pertinent mitigation measures from the EIR have been incorporated as conditions of approval.

The project has also been designed to minimize land form modification, and impacts to ESHA, cultural resources and water quality, avoid or reduce exposure to geologic hazards and hazardous materials, avoid disruptions to public utilities, and be aesthetically compatible with the project setting, as required by the resource protection policies of the City's General Plan/Coastal Land Use Plan.

g. *The proposed development will not conflict with recorded easements acquired by the public-at-large for access through or use of the property within the proposed development or any easements granted to any public agency or required as a condition of approval.*

The proposed project would not interfere with any recorded easements acquired by the public-at-large for access through, or use of, the project area. Rather, the proposed project involves the construction of a new public multi-use pathway within existing public right-of-way between the east end of the City of Carpinteria and the unincorporated areas near the Santa Barbara/Ventura County line to facilitate improved public coastal access, recreation and alternative transportation opportunities in the area. In this regard, the project enhances public access along the Carpinteria coastline and between areas located in the City of Carpinteria and those in the unincorporated Rincon Point area.

A portion of the Caltrans right-of-way located just east of the City-County boundary would be dedicated and transferred to the City of Carpinteria as part of the project in order to facilitate the City's ongoing ownership and responsibility for this portion of the trail. A temporary construction easement may need to be acquired from the property owner of the easternmost parcel on Carpinteria Avenue (APN 001-210-016) to facilitate access to, and construction of the new trail alignment. The proposed project is not known to conflict with any easements granted to any public agency. Maintenance access for Caltrans and UPRR through the project area will be maintained/provided, as needed.

h. *Any other conditions which are reasonably necessary to protect the public peace, health, safety, and general welfare.*

Through the environmental review process, a number of mitigation measures have been developed in order to avoid significant impacts to the environment. All mitigation measures identified in the EIR have been included in the conditions of approval and are fully enforceable. Additional project-specific conditions of approval have been included to address traffic management during construction, property owner/neighbor outreach, and ongoing maintenance responsibilities for the trail improvements.

1.4 Coastal Development Permit Finding

Pursuant to the California Coastal Act, the Administrative Regulations of the California Coastal Commission and the City's Local Coastal Program, it has been found that the permit requested may be issued based on the following finding:

a. *The proposed development is in conformity with the City's certified Local Coastal Program.*

The Caltrans right-of-way is designated Transportation Corridor (TC) in the General Plan/Coastal Land Use Plan and is undesignated with respect to zoning. The portion of the project located on Carpinteria Avenue is designed Visitor-serving Commercial (VC) in the General Plan/Coastal Land Use Plan and is zoned Resort District (RES). The proposed use is consistent with the stipulations outlined for these land use designations as the project involves improvements to pedestrian and bicyclist facilities, which are permissible in all land use categories and zoning districts. A Conditional Use Permit and Coastal Development Permit are required for this major transportation facility. The project can meet all of the required findings for approval of the required CUP (discussed above) and CDP. The proposed project is consistent with all applicable policies in the General Plan/Coastal Land Use Plan as discussed in the Planning Commission staff report dated January 18, 2022. The project is also consistent with the Interpretive Guidelines of the California Coastal Commission and the California Coastal Act.

Exhibit 1

Attachment B: Proposed Plans

Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022

THE CITY OF CARPINTERIA
DEPARTMENT OF PARKS AND RECREATION

PROJECT PLANS FOR
RINCON MULTI-USE TRAIL
IN SANTA BARBARA COUNTY
BETWEEN RINCON ROAD AND BATES ROAD

To be supplemented by 2018 State Standard Plans and Specifications



AERIAL CONCEPT RENDERING OF PROJECT LOOKING SOUTH EAST TOWARD RINCON POINT

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UPRR PROJECT INFORMATION
1. MILE POST 380.49 SANTA BARBARA SUB, CARPINTERIA, CA
2. LATITUDE: 34°22'48.18"N LONGITUDE: 119°28'57.20"W
3. UNION PACIFIC DOT NUMBER 441148Y

S. Onishuk 04/23/2021
PLANS APPROVAL Date
Project Engineer

REGISTERED PROFESSIONAL ENGINEER S. Onishuk No C 48052 CIVIL STATE OF CALIFORNIA

The City of Carpinteria & their officers or agents shall not be responsible for the accuracy or completeness of electronic copies of the plan sheet

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SD
Drawn MB
Chk'd HS
_SD

BENGAL ENGINEERING, INC. 360 E. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
TITLE SHEET

441148Y
UPRR PROJECT NO.

04/23/21 | TITLE
DATE | SHT. DES.

SANTA BARBARA SUB.
MP 380.49
UPRR MILE POST

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Selected Acronyms and Abbreviations
(See Caltrans Standard Plan for complete list)

AB	Aggregate Base	Dwy	Driveway	HP	Hinge Point	Qty	Quantity
Abn	Abandon	E	Easting	HWM	High water mark	R	Radius
Abut	Abutment	Ease	Easement	Irr	Irrigation	Reinf	Reinforcement
AC	Asphalt Concrete	EB	East Bound	Jct	Junction	Rel	Relocate
Adj	Adjust	EC	End of Curve	Jt	Joint	Ret	Retaining
AP	Angle Point	ECR	End of Curb Return	L	Length	Rev	Revised
BB	Beginning of Bridge	EG	Existing Ground	LOL	Layout line	RSP	Rock Slope Protection
BC	Beginning of Curve	EOD	Edge of Deck	LS	Lump sum	Rt	Right
BCR	Beginning of Curb Return	EP	Edge of Pavement	Lt	Left	R/W	Right of Way
Beg	Begin	ES	Edge of Shoulder	Max	Maximum	Salv	Salvage
Bldg	Building	ESM	Engineered Stream Material	MBGR	Metal Beam Guard Rail	SG	Subgrade
BM	Bench Mark	ETW	Edge of Traveled Way	MH	Manhole	Sht	Sheet
Bot	Bottom	EVC	End Vertical Curve	Min	Minimum	SR	Superelevation Rate
Br	Bridge	Exc	Excavate	Misc	Miscellaneous	Spec	Special/Specification
Brg	Bearing	Exist	Existing	Mod	Modify	Sta	Station
BVC	Beginning of Vertical Curve	Exp	Expansion	NTS	Not to scale	Std	Standard
BW	Bottom of Wall	Exp Jt	Expansion Joint	N	Northing	Str	Structure
CAA	Cable Anchor Assembly	Ext	Exterior	Oblr	Obliterate	SW	Sidewalk
C-C	Center-to-center	F&C	Frame and Cover	OC	Overcrossing	S	Sewer
Chnl	Channel	F&G	Frame and Grate	OD	Outside Diameter	TC	Top of Curb
CI	Cast-iron	Fdn	Foundation	OG	Original Ground	TCB	Traffic Control Box
CIDH	Cast In Drilled Hole	FES	Flared End Section	OH	Overhead	TBM	Temporary Benchmark
CIP	Cast in place	FF	Filter Fabric	O-O	Out-to-out	TG	Top of Grade/Top of Grate
CISS	Cast in Steel Shell	FG	Finished Grade	P	page	Top	Top of Creekbank
CL	Chain Link	FH	Fire Hydrant	PB	Pull box	TP	Telephone Pole
Cl	Class	Fig	Figure	PC	Point of curvature or Precast	Trans	Transition
C/L	Centerline	FL	Flow Line	PCC	Pt of compound curvature	TW	Top of Wall
Clr	Clear	FOC	Face of Concrete	Ped	Pedestrian	TYP	Typical
CM	Corrugated Metal	FS	Finished Surface	Perm Mtl	Permeable Material	UON	Unless otherwise noted
Col	Column	Ftg	Footing	PG	Profile Grade	V	Valve
Conc	Concrete	Ga	Gauge	PI	Point of Intersection	Var	Variable
CP	Catch Point	GB	Grade Break	P/L	Property Line	VC	Vertical Curve
Cr	Creek	GP	Grading Plane	POC	Point on Curve	W	Width
D	Depth	Galv	Galvanized	POT	Point on Tangent	WH	Weep Hole
Deg	Degree	GR	Guard Railing	PRC	Point of Reversing Curve	WM	Wire Mesh/Water Meter
Det	Detail	Gtr	Gutter	PS&E	Plans, Specifications & Estimate	WW	Wing Wall
DI	Drainage Inlet	H	Height	PS	Pre-Stressed	WWLOL	Wing Wall Layout line
Dia	Diameter	h, hr	Hour	P/S	Pre Stressed		
Diaph	Diaphragm	HW	Headwall	PT	Point of Tangent		
Dist	Distance	Horz	Horizontal	PVI	Point of Vertical Intersection		

ABBREVIATIONS AND LEGEND
S-01

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

Design
Drawn
Date

BENGAL ENGINEERING, INC.
350 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

ABBREVIATIONS AND LEGEND

441148Y
UPRR PROJECT NO

04/23/21 | S-01
DATE | SHT. DES

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

1. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.

2. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.

4. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.

5. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.

6. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.

7. RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.

8. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.

9. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.

10. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD MINIMUM REQUIREMENTS AS PART OF SPECIAL PROVISIONS.

GENERAL UPRR NOTES

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SO
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Chk'd SO

BENGAL ENGINEERING, INC.
369 S. Hope Ave, C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

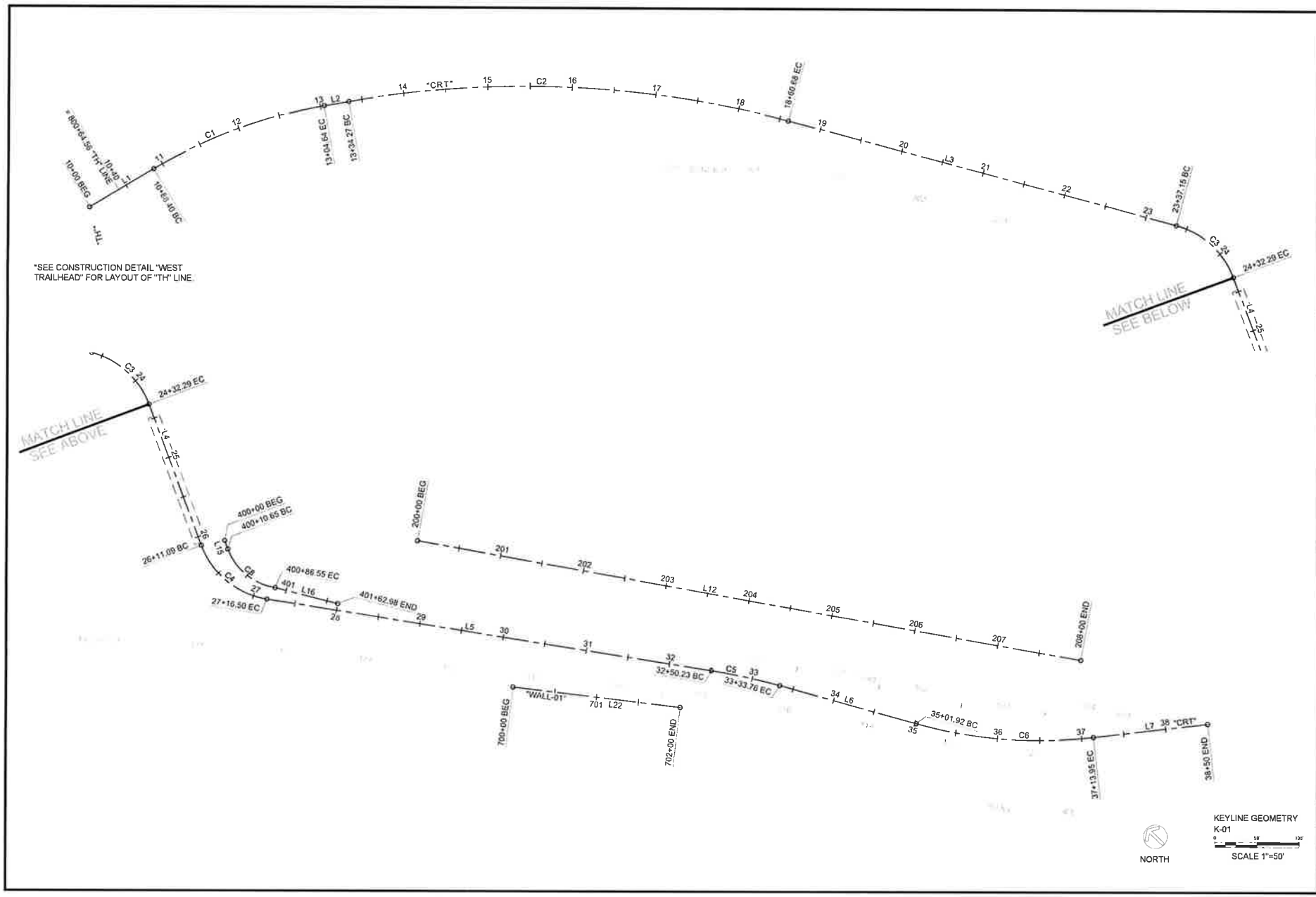
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THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

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IBENGAL ENGINEERING SERVICES, INC.

360 S. Hope Ave., C-110 Santa Barbara, CA 93105

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CARPINTERIA RINCON MULTI USE TRAIL

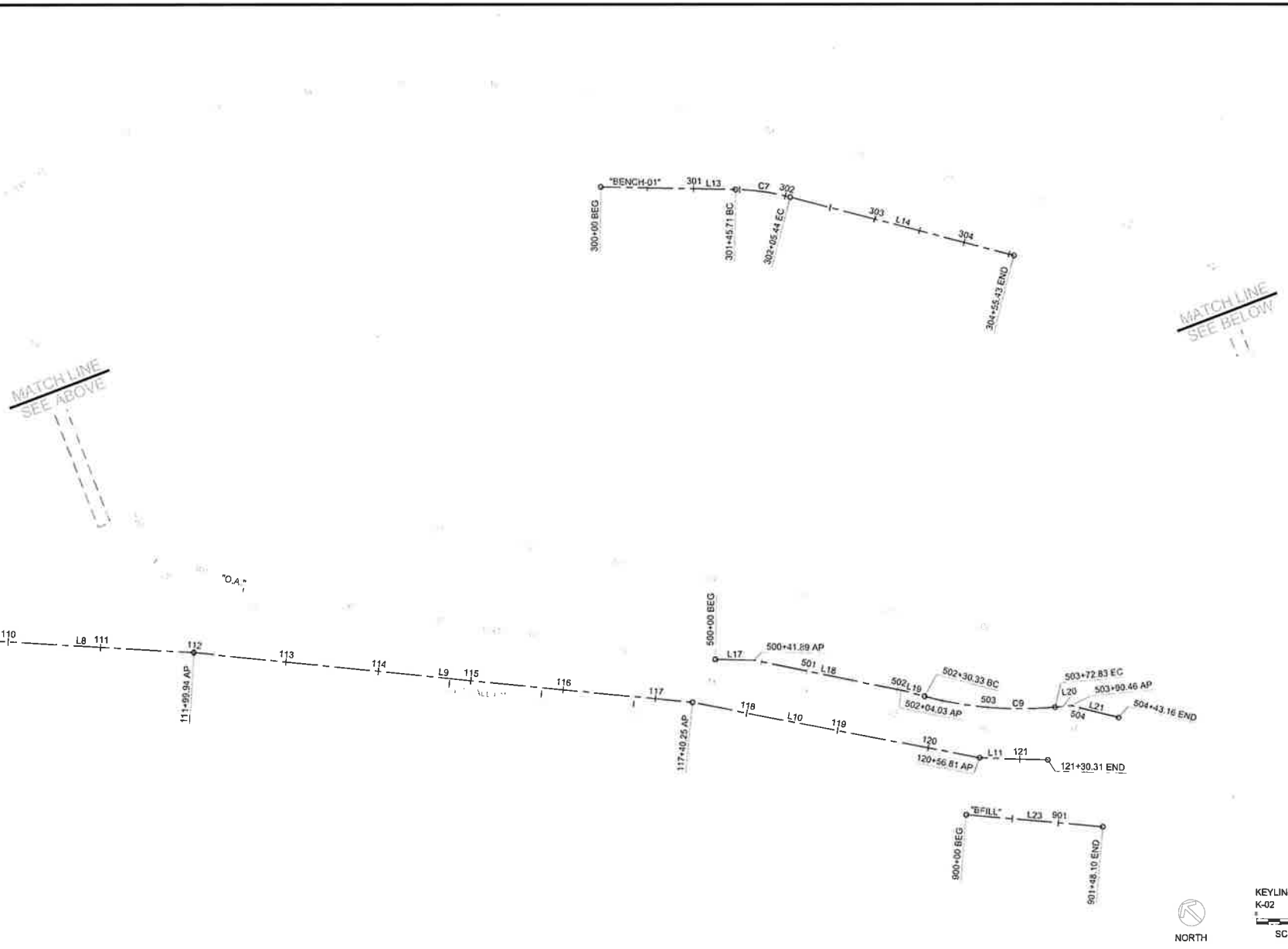
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Digitally_signed_by Michael Baratch



THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design: SO
Drawn: MB
Ckkd: SO

BENGAL ENGINEERING, INC.
260 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

441148Y
URS PROJECT NO.

04/23/21 DATE | K-2 SHT NO.

SANTA BARBARA Sub. MP 380.69 UPRR MILE POST

5 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

Federal, state and local laws require you to notify Underground Service Alert of Southern California (USA) at least two working days before you dig in the vicinity of its members' facilities. Call USA at 811 or 1-800-227-2600.

"CRT" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L1	10+00.00	88.40'	10+88.40	1965107.50	6113550.33	S74° 26' 55.93"E	
C1	10+88.40	216.23'	13+04.64	1965083.80	6113635.50	020°38'56"	600.00'
L2	13+04.64	29.63'	13+34.27	1964989.94	6113829.00	S53° 47' 59.83"E	
C2	13+34.27	526.41'	18+60.68	1964972.44	6113852.92	025°08'03"	1200.00'
L3	18+60.68	476.46'	23+37.15	1964579.72	6114197.11	S28° 39' 56.47"E	
C3	23+37.15	95.14'	24+32.29	1964161.66	6114425.67	054°30'39"	100.00'
L4	24+32.29	178.81'	26+11.09	1964070.09	6114427.92	S25° 50' 43.02"W	
C4	26+11.09	105.40'	27+16.50	1963909.17	6114349.87	060°23'32"	100.00'
L5	27+16.50	533.73'	32+50.23	1963808.87	6114357.60	S34° 32' 48.53"E	
C5	32+50.23	83.53'	33+33.76	1963369.26	6114660.27	006°22'54"	750.00'
L6	33+33.76	168.16'	35+01.92	1963297.96	6114703.72	S28° 09' 54.77"E	
C6	35+01.92	212.03'	37+13.95	1963149.71	6114783.09	022°05'16"	550.00'
L7	37+13.95	136.05'	38+50.00	1962986.44	6114916.29	S50° 15' 10.58"E	

"FL-01" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L8	109+50.00	249.94'	111+99.94	1963940.14	6114157.84	S39° 58' 57.52"E	
L9	111+99.94	540.31'	117+40.25	1963748.63	6114318.44	S37° 39' 54.64"E	
L10	117+40.25	316.56'	120+56.81	1963320.92	6114648.60	S32° 17' 37.38"E	
L11	120+56.81	73.50'	121+30.31	1963053.33	6114817.72	S41° 59' 02.24"E	

"FL-02" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L12	200+00.00	800.00'	208+00.00	1963728.07	6114531.00	S33° 27' 28.84"E	

"BENCH-01" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L13	300+00.00	145.71'	301+45.71	1964639.20	6114052.81	S42° 21' 16.74"E	
C7	301+45.71	59.73'	302+05.44	1964531.52	6114150.97	013°41'20"	250.00'
L14	302+05.44	249.99'	304+55.43	1964483.02	6114185.59	S28° 39' 56.47"E	

"O.A." LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L15	400+00.00	10.65'	400+10.65	1963893.10	6114373.30	S25° 50' 43.02"W	
C8	400+10.65	75.89'	400+86.55	1963883.51	6114368.65	060°23'32"	72.00'
L16	400+86.55	76.43'	401+62.98	1963811.29	6114374.15	S29° 17' 32.03"E	

"SHD" LINE

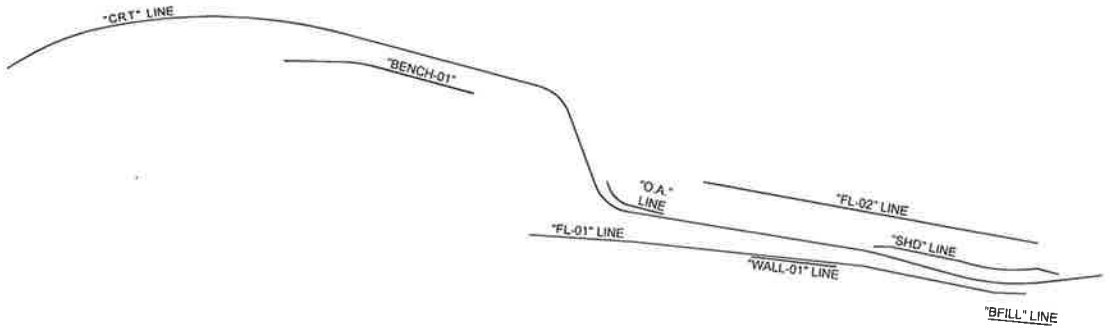
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L17	500+00.00	41.89'	500+41.89	1963334.77	6114699.58	S42° 11' 30.43"E	
L18	500+41.89	162.13'	502+04.03	1963303.73	6114727.71	S31° 55' 25.29"E	
L19	502+04.03	26.30'	502+30.33	1963166.12	6114813.45	S28° 23' 15.32"E	
C10	502+30.33	142.50'	503+72.83	1963142.98	6114825.95	020°24'44"	400.00'
C9	502+30.33	142.50'	503+72.83	1963142.98	6114825.95	020°24'44"	400.00'
L20	503+72.83	17.63'	503+90.46	1963032.19	6114914.38	S48° 47' 59.54"E	
L21	503+90.46	52.70'	504+43.16	1963020.57	6114927.64	S29° 07' 08.81"E	

"WALL-01" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L22	700+00.00	200.00'	702+00.00	1963525.73	6114483.40	S36° 52' 03.04"E	

"BFILL" LINE

SEGMENT ID	START STATION	LENGTH	END STATION	START NORTHING	START EASTING	DIRECTION/ DELTA	RADIUS
L23	900+00.00	148.10'	901+48.10	1963021.64	6114762.73	S38° 19' 43.02"E	



KEYLINE GEOMETRY
K-03

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design | Drawn | Chkd: SD | MB | SD

BENGAL ENGINEERING, INC.
360 S. Hope Ave. C-110, Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

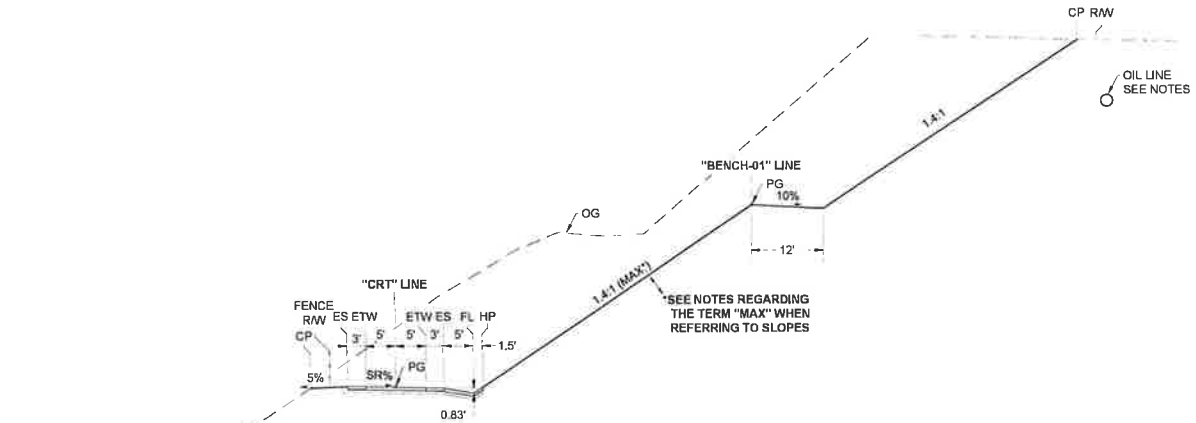
441148Y
UPRR PROJECT. NO

04/23/21 | K-3
DATE | SHT. REF.

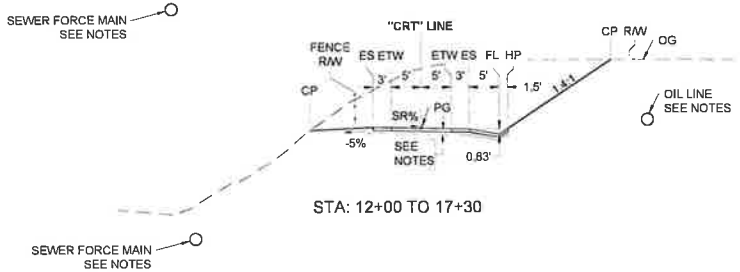
SANTA BARBARA SUB.
MP 380.48
UPRR MILE POST

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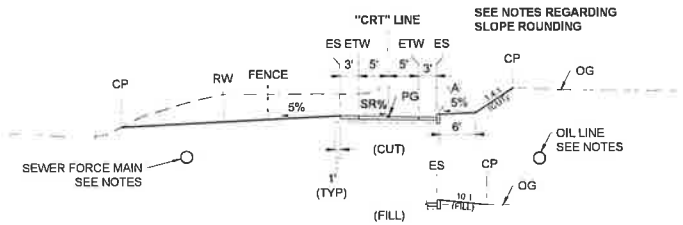
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES
0 1 2



STA: 17+30 TO 22+00



STA: 12+00 TO 17+30



STA: 10+40 TO 12+00

NOTES

1. STRUCTURAL SECTION FOR PATH AND GUTTER IS:
   0.42' JPCP
   0.5' AB (CLASS 2)
2. DIMENSIONS OF THE STRUCTURAL SECTION ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
3. SUPERELEVATION AS SHOWN OR AS DIRECTED BY ENGINEER. ALSO SEE PROFILE SHEETS.
4. CHEVRON/VENOCO OIL PIPELINE IS SHOWN 9-FEET BELOW THE ORIGINAL GROUND, BASED ON OBSERVATION NOTES DURING CONSTRUCTION. ACTUAL DEPTH MAY VARY.
5. A SEWER "FORCE MAIN" EXISTS ALONG THE SOUTH BOUND LANE OF HWY 101. RECORD DRAWINGS SHOW THE DEPTH OF THIS SEWER TO BE HIGHLY VARIABLE.
6. CALTRANS ELECTRIC LIGHTING CONDUIT IS NOT SHOWN. THIS EXISTS ALONG SHOULDER OF THE SOUTHBOUND 101 LANES.
7. REGARDING THE TERM "MAX" WHEN REFERRING TO SLOPES, SOME CUT SLOPES ARE BUILT BETWEEN DIFFERENT ALIGNMENTS EACH WITH THEIR OWN PROFILE. THE ENGINEERS HAVE SET THESE ALIGNMENTS TO ACCOMMODATE THE CUT SLOPES SHOWN. THE TERM "MAX" INDICATES THE MAXIMUM VARIABLE SLOPE CREATED BY THE GRADING BETWEEN THESE ALIGNMENTS
8. SLOPE ROUNDING IS NOT SHOWN, SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
9. SEE FENCING PLAN FOR FENCE LAYOUT.

CONSTRUCTIONS NOTES

Ⓐ CALTRANS TYPE A1 CURB
"CRT" LINE 10+40 TO 12+00

TYPICAL SECTIONS
X-01
0 18 27
SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design / Drawn / Chkd: SO / MB / SO

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

BENGAL ENGINEERING
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
TYPICAL SECTIONS

441148Y
UPRR PROJECT NO.
04/23/21 | X-01
DATE | SHT. NO.
SANTA BARBARA SUB.
MP 385.48
UPRR MILE POST

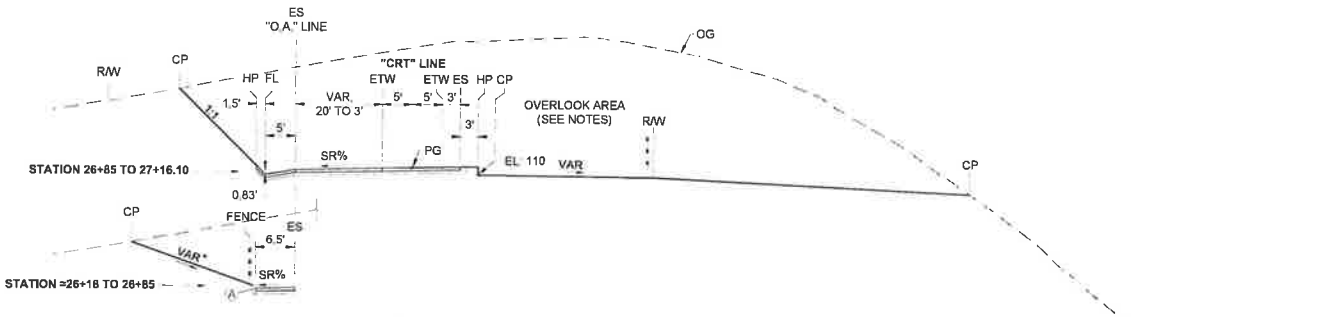
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NOTES

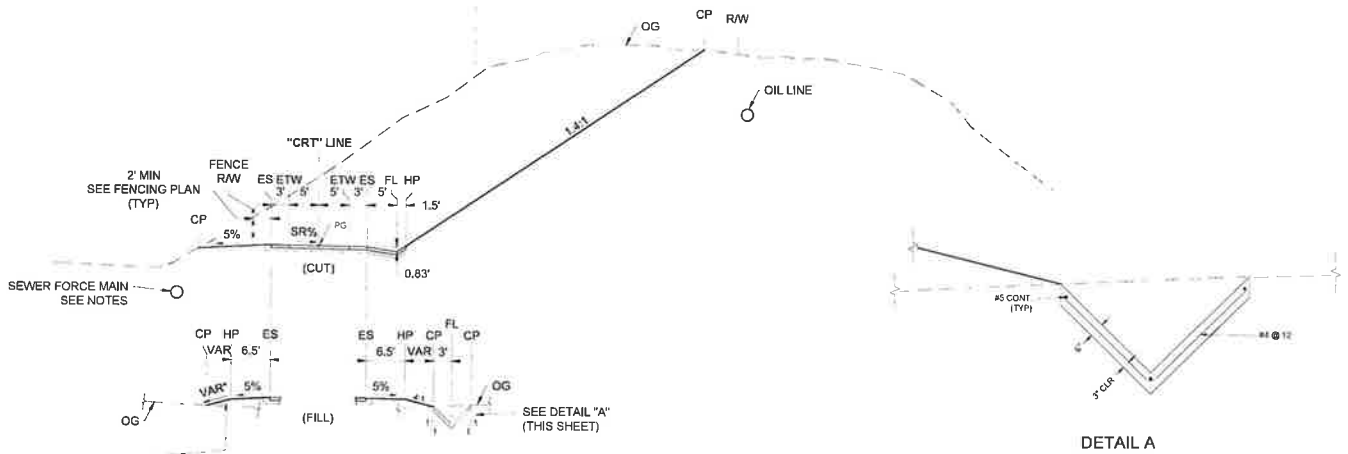
1. SEE OVERLOOK AREA CONSTRUCTION DETAILS FOR MORE INFORMATION.

CONSTRUCTIONS NOTES

A. CALTRANS TYPE A1 CURB
"CRT" LINE 26+18 TO 26+85



STA: 26+08 (EB) TO 27+16.50 (EC)



STA: 22+00 TO 24+48 (BB)

DETAIL A

TYPICAL SECTIONS
X-02

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design SO
Drawn MB
Ck'd SO

BENGAL
369 S. Hope Ave, C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
TYPICAL SECTIONS

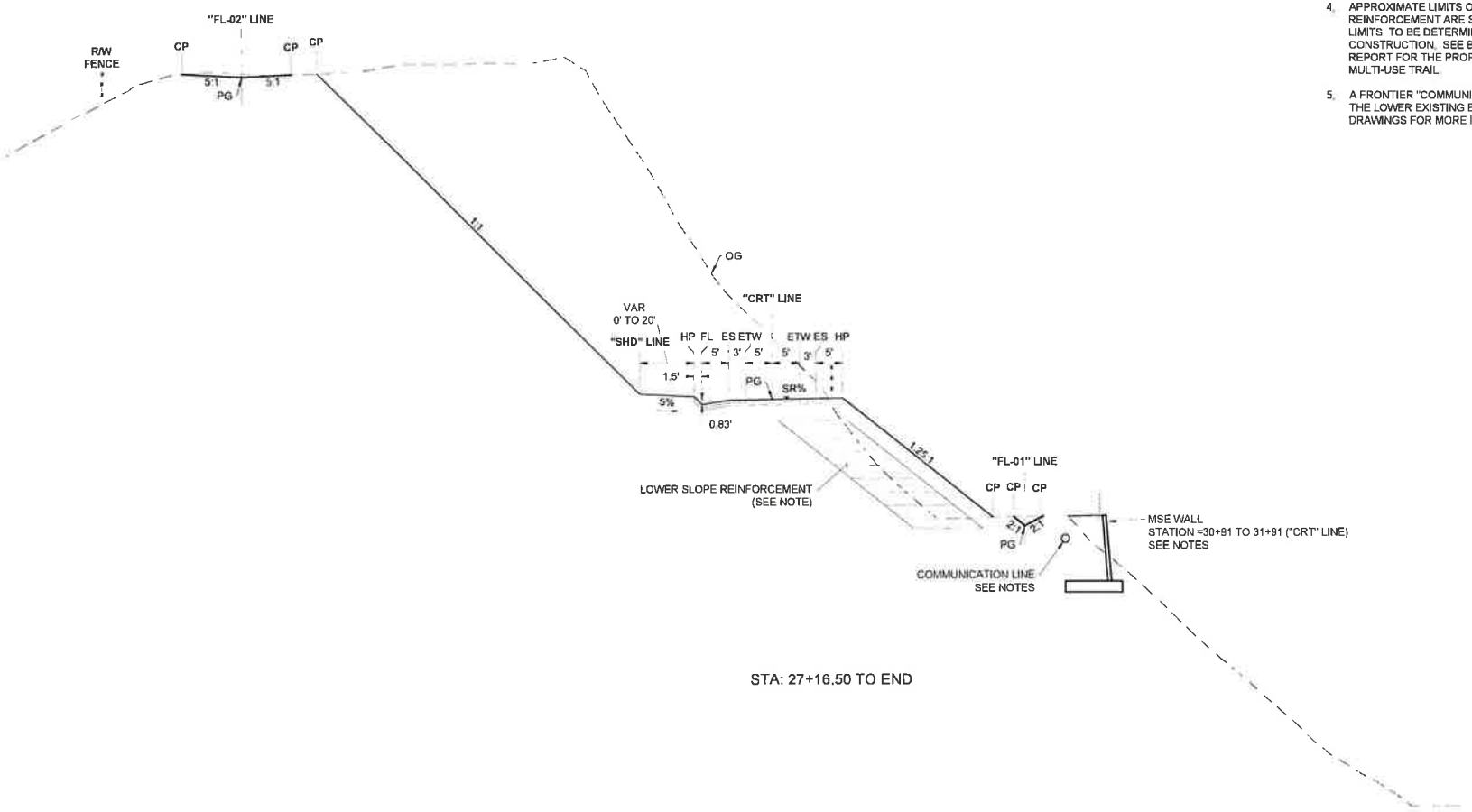
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LRRR PROJECT NO.
04/23/21 DATE
X-02 SHT. DES.
SANTA BARBARA SUB
MP 380.45
LRRR MILE POST
8 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

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NOTES

1. "KEYWAY" ALONG OLD RAILROAD BENCH IS NOT SHOWN, TO PROVIDE CLARITY REGARDING LAYOUT OF CONCRETE DITCH. SEE CONSTRUCTION DETAILS.
2. SEE "CONSTRUCTION DETAIL" FOR MORE INFORMATION REGARDING SLOPE REINFORCEMENT.
3. SEE "CONSTRUCTION DETAILS" FOR MORE INFORMATION REGARDING MSE WALL.
4. APPROXIMATE LIMITS OF MID SLOPE REINFORCEMENT ARE STATION 32+00 TO 35+00. LIMITS TO BE DETERMINED DURING CONSTRUCTION. SEE BENGAL'S GEOTECHNICAL REPORT FOR THE PROPOSED RINCON BEACH MULTI-USE TRAIL.
5. A FRONTIER "COMMUNICATION LINE" EXISTS ALONG THE LOWER EXISTING BENCH. SEE UTILITY DRAWINGS FOR MORE INFORMATION.



STA: 27+16.50 TO END

TYPICAL SECTIONS
X-03
0 10 20
SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

Design SD
Drawn MB
Ck'd SD

BENGAL ENGINEERING
260 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
TYPICAL SECTIONS

441148Y
UPRR PROJECT NO

04/23/21 DATE | X-03 SHT. DES.

SANTA BARBARA SUB MP 392.48
UPRR MILE POST

LEGEND

CITY RIGHT OF WAY — R/W (CITY) — R/W (CITY)

STATE RIGHT OF WAY — R/W (STATE)

RAILROAD RIGHT OF WAY — R/W (UPRR) — R/W (UPRR)

PROPERTY LINE

RIGHT OF WAY TAKE

CATCH POINT/DAYLIGHT

CITY/COUNTY LIMITS — CITY / COUNTY

CENTERLINE

STORM DRAINS

SEWER

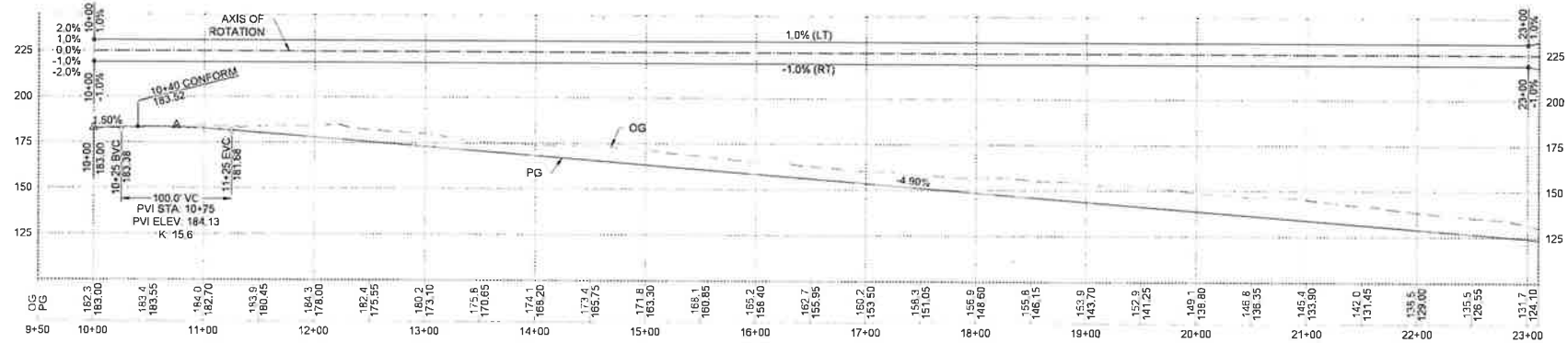
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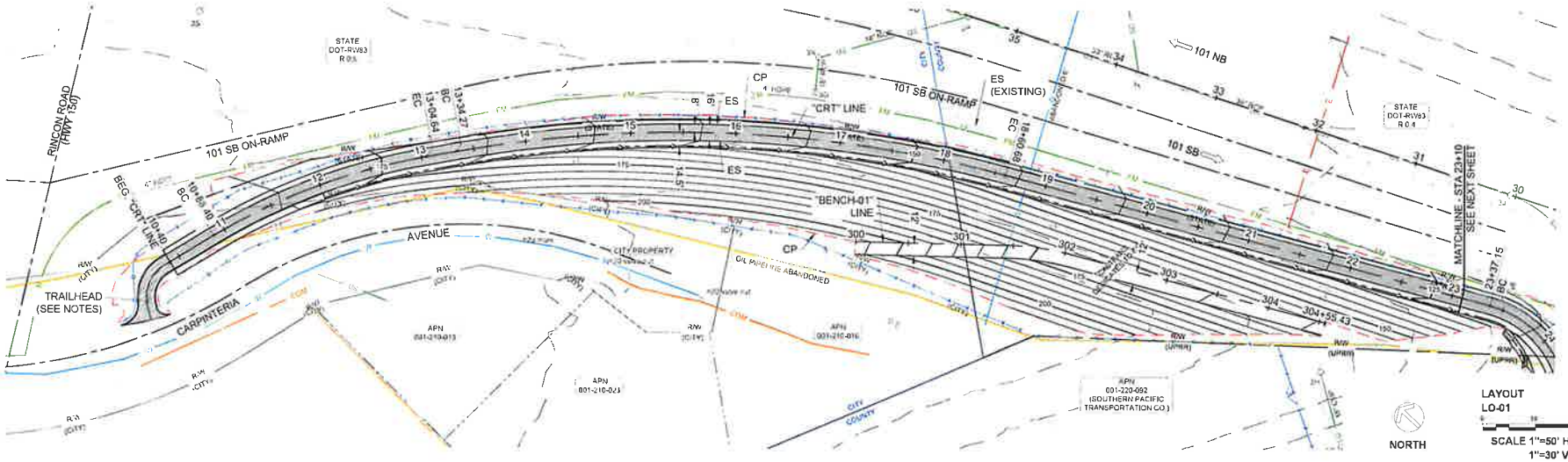
OIL

WATER

NOTES

1. FOR COMPLETE RIGHT-OF-WAY INFORMATION, SEE RIGHT-OF-WAY MAPS IN COUNTY OFFICES.
2. SEE "KEY LINE GEOMETRY" SHEET FOR LAYOUT INFORMATION.
3. SEE CONSTRUCTION DETAILS SHEET FOR TRAILHEAD INFORMATION AT ENDS OF BIKE PATH.
4. TEMPORARY FENCE (TYPE ESA) WILL BE LOCATED 10-FEET BEYOND DAYLIGHT LINE OR AS DIRECTED BY THE ENGINEER.
5. SEE CONSTRUCTION DETAILS FOR LAYOUT OF TRAILHEAD.





THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design SO
Drawn MG
Check JO

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360 S. Hope Ave, C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

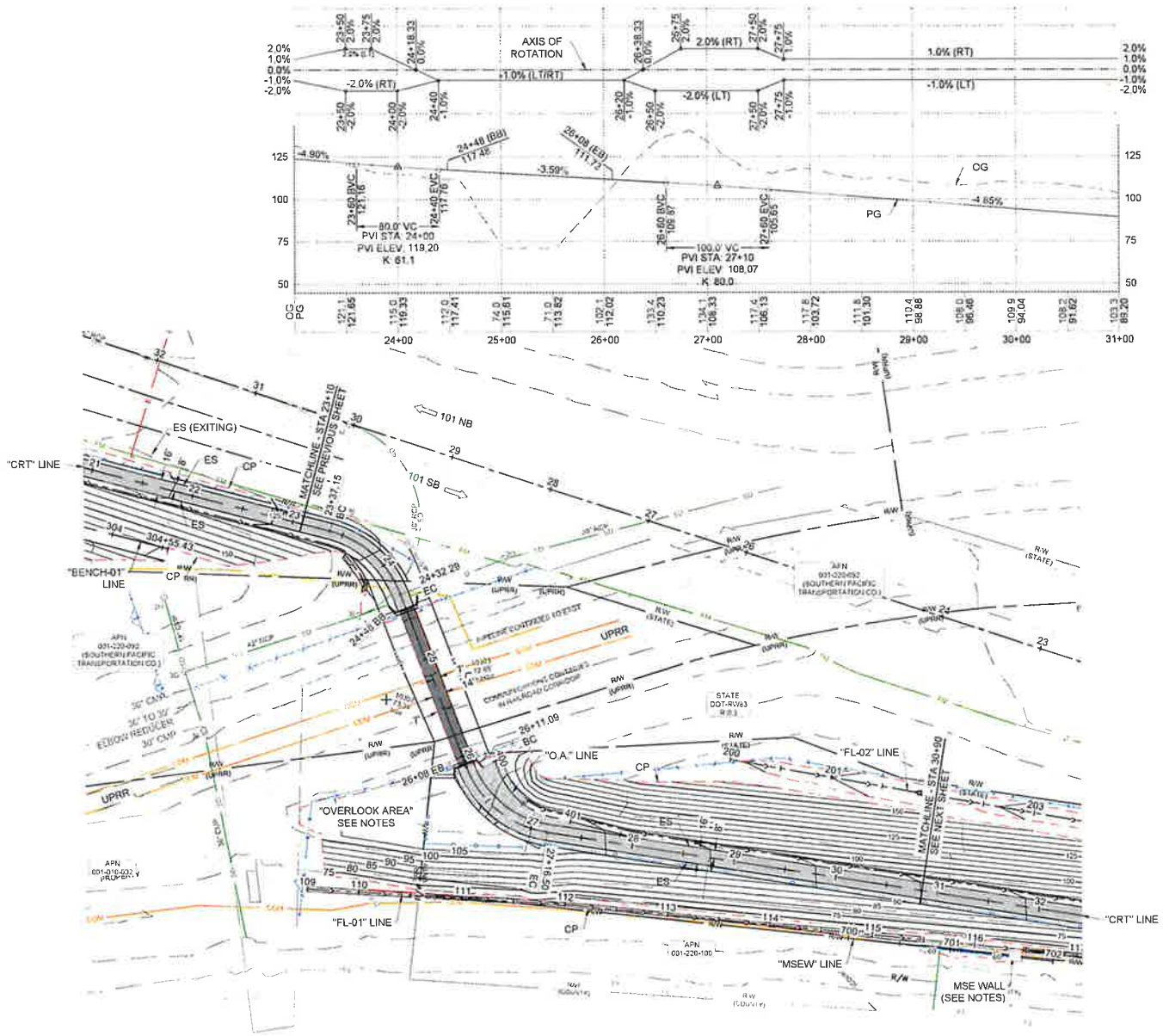
LAYOUT

441148Y
UPRR PROJECT NO.

04/23/21 DATE | LO-01 SHT. DES.

SANTA BARBARA SUB. MP 282.48 UPRR MILE POST

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NOTES

1. SEE CONSTRUCTION DETAILS FOR GRADING OF OVERLOOK AREA.
2. SEE CONSTRUCTION DETAILS FOR LAYOUT OF MSE WALL.

LAYOUT
LO-02

SCALE 1"=50' H
1"=30' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

As-built Matt Roberts, Project Manager

Design SO
Drawn MB
Ck'd SO

BENGAL ENGINEERING
300 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
LAYOUT

441148Y
UPRR PROJECT NO.

04/23/21 DATE | LO-02 SHT. NO.

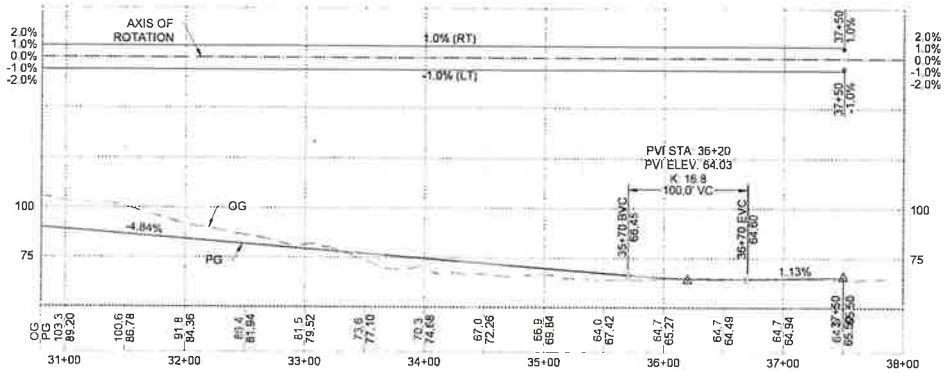
SANTA BARBARA Sub
MP 398.49
UPRR MILE POST

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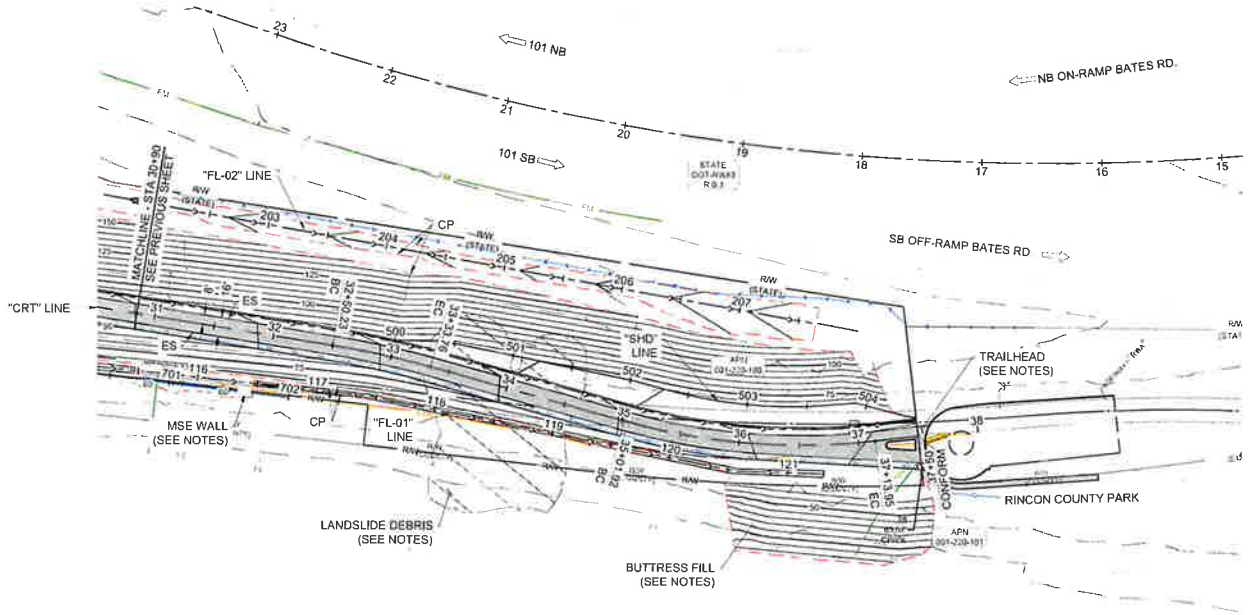
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NOTES

1. UTILITIES EAST OF RINCON PARK CUL-DE-SAC NOT SHOWN.
2. SEE CONSTRUCTION DETAILS FOR LAYOUT OF MSE WALL.
3. SEE CONSTRUCTION DETAILS FOR BUTTRESS FILL DETAILS.
4. SEE CONSTRUCTION DETAILS FOR LAYOUT OF TRAILHEAD.
5. SEE BENGAL'S GEOTECHNICAL REPORT FOR THE PROPOSED RINCON BEACH MULTI-USE TRAIL.



LAYOUT
LO-03

SCALE 1"=50' H
1" = 30' V

NORTH

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design SO
Drawn MB
Chk'd SO

BENGAL ENGINEERING
382 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

LAYOUT

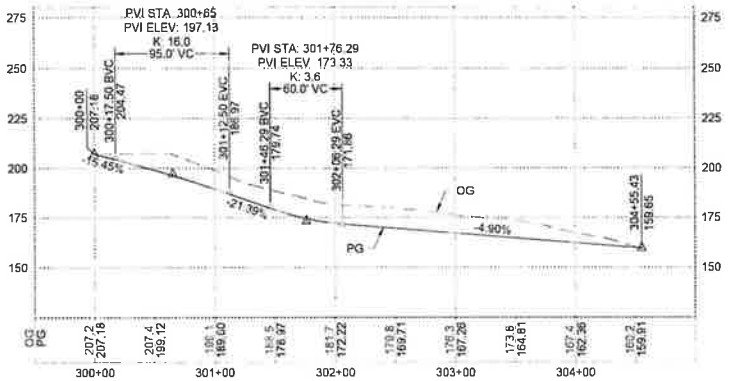
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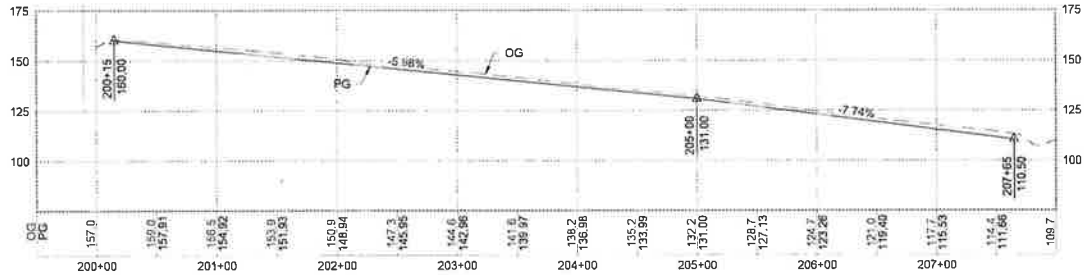
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MP 380.49
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12 of 119

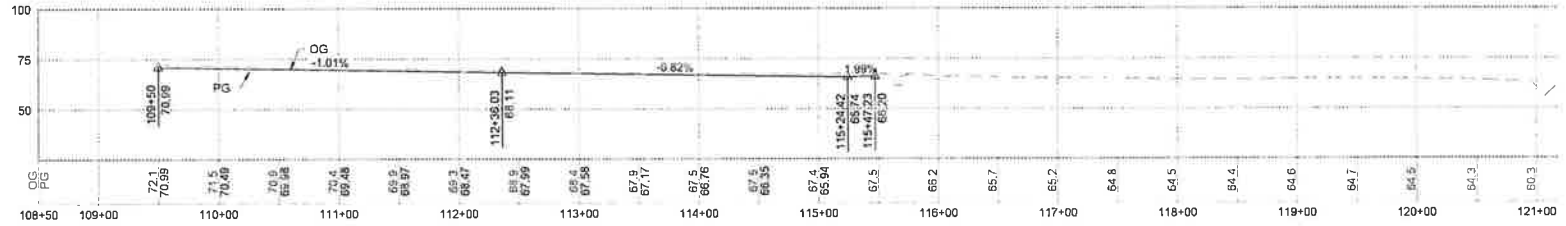
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PROFILE "BENCH-01" LINE



PROFILE "FL-02" LINE



PROFILE "FL-01" LINE

PROFILES
P-01

SCALE 1"=50' H
1" = 30' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design
Drawn
Chkd

GEWEAL
360 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PROFILES

441146Y
UPRR PROJECT NO.

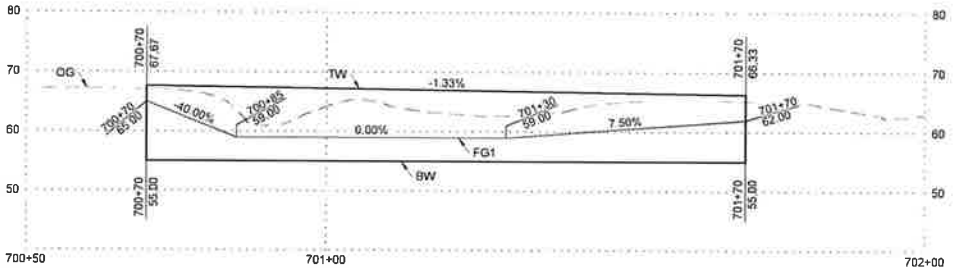
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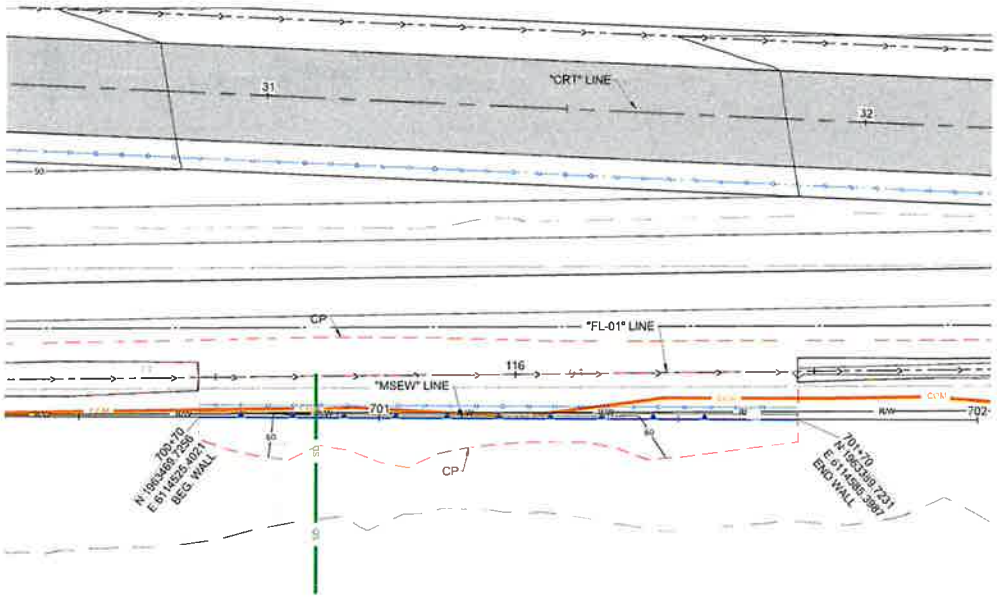
SANTA BARBARA SUB
MP 385.49
UPRR MILE POST

13 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

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NOTES

1. THIS PLAN SHEET ACCURATE FOR RETAINING WALL WORK ONLY.

LEGEND

CP = CATCH POINT / DAYLIGHT
TW = TOP OF WALL
BW = BOTTOM OF WALL
OG = ORIGINAL GRADE
PG = PROFILE GRADE
FG1 = FINISHED GRADE AT FACE OF WALL
FG2 = FG AT TOE SLOPE OF "CRT" LINE (SEE LAYOUT SHEETS)

NORTH

CONSTRUCTION DETAIL
MSE WALL
PLAN AND PROFILE
C-01

SCALE 1"=10' H
1"=10' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design SO
Drawn MB
Check SO

BENGAL ENGINEERING, INC.
360 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

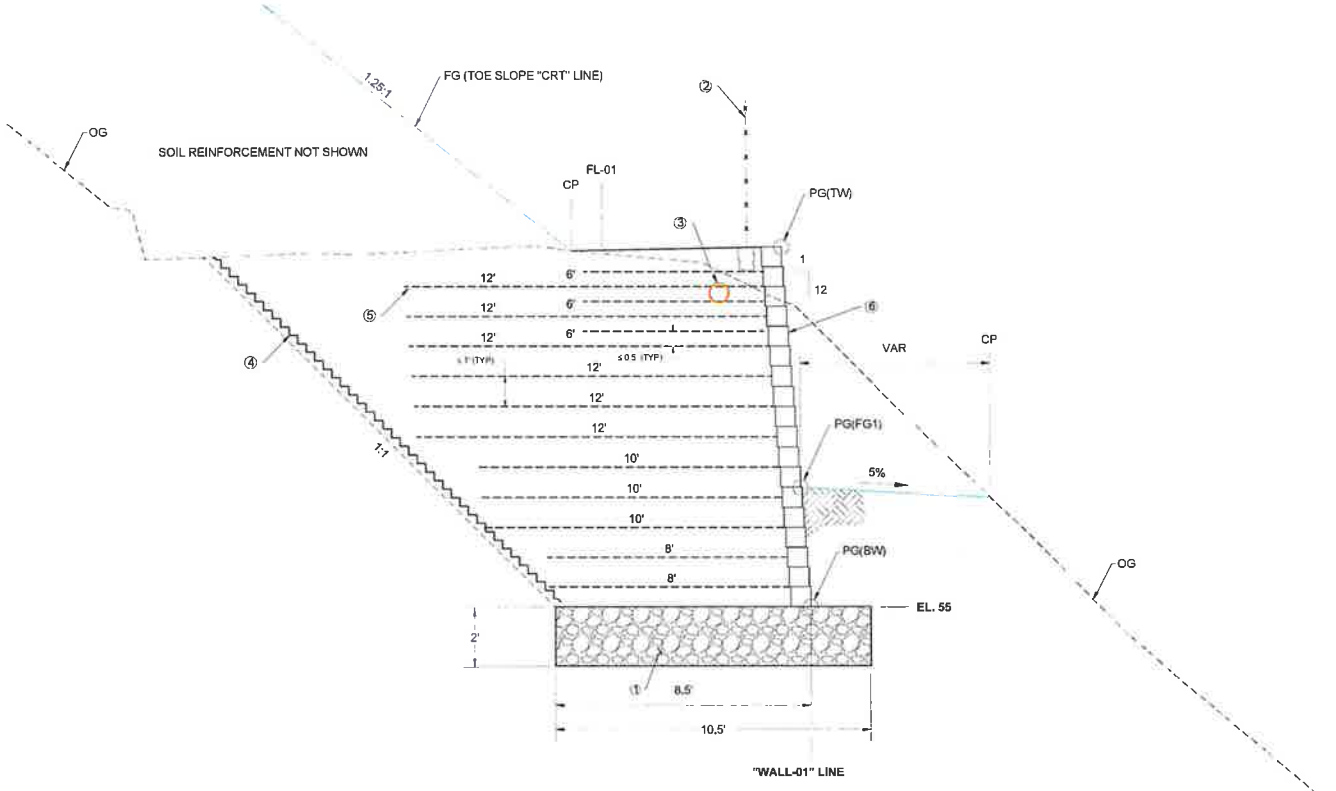
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C-01 SHT. NO.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES



MSE WALL SECTION

NOTES

1. REINFORCED SOIL FOUNDATION (ENCAPSULATED WITH GEOTEXTILE)
2. PLACE POLECRAFT FENCE AT TOP OF WALL
3. EXISTING COMMUNICATION LINE, PROTECT IN PLACE
4. GEOTEXTILE FILTER FABRIC
5. ALL GEOGRID MIRAGRID 5XT (OR APPROVED EQUAL)
6. CONCRETE MASONRY UNIT

CONSTRUCTION DETAIL
MSE WALL SECTION
C-02

SCALE 1"=2' H
1"=2' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design 50 / Detail MB / Check'd 50

BENGAL ENGINEERING, INC.
360 S. Hope Ave, C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

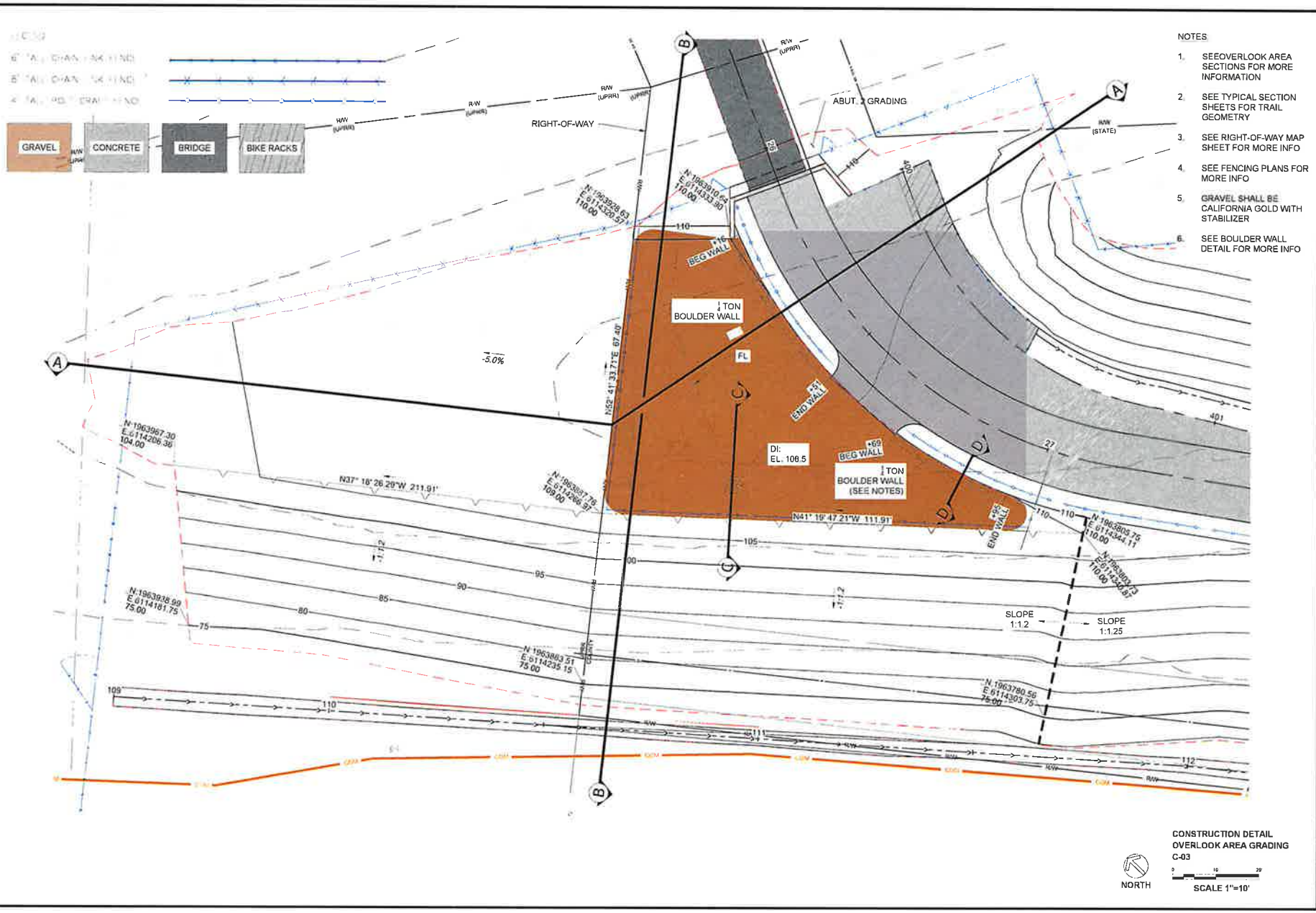
441146Y
UPRR PROJECT NO.

04/23/21 | C-02
DATE | SHT. DES.

SANTA BARBARA SUB
MP 380.49
UPRR MILE POST

15 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2



NOTES

1. SEEOVERLOOK AREA SECTIONS FOR MORE INFORMATION
2. SEE TYPICAL SECTION SHEETS FOR TRAIL GEOMETRY
3. SEE RIGHT-OF-WAY MAP SHEET FOR MORE INFO
4. SEE FENCING PLANS FOR MORE INFO
5. GRAVEL SHALL BE CALIFORNIA GOLD WITH STABILIZER
6. SEE BOULDER WALL DETAIL FOR MORE INFO

CONSTRUCTION DETAIL
OVERLOOK AREA GRADING
C-03

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design SO
Drawn MG
Ck'd SO

BENGAL ENGINEERING INC.
360 S. Hope Ave., C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

441148Y
UPRR PROJECT NO.

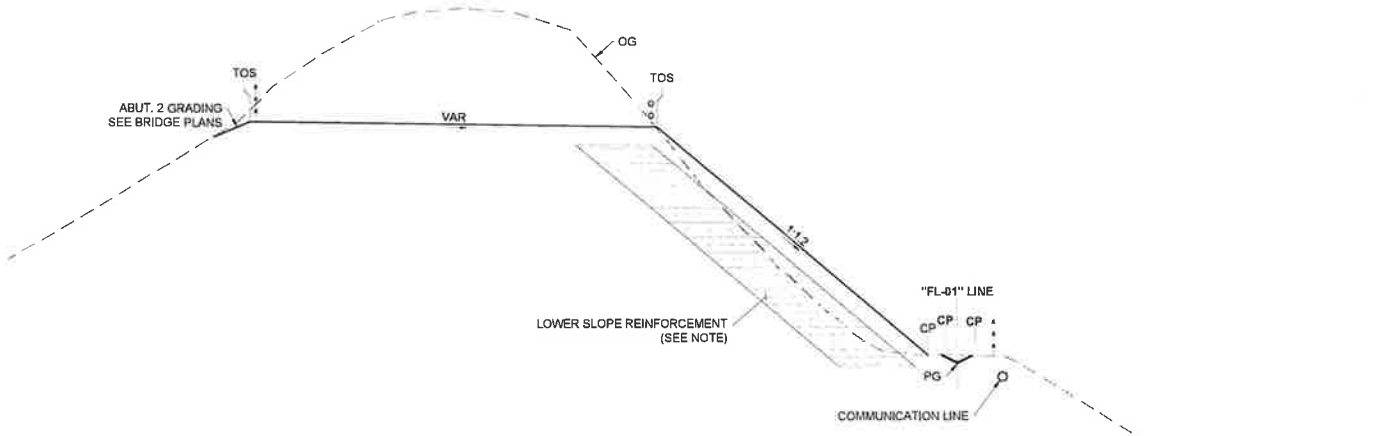
04/23/21 DATE | C-03 SHT. NO.

SANTA BARBARA SUB. MP 382.48
UPRR MILE POST

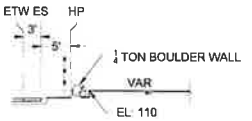
I:\bengal\C_active projects\rincon trail\c-construction drawings\plan\cover&dwg BY: Michael Bunsch

NOTES

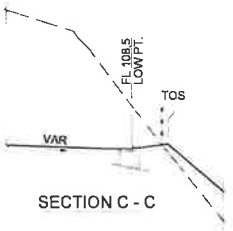
1. SEE FENCING SHEETS FOR MORE INFORMATION
2. SEE SLOPE REINFORCEMENT SHEETS FOR MORE INFORMATION



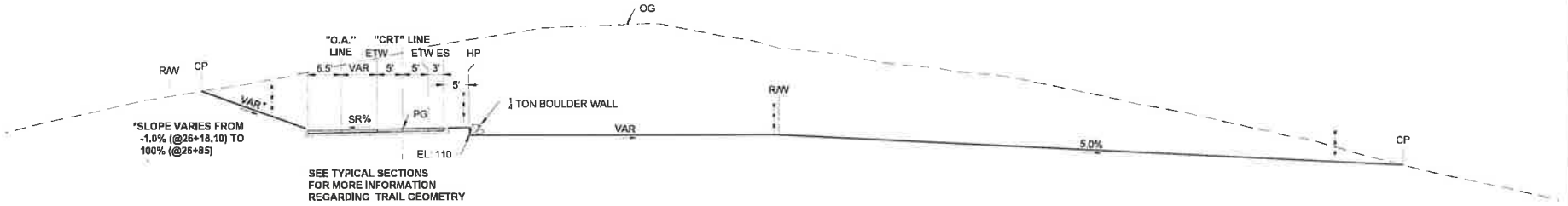
SECTION B - B



SECTION D - D



SECTION C - C



SECTION A - A

CONSTRUCTION DETAIL
OVERLOOK AREA SECTIONS
C-04

SCALE 1"=10' H
1"=10' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SD
Drawn SB
Chkd SD

BENGAL ENGINEERING
360 S. Hope Ave, C-11B Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

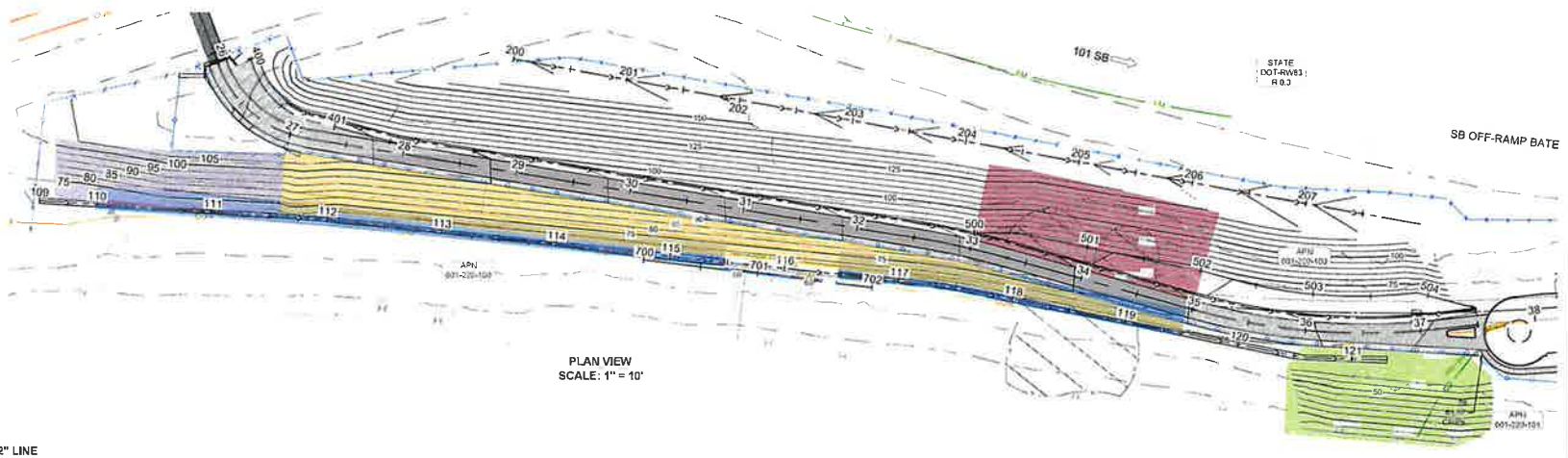
441148Y
UPRR PROJECT NO.

04/23/21 | C-04
DATE | SHT. NO.

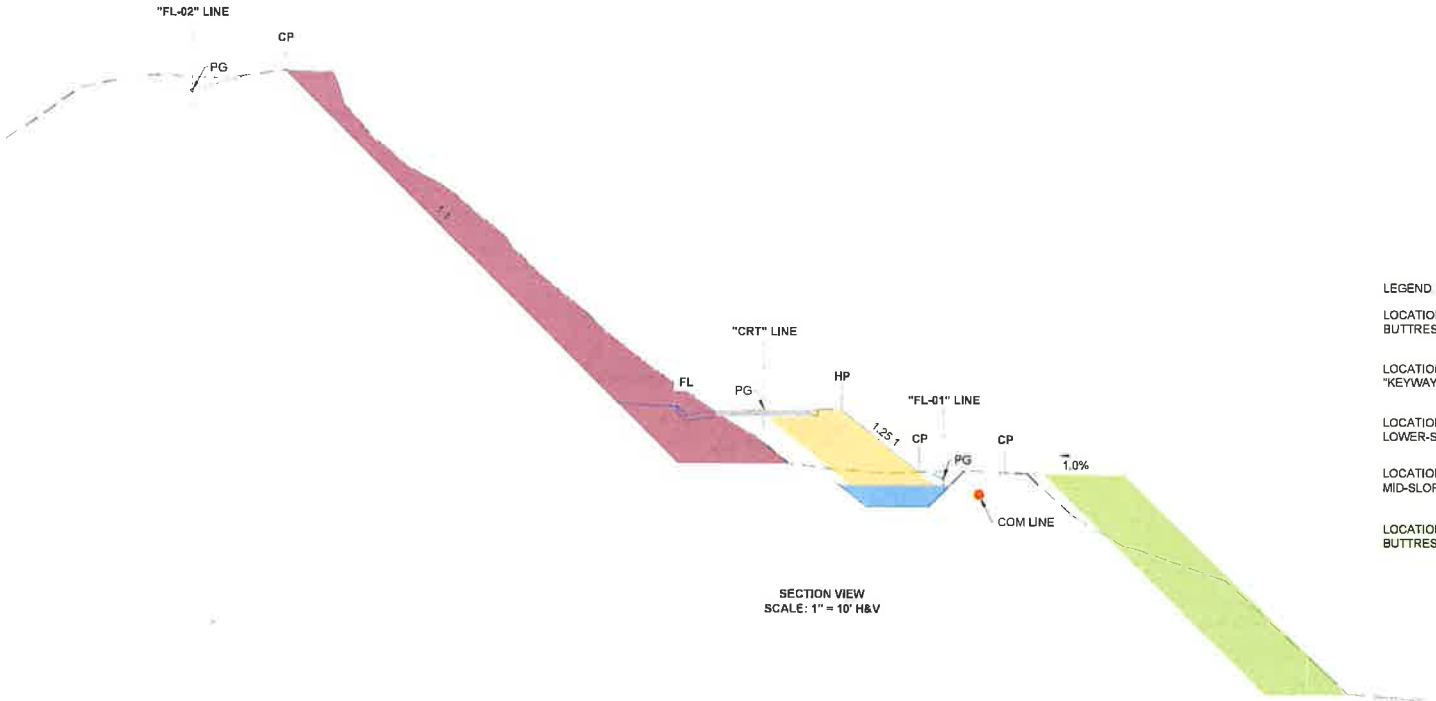
SANTA BARBARA SUB
MP 380.68
UPRR MILE POST

17 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES



PLAN VIEW
SCALE: 1" = 10'



SECTION VIEW
SCALE: 1" = 10' H&V

NOTES:

1. SEE DETAILS, NEXT SHEET, FOR GRID TYPE, PLACEMENT AND LENGTH.
2. LIMITS OF LOCATION D TO BE DETERMINED DURING CONSTRUCTION. SEE BENGAL'S GEOTECHNICAL REPORT FOR THE PROPOSED RINCON BEACH MULTI-USE TRAIL

LEGEND

LOCATION A BUTTRESS		STATION 109+63 TO 111+60 ("FL-01" LINE)
LOCATION B: "KEYWAY"		STATION 111+60 TO 115+47.14 AND 116+46.61 TO 119+50 ("FL-01" LINE)
LOCATION C: LOWER-SLOPE		STATION 111+60 TO 119+50 ("FL-01" LINE)
LOCATION D: MID-SLOPE		STATION ≈33+00 TO 35+00 (SEE NOTES) ("CRT" LINE)
LOCATION E BUTTRESS		STATION 900+15 TO 900+48.10 ("BFILL" LINE)

NORTH

CONSTRUCTION DETAIL
SLOPE REINFORCEMENT
C-04

SCALE: AS NOTED

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design SD | Drawn MB | Ck'd SD

BENGAL Engineering, Inc.
300 E. Hope Ave., C-110, Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

441148Y
UPRR PROJECT NO.

04/23/21 DATE | C-05 SHT STS

SANTA BARBARA SUB. MP 380.48 UPRR MILE POST

18 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1"

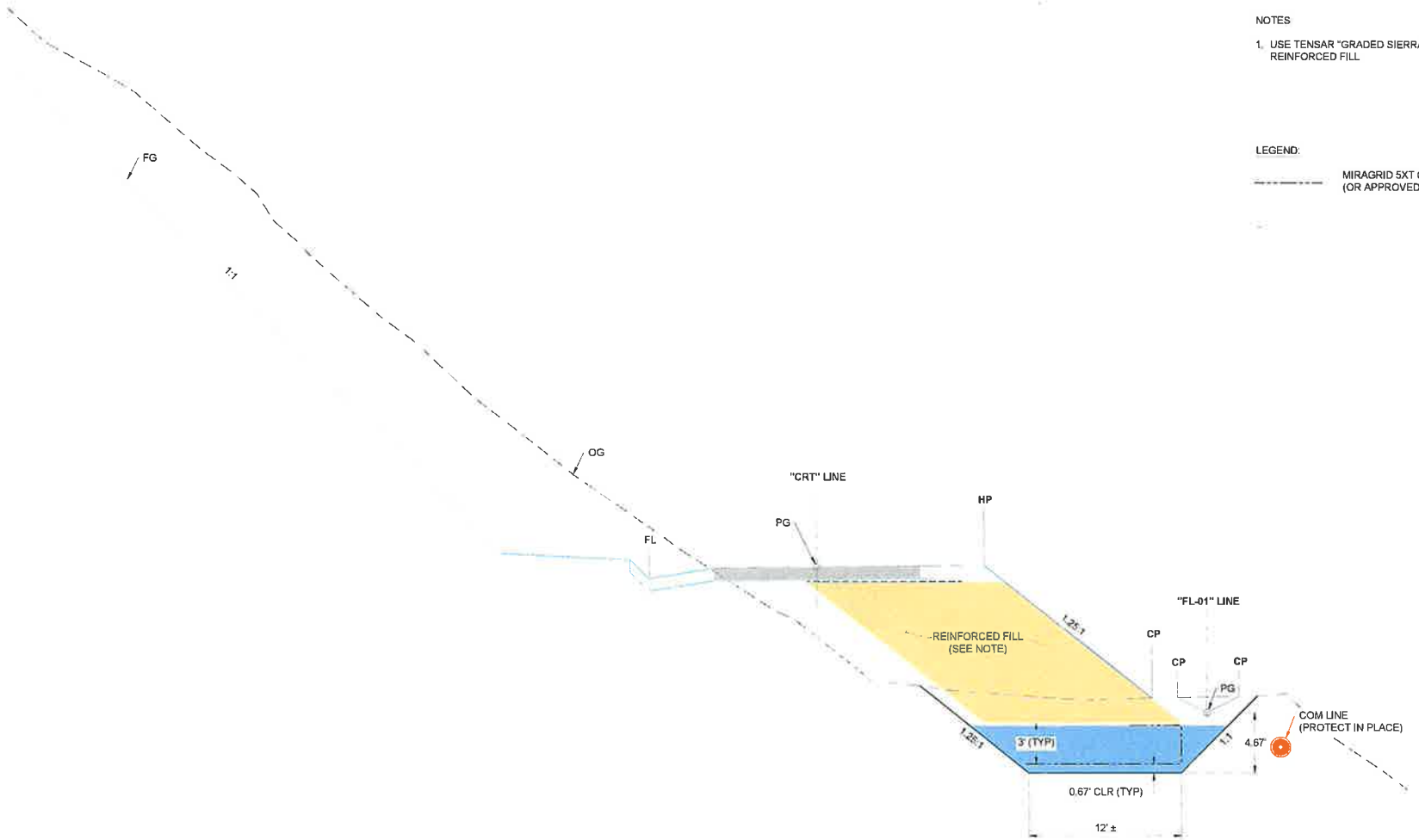
I:\plans\0_xcross projects\pers mtce\construction drawings\plan-sht.dwg BY: Michael Burdick

NOTES

1. USE TENSAR "GRADED SIERRA SLOPE" REINFORCED FILL

LEGEND:

MIRAGRID 5XT GEOGRID (OR APPROVED EQUAL)



CONSTRUCTION DETAIL
SLOPE REINFORCEMENT
C-05

SCALE 1"=4' H
1"=4' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts Project Manager

Design
Drawn
Chkd

BENGAL
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

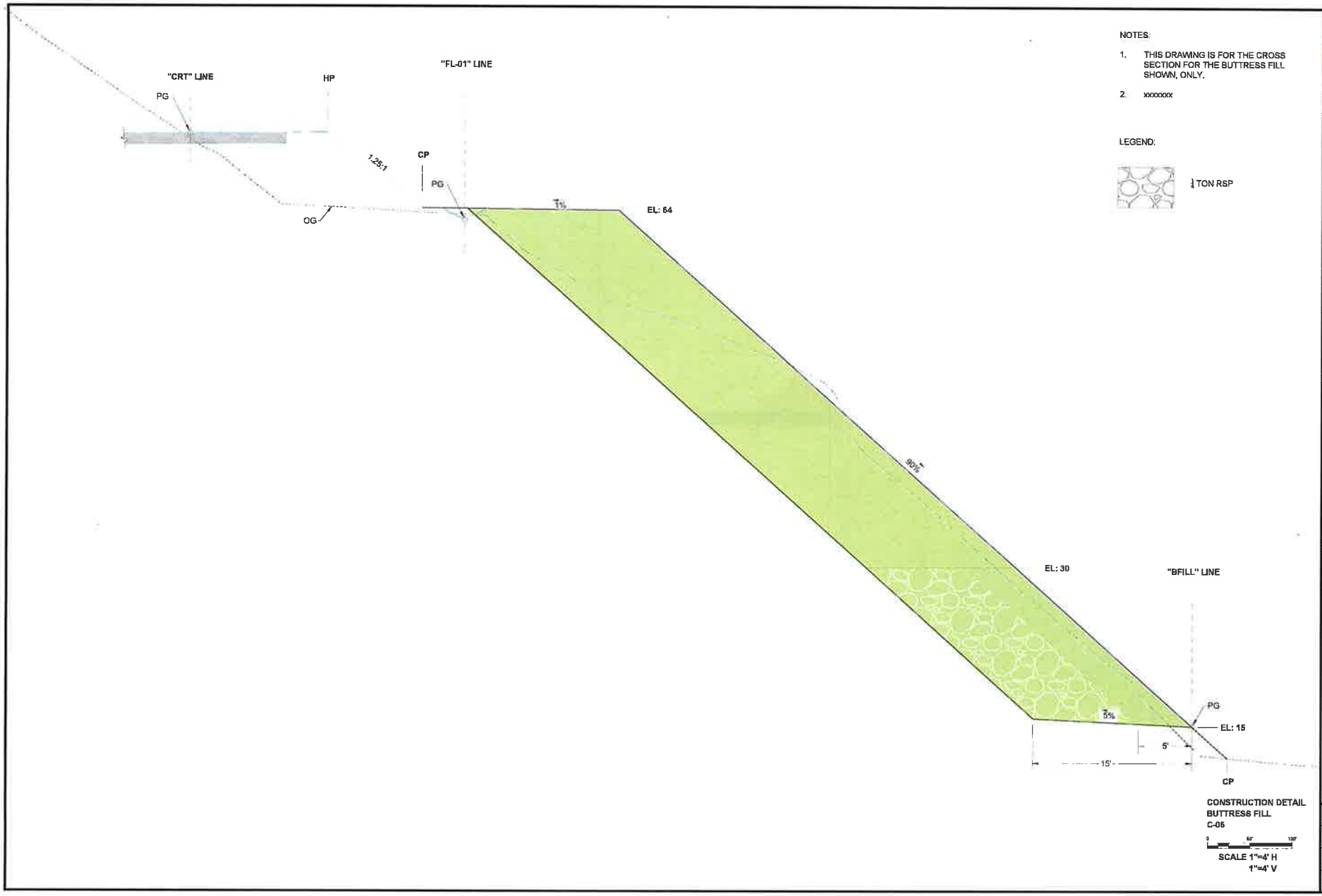
441148Y
UPRR PROJECT NO

04/23/21 DATE | C-06 SHT. DES

SANTA BARBARA SUB
MP 380.48
UPRR SUB & POST

19 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2



NOTES:

1. THIS DRAWING IS FOR THE CROSS SECTION FOR THE BUTTRESS FILL SHOWN, ONLY.
2. xxxxxxx

LEGEND:

¼ TON RSP

CONSTRUCTION DETAIL
BUTTRESS FILL
C-05

SCALE 1"=4' H
1"=4' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design 80
Drawn 145
Check 90

BENGAL
ENGINEERING
265 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAIL

441148Y
WRR PROJECT NO.

04/23/21
DATE

C-07
SHT. NO.

SANTA BARBARA SUB.
MP 380.48
UPRR MILE POST

20 of 119

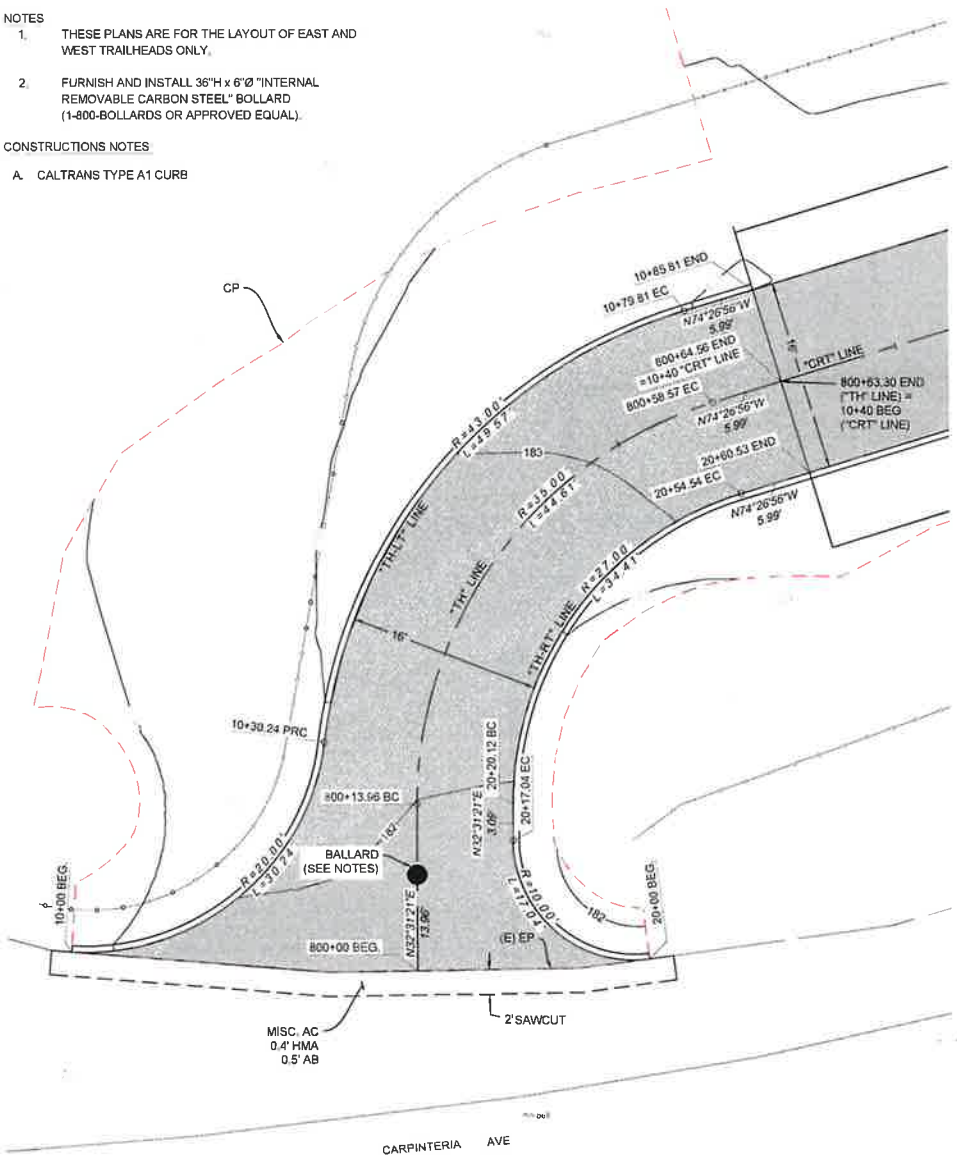
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

NOTES

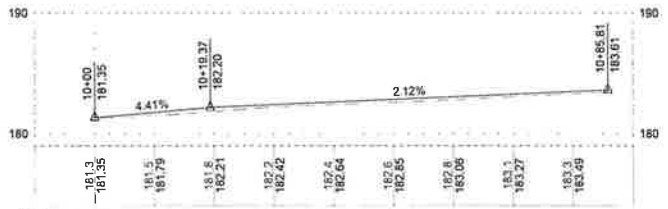
1. THESE PLANS ARE FOR THE LAYOUT OF EAST AND WEST TRAILHEADS ONLY.
2. FURNISH AND INSTALL 36"H x 6"Ø "INTERNAL REMOVABLE CARBON STEEL" BOLLARD (1-800-BOLLARDS OR APPROVED EQUAL).

CONSTRUCTIONS NOTES

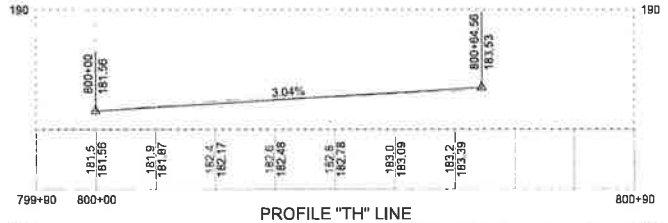
A. CALTRANS TYPE A1 CURB



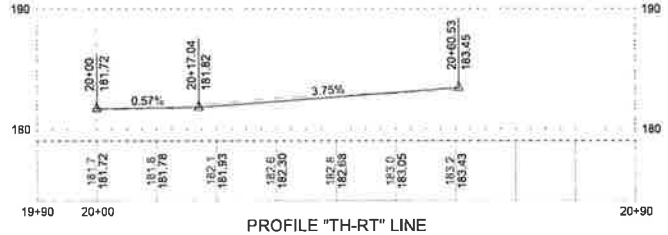
WEST TRAILHEAD CONSTRUCTION DETAILS



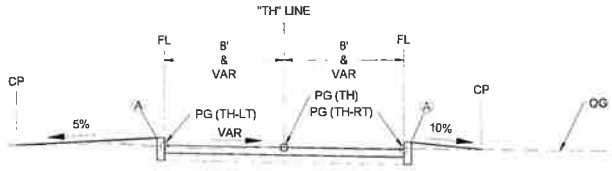
PROFILE "TH-LT" LINE



PROFILE "TH" LINE



PROFILE "TH-RT" LINE



CONSTRUCTION DETAILS
WESTERN TRAILHEAD
C-08

NORTH

SCALE 1"=10' H
1"=10' V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design
Drawn
Chk'd

BENGAL
260 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAILS

441148Y
SBBE PROJECT NO.

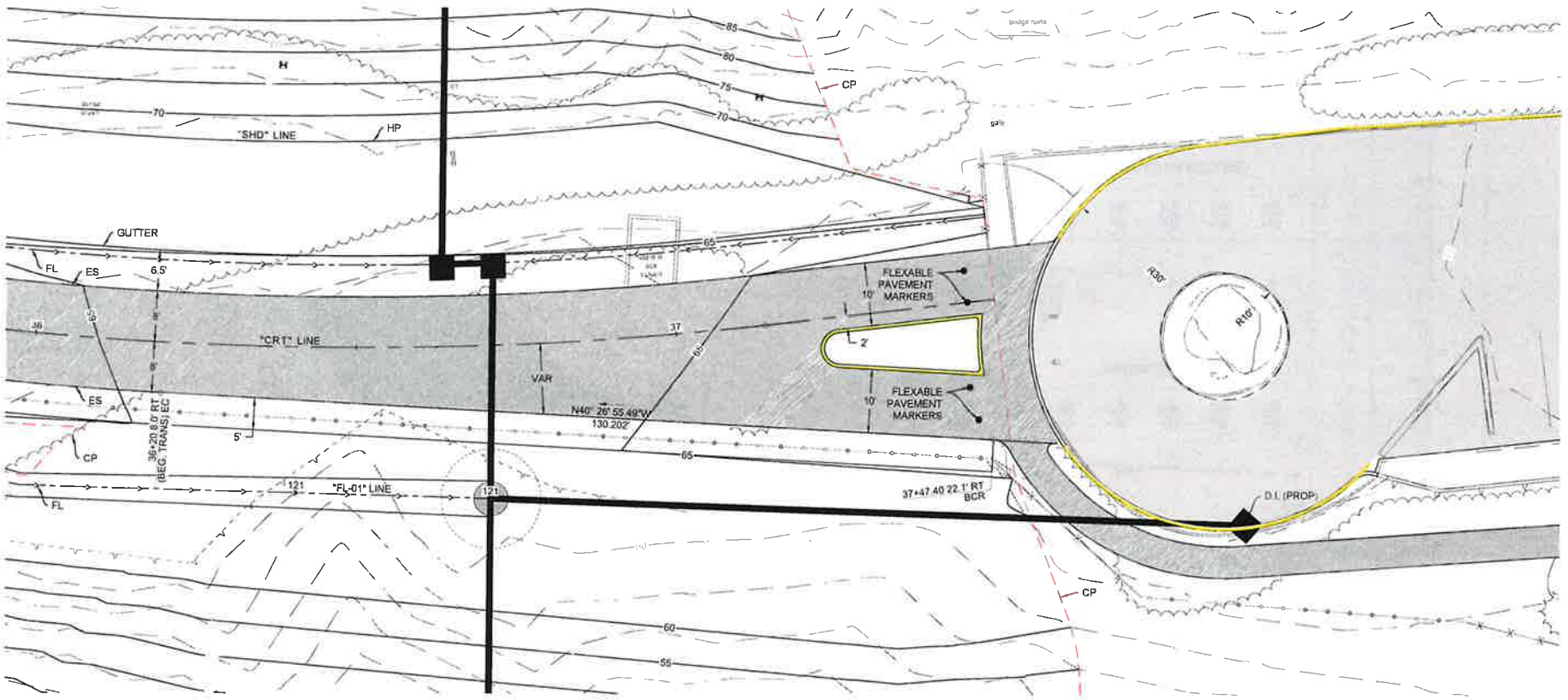
04/23/21
DATE

C-8
SHT. NO.

SANTA BARBARA SUB
MP 260.48
MRM MILE POST

21 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2



EAST TRAILHEAD CONSTRUCTION DETAIL
SCALE: 1" = 8'

CONSTRUCTION DETAILS
EASTERN TRAILHEAD
C-09

NORTH

SCALE 1"=8' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design 50 mph
Dsgn Cntrl d 50

BENGAL ENGINEERING
305 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAILS

441148Y
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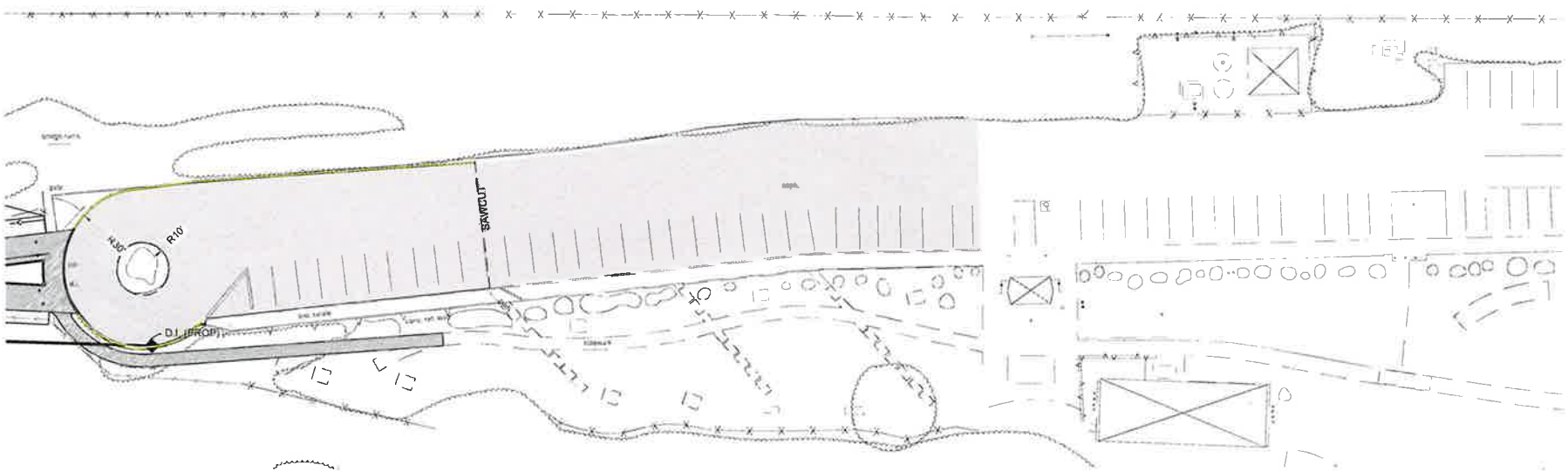
04/23/21 DATE | C-9 SHT. NO.

SANTA BARBARA SUB MP 380.49
LRBS MILE POST

22 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1" 2" 3" 4" 5" 6" 7" 8" 9" 10"



EAST PARKING AREA CONSTRUCTION DETAIL
SCALE: 1" = 20'

NORTH

SCALE 1"=20' H

CONSTRUCTION DETAILS
EASTERN TRAILHEAD
C-10

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design
Drawn
Chkd

BENGAL ENGINEERING
360 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONSTRUCTION DETAILS

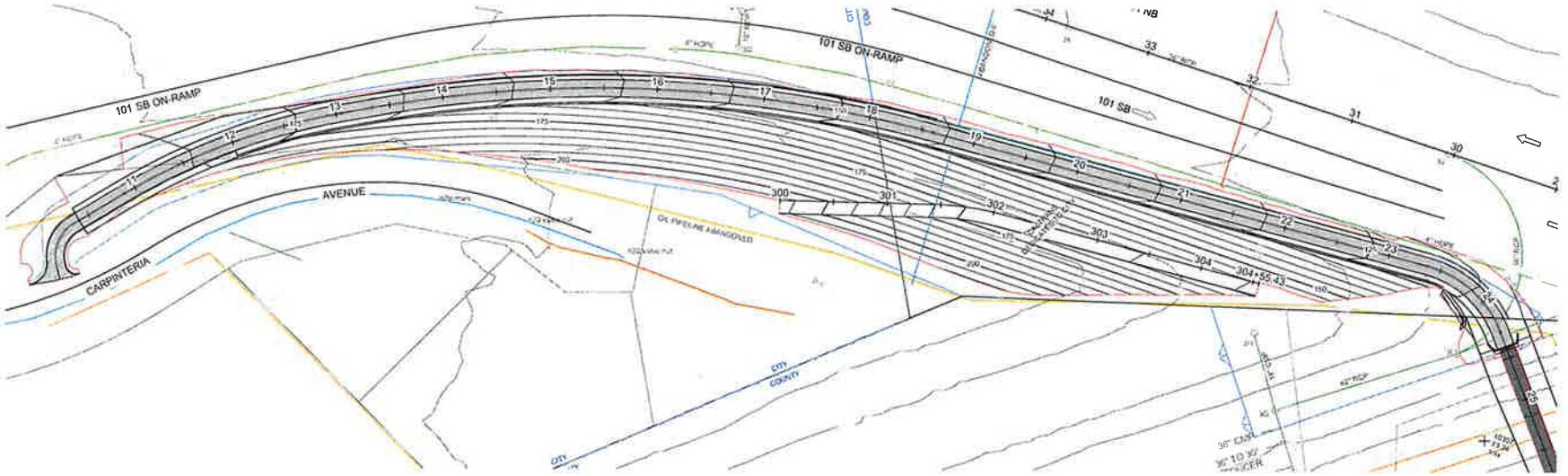
441148Y
WORK PROJECT NO.

04/23/21
DATE

C-10
SHT. NO.

SANTA BARBARA SUB
MP 388.49
UPRR MILE POST

23 of 119



NORTH

CONTOUR GRADING
G-01

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design
Drawn
Chkd
SO
MB
SO

BENGAL ENGINEERING
350 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

CONTOUR GRADING

441148Y
UPRR PROJECT NO.

04/23/21
DATE

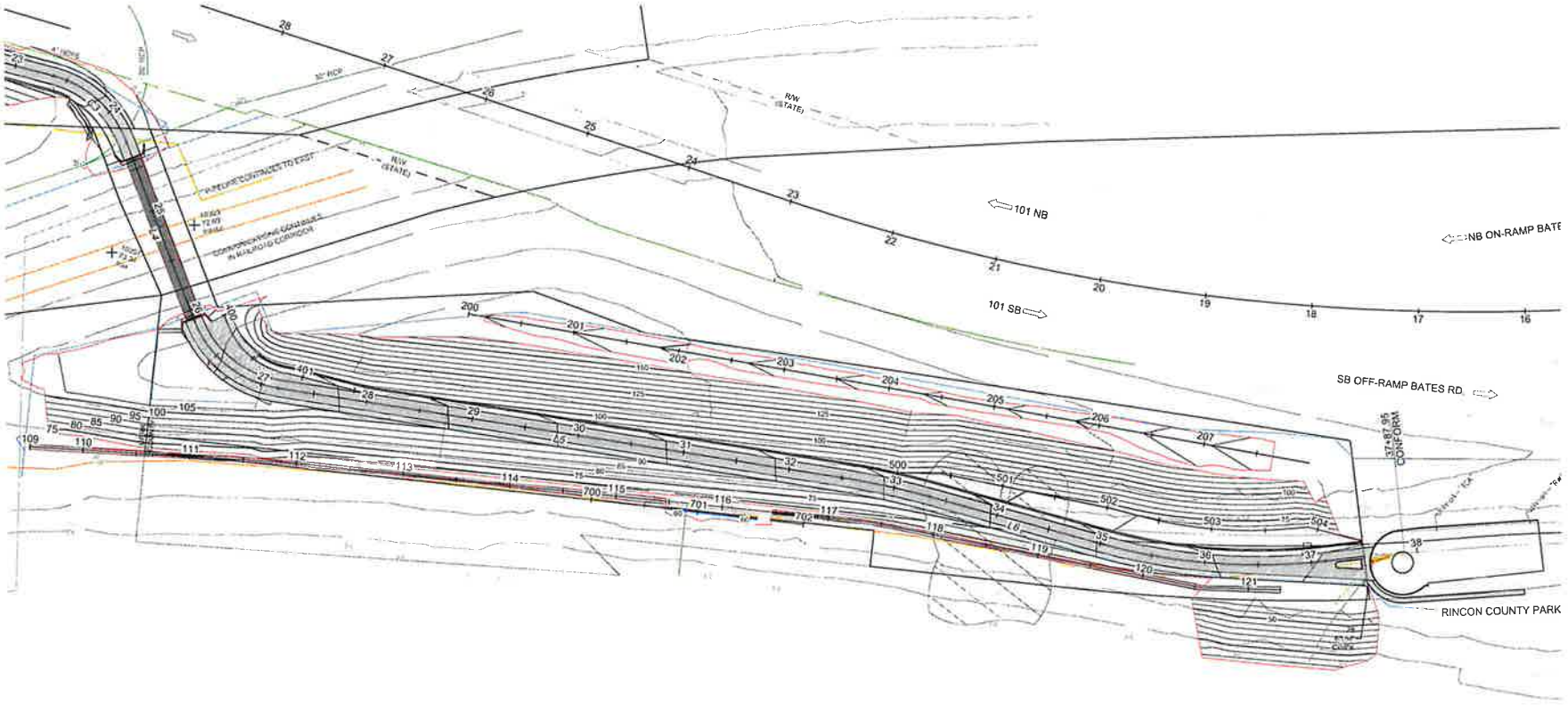
G-01
SHT. NO.

SANTA BARBARA SUB.
MP 380.48
UPRR MILE POST

24 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

BY: Michael Bandich



CONTOUR GRADING
G-02

NORTH

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

App owner: Matt Roberts Project Manager/

Design SO
Drawn MB
Check SO

BENGAL ENGINEERING, INC.
360 S. Hope Ave. C-119 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
CONTOUR GRADING

441148Y
UPRR PROJECT NO.

04/23/21 DATE | G-02 SHT. NO.

SANTA BARBARA SUB
MP 380.43
UPRR MILE POST

25 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

LEGEND

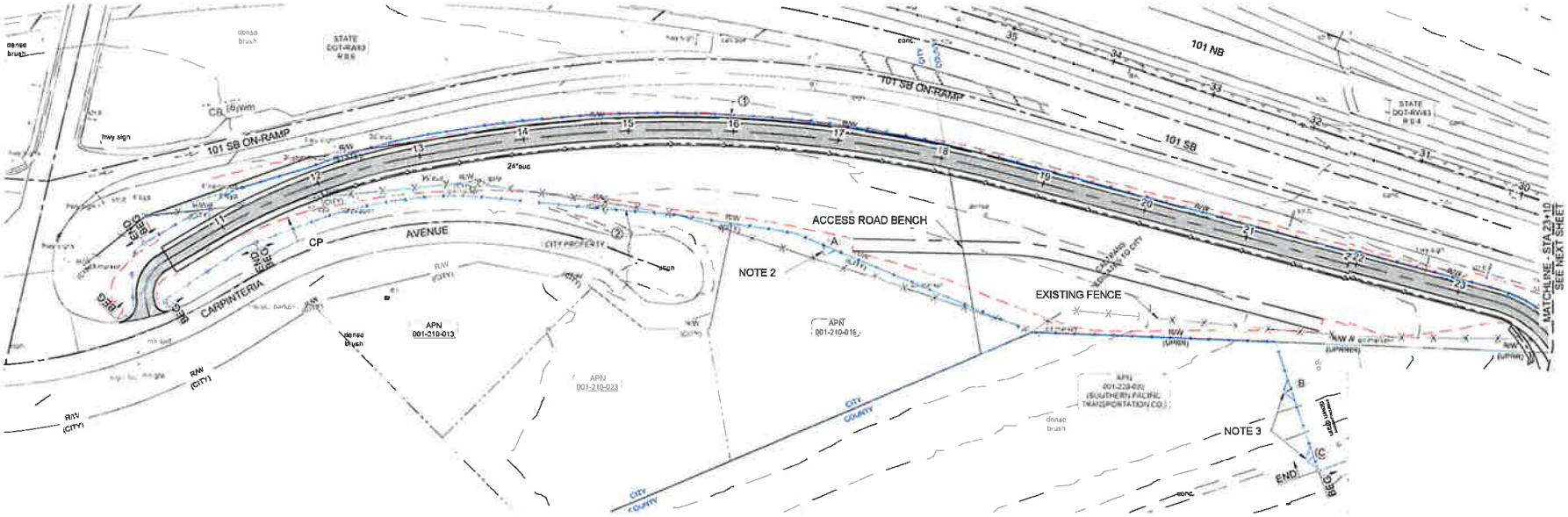
6' TALL CHAIN LINK FENCE

8' TALL CHAIN LINK FENCE

4' TALL POLE CRAFT FENCE

NOTES

1. THIS PLAN IS FOR FENCING ONLY
2. 12' CHAIN LINK GATE
   PER CAL TRANS STANDARD PLANS A85
3. 16' CHAIN LINK GATE (TYPE CL-8)
   PER CAL TRANS STANDARD PLANS A85A



NORTH

FENCE PLAN

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design / Draw / Check: SD / MRC / SD

BENGAL ENGINEERING & SURVEYING, INC.

380 S. Hope Ave., C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

441148Y
URBB PROJECT NO

04/23/21 | F-01
DATE | SHT. NO.

SANTA BARBARA SUB
MP 385.49
URBB MILE POST

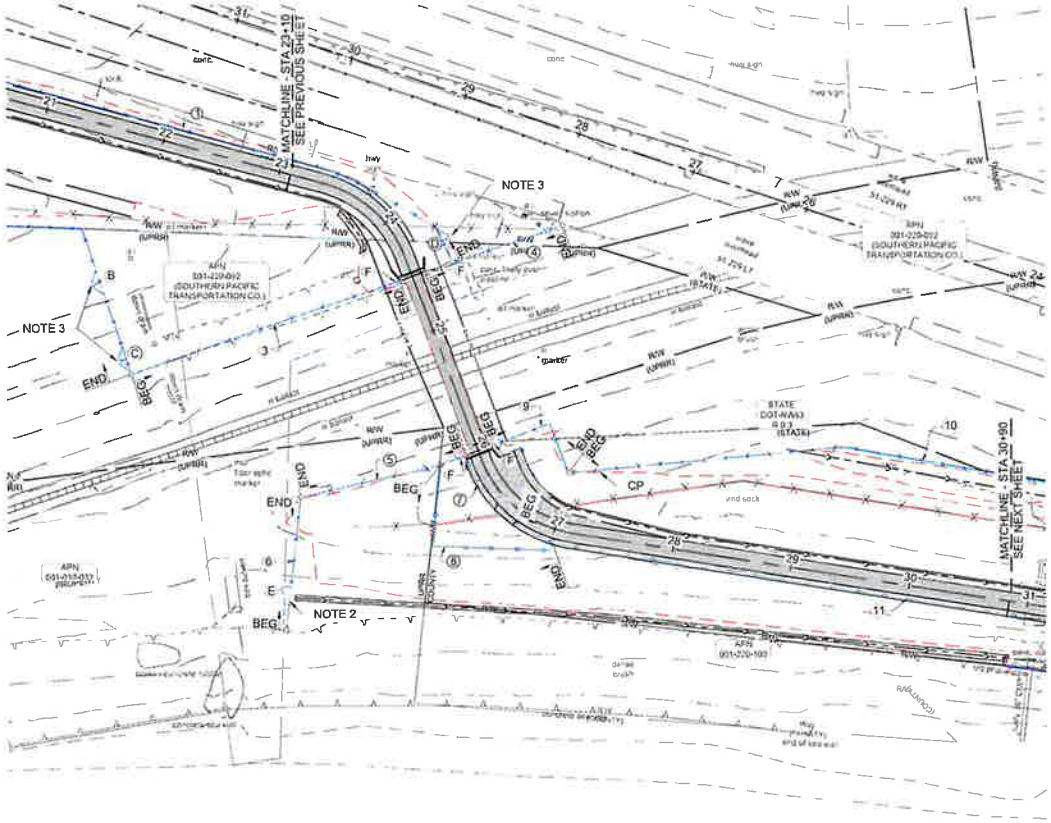
26 of 119

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 0 1 2

Trimble(R) Access positioning version trafficproduction d:\engineering\projects\proj.dwg 8/7 Michael Bensch

NOTES

SEE NOTES ON F-01



NORTH

FENCE PLAN

0 50' 100'

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts Project Manager

Design — Drawn MB/SS Check SO

BENGAL ENGINEERING, INC.

360 S. Hope Ave. C-150,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

441148Y
LOSSR PROJECT NO.

04/23/21 DATE | F-02 SHT. NO.

SANTA BARBARA SUB. MP 386.48
UPRR MILE POST

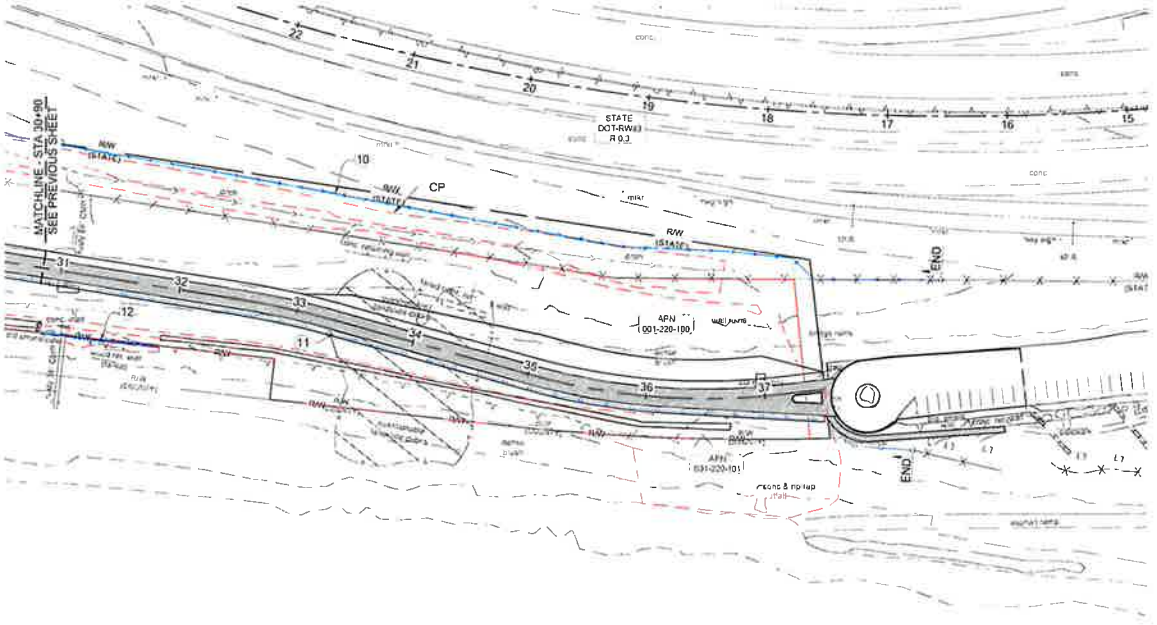
27 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1 2

NOTES

SEE NOTES ON F-01



NORTH

FENCE PLAN

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design
Drawn
Chk'd

BENGAL ENGINEERING

360 S. Hope Ave., C-110, Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

441148Y
LPMS PROJECT NO.

04/23/21 DATE | F-03 SHT. NO'S

SANTA BARBARA CO.
MP 380.48
LPMS MILE POST

28 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2

I:\Data\0_Active projects\Carp\1 rincon trail\pr\construction drawings\carp\landing plans dwg BY: Michael Banach

FENCING QUANTITIES

FENCE / GATE ID	DESCRIPTION	FENCE (TYPE CL-6)	FENCE (TYPE CL-8)	WOOD FENCE (POLE CRAFT 4")	12' WIDE CL GATE (TYPE CL-6)	16' WIDE CL GATE W/ REMOVABLE CENTER POST (TYPE CL-6)	4' WIDE WALK GATE
		LF	LF	LF	EA	EA	EA
1	LEFT OF TRAIL- WEST TRAILHEAD END TO BRIDGE	1450					
2	RIGHT OF TRAIL - TRAILHEAD ALONG TOP OF SLOPE TOWARD RAILROAD	1150					
3	RIGHT OF TRAIL - ALONG TOP OF SLOPE ABOVE RAILROAD TOWARD BRIDGE FOUNDATION		240				
4	LEFT OF TRAIL- ALONG TOP OF SLOPE ABOVE RAILROAD TOWARD HIGHWAY		125				
5	RIGHT OF TRAIL - FROM BRIDGE FOUNDATION TO EDGE OF OBSERVATION AREA		80				
6	RIGHT OF TRAIL - FROM OBSERVATION AREA DOWN SLOPE TO ORIGINAL BENCH	110					
7	RIGHT OF TRAIL - FROM BRIDGE BETWEEN TRAIL AND OBSERVATION AREA			45			
8	RIGHT OF TRAIL - OUTSIDE OBSERVATION AREA			175			
9	LEFT OF TRAIL - FROM BRIDGE FOUNDATION ALONG RIDGE		100				
10	LEFT OF TRAIL - ALONG TOP OF RIDGE TOWARD RINCON PARK	1135					
11	RIGHT OF TRAIL - ALONG SHOULDER OF TRAIL TOWARD RINCON PARK			1170			
12	RIGHT OF TRAIL - AT TOP OF MSE WALL			100			
A	RIGHT OF TRAIL - STA: 16+85 OFFSET: 114.5'				1		
B	RIGHT OF TRAIL - STA: 21+79 OFFSET: 128.5'					1	
C	RIGHT OF TRAIL - STA: 22+17 OFFSET: 185.5"					1	
D	LEFT OF TRAIL - STA: 24+31 OFFSET: 34.5'					1	
E	RIGHT OF TRAIL - STA: 26+62 OFFSET: 120'				1		
F	AT BRIDGE CORNERS						4
*G	MODIFIED GATE & TRAIL OPENING AT ENTRANCE TO RINCON PARK FROM BATES ROAD						
TOTALS		3845	545	1490	2	3	4

* DESIGN PENDING

NORTH

FENCE PLAN

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

50 Mins 50

Design / Drawn / Chkd

BENGAL
380 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

441148Y
LUPP PROJECT NO.

04/23/21 | F-04
DATE | SHT. NO.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

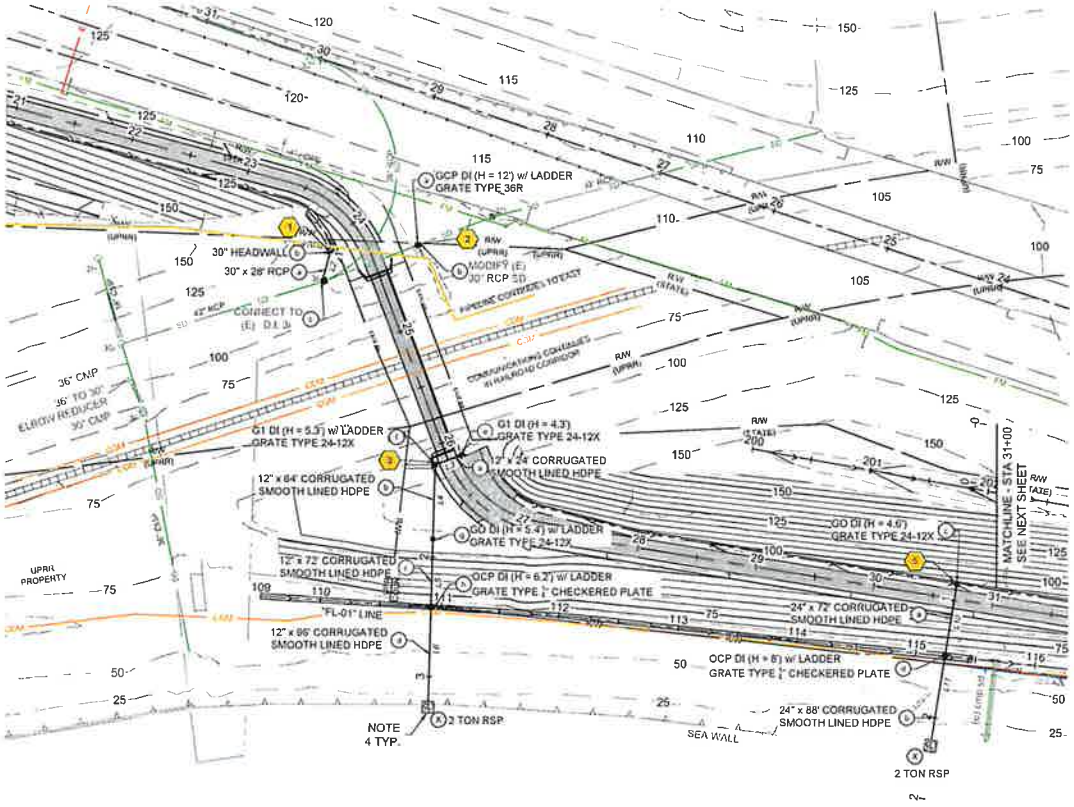
29 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

I:\data\0_Active projects\carp rincon trail\fy calculation drawings\fpc\fencing plans.dwg BY: Michael Bardach

NOTES

1. FOR COMPLETE RIGHT OF WAY INFORMATION, SEE MAPS IN THE CITY OFFICES.
2. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
3. EXISTING DRAINAGE SYSTEMS ARE NAMED ACCORDING TO THE 1968 CALTRANS DRAINAGE PLANS (SEE RECORD DRAWINGS).
4. APPROX. 10-FOOT X 10-FOOT PAD OF 2 TON RIP RAP AT OUTFALL OF DRAINAGE SYSTEMS 3, 5, 6, &7.



NORTH

DRAINAGE - 01

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design Drawn Chkd SD MS SD

BENGAL ENGINEERING

380 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
UPRR PROJECT NO

04/23/21 DATE | D-01 SHT. DES.

SANTA BARBARA SUB MP 280.49 UPRR MILE POST

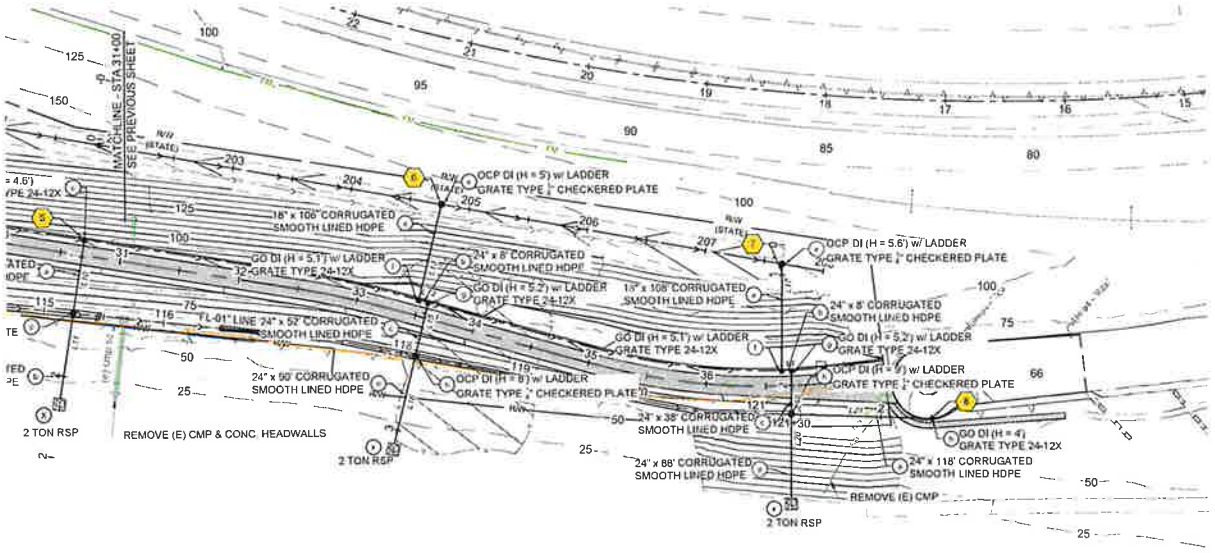
30 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1 2

NOTES

1. FOR COMPLETE RIGHT OF WAY INFORMATION, SEE MAPS IN THE CITY OFFICES.
2. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
3. EXISTING DRAINAGE SYSTEMS ARE NAMED ACCORDING TO THE 1968 CALTRANS DRAINAGE PLANS (SEE RECORD DRAWINGS).
4. APPROX. 10-FOOT X 10-FOOT PAD OF 2 TON RIP RAP AT OUTFALL OF DRAINAGE SYSTEMS 3, 5, 6, &7.



NORTH

DRAINAGE - 02

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design
Drawn
Check

RRM DESIGN GROUP
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
LOCAL PROJECT NO.

04/23/21 | D-02
DATE | SHT. NO.

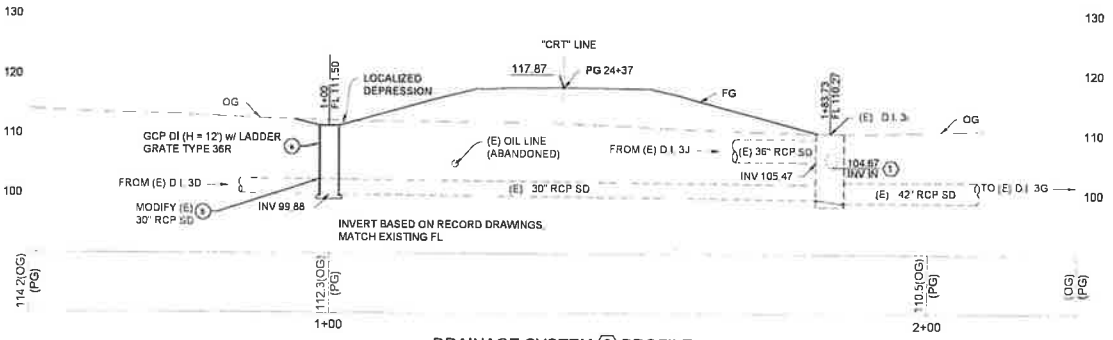
SANTA BARBARA CUS
MP 32.49
LOCAL MILE POST

31 of 119

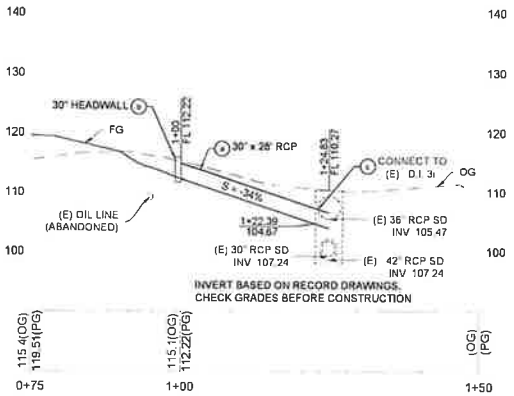
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

NOTES

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3. SOIL REINFORCEMENT, WHERE IT WILL BE PLACED, IS NOT SHOWN ON THE DRAINAGE PROFILES
4. PIPES IN PROFILE VIEW ARE EXTENDED TO CENTER OF STRUCTURE & LENGTHS OF PIPES ARE ROUNDED UP TO NEAREST 2' FOR MEASUREMENT. PIPES WILL BE TRIMMED PER STANDARD PLANS.
5. PIPE ELBOWS ARE USED WHERE STORM DRAIN CHANGES VERTICAL ANGLE AND ARE INCLUDED IN THE LENGTH.
6. JOINT RESTRAINERS ARE: (SEE CALTRANS STD PLANS FOR DETAIL)
   - 6.1. TYPE A - AT MID-POINT OF PIPE
   - 6.2. TYPE B - AT PIPE JOINT
7. STRUCTURE HEIGHT (H) IS MEASURED FROM TOP OF BOTTOM SLAB TO THE NORMAL GUTTER GRADE LINE UNDEPRESSED AT THE CURB FACE.
8. DEPTH & LOCATION OF COMMUNICATION LINE ON OLD BENCH IS NOT KNOWN. POTHOLE BEFORE PROCEEDING. SEE RIGHT-OF WAY AGREEMENTS IN CITY OFFICES FOR MORE INFORMATION.



DRAINAGE SYSTEM (2) PROFILE



DRAINAGE SYSTEM (1) PROFILE

DRAINAGE - 03

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design / Drawn / Chkd

FOR REDUCED PLANS ORIGINAL SCALE: 1" = 10" HORIZONTAL

BENGAL ENGINEERING
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
UPRR PROJECT NO.

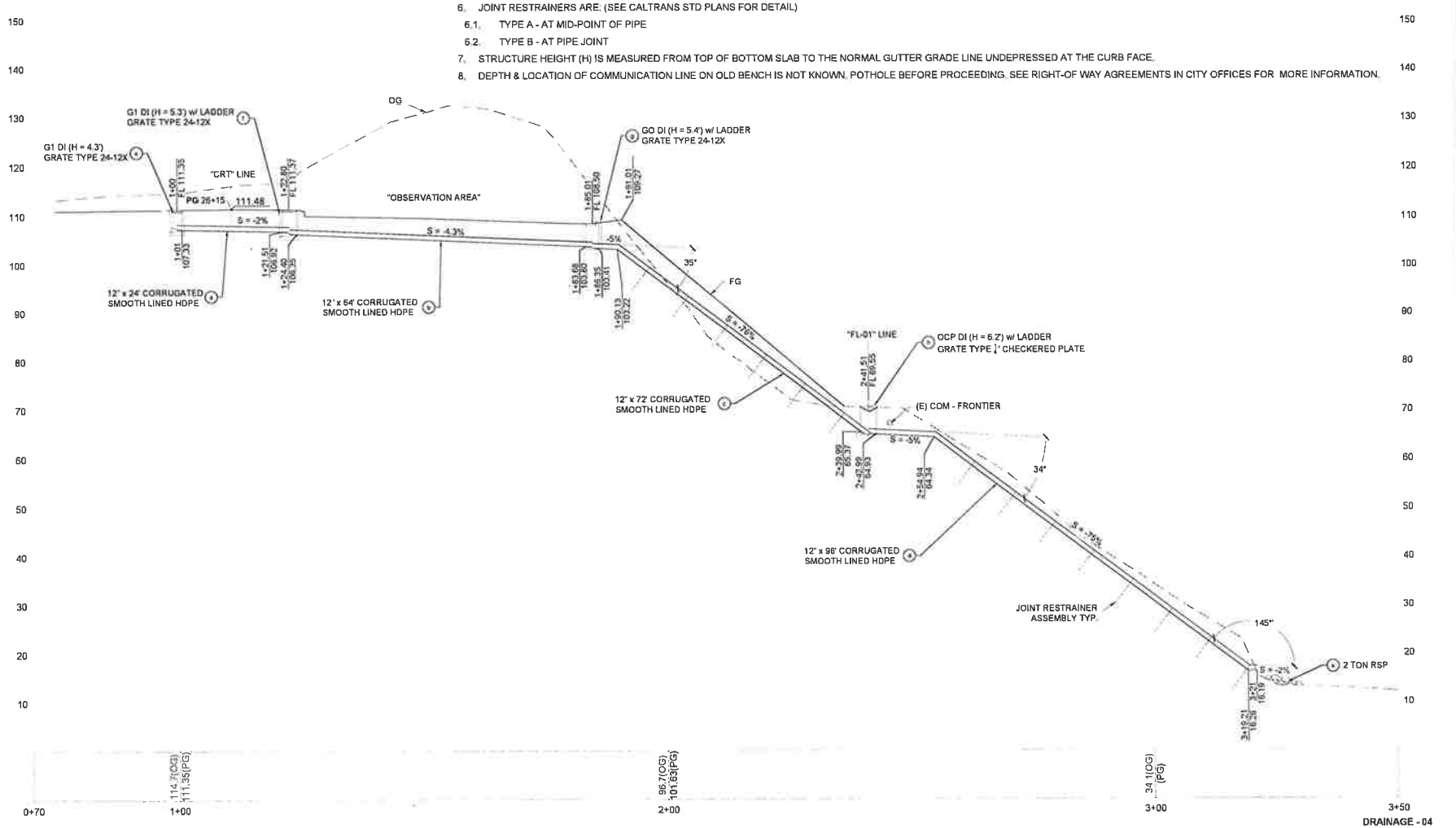
04/23/21 | D-03
DATE | SHT. NO.

SANTA BARBARA SUB MP 380.48
UPRR MILE POST

32 of 119

NOTES:

1. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
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DRAINAGE SYSTEM (3) PROFILE

SCALE 1"=10' H&V

DRAINAGE - 04

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT/ ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design — SO
Drawn — HJ
Check — SO

BENGAL ENGINEERING INC.
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
UPRR PROJECT NO

04/23/21 | 0-04
DATE | SHT. NO.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

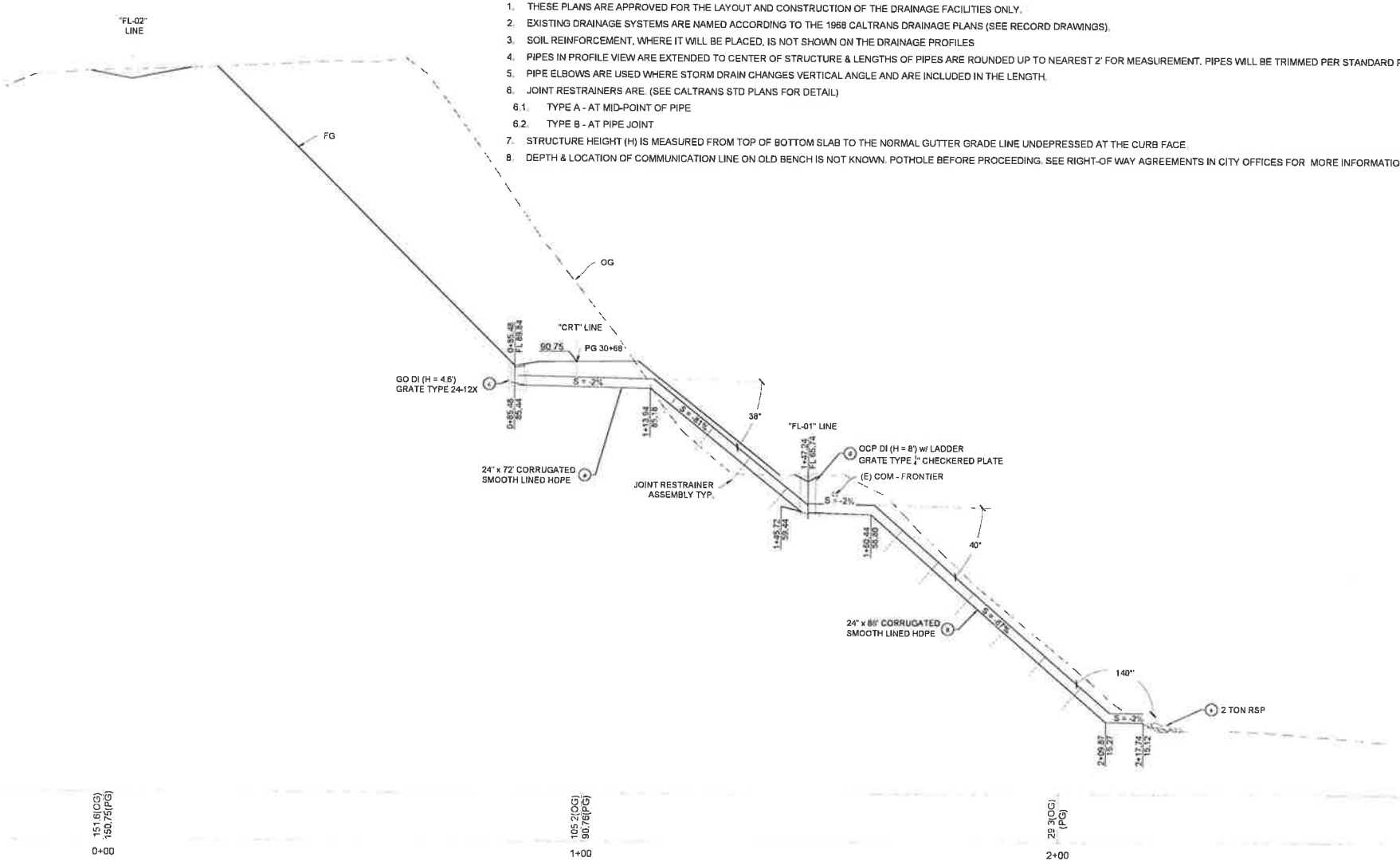
33 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

I:\bengal_active projects\active projects\441148y carpinteria rincon multi use trail\construction drawings\drainage\drainage - 04.dwg 8/1/2021 Michael Bangert

NOTES

1. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
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DRAINAGE SYSTEM (5) PROFILE

DRAINAGE - 05

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

SO | NS | SS

Design
Drawn
Chkd

BENGAL ENGINEERING & SURVEYING, INC.
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
LHPS PROJECT NO.

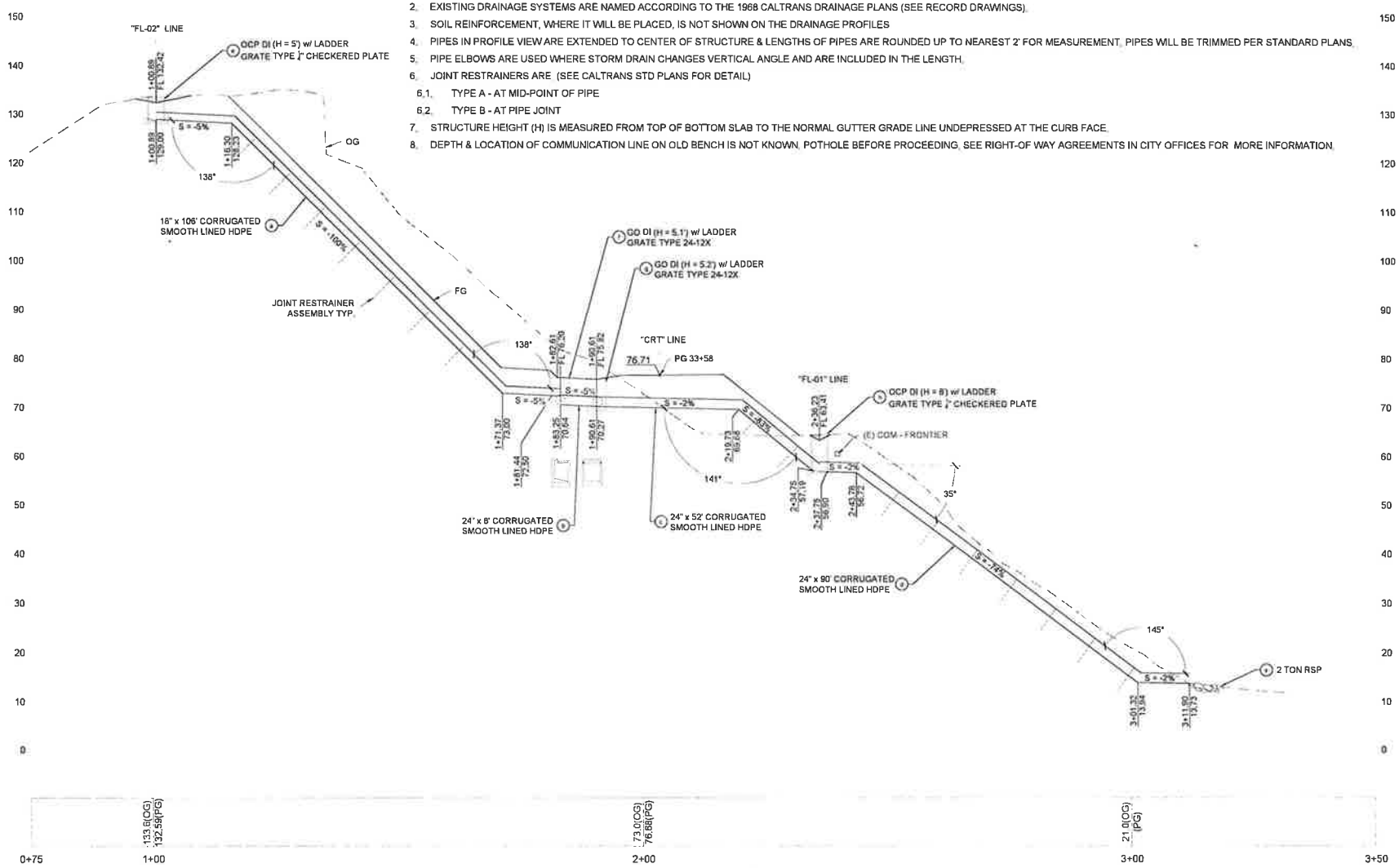
04/23/21 | D-05
DATE | SHT. NO.

SANTA BARBARA SUB.
MP 380.48
LHPS MILE POST

34 of 119

NOTES

1. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
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DRAINAGE SYSTEM (6) PROFILE

DRAINAGE - 06

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design — SO
Drawn — KS
Check — SO

BENGAL ENGINEERING, INC. 303 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
USER PROJECT NO.

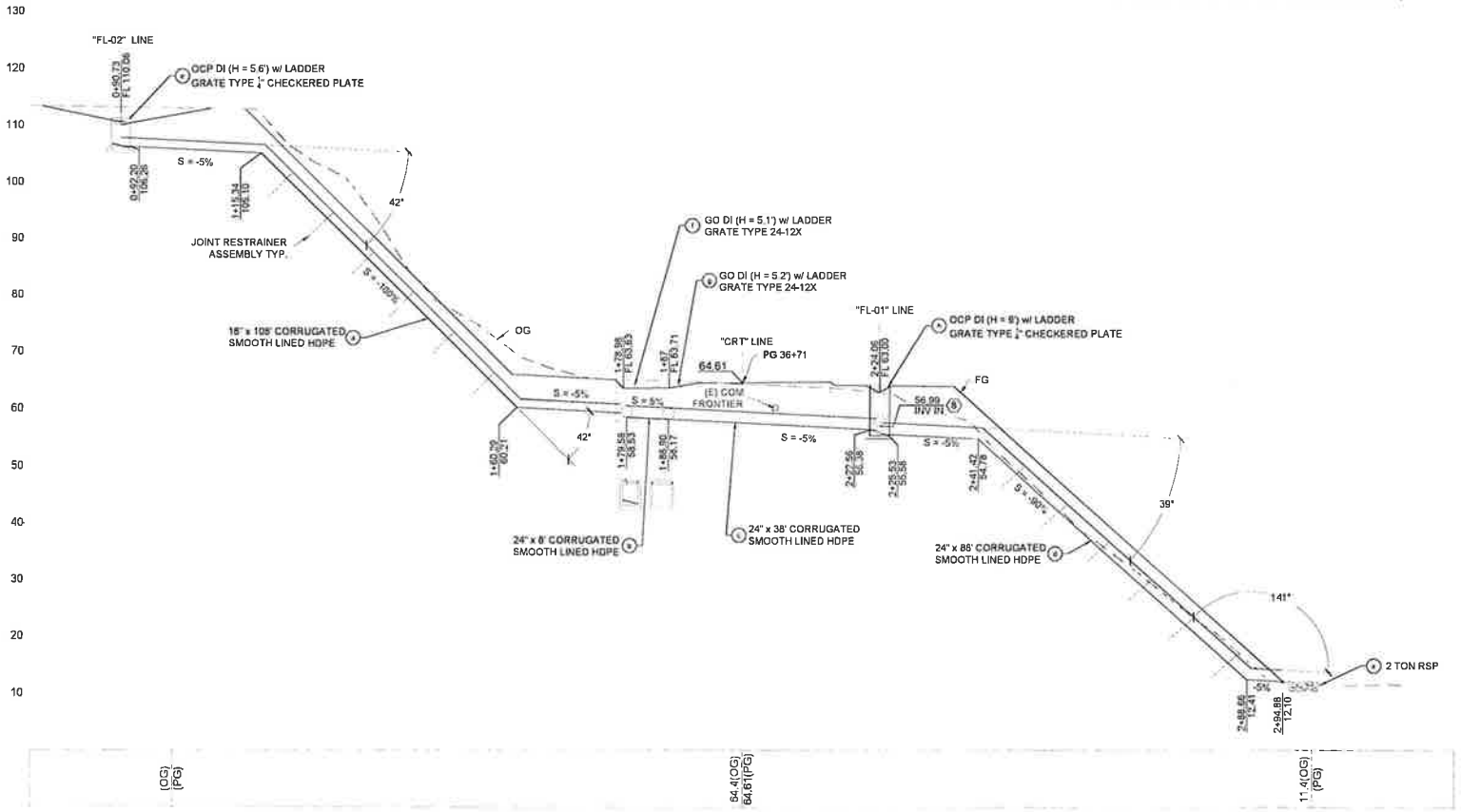
04/23/21 — DATE
D-06 — SHT. DES.

SANTA BARBARA CO.
MP 380.48
LRMS MILE POST

35 of 119

NOTES:

1. THESE PLANS ARE APPROVED FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES ONLY.
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DRAINAGE SYSTEM (7) PROFILE

DRAINAGE - 07

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design — SD
Drawn — SD
Ck'd —

BENGAL ENGINEERING, INC.
302 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
UPRR PROJECT NO

04/23/21 | D-07
DATE | SHT. NO.

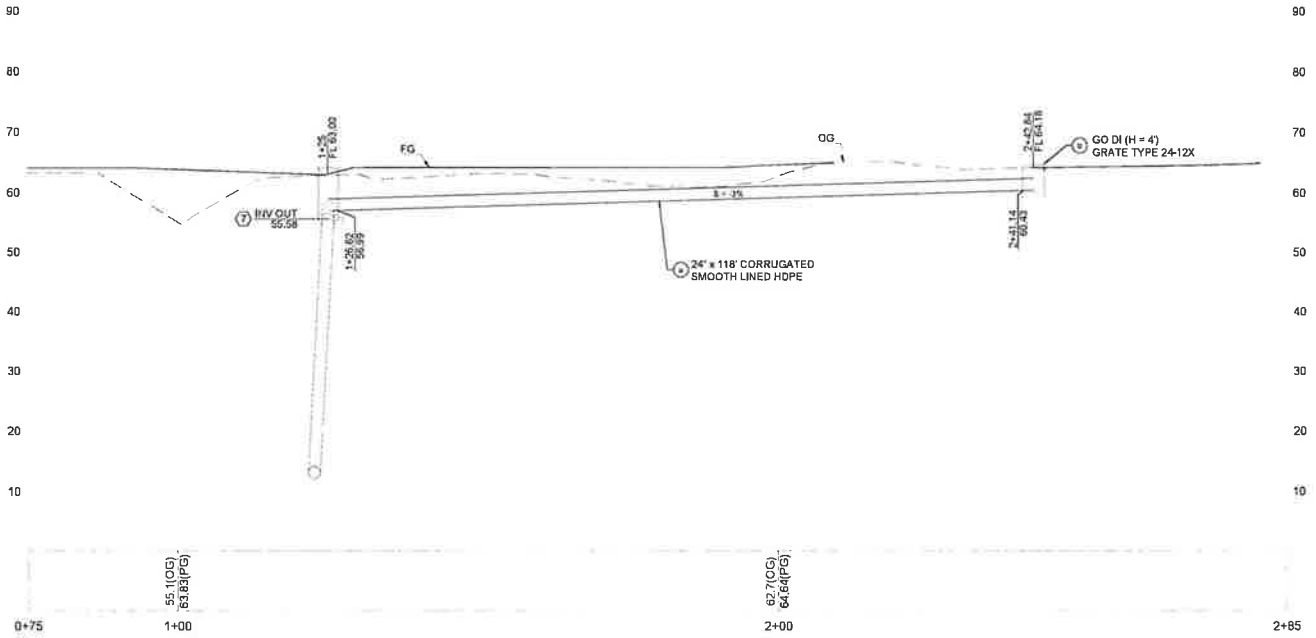
SANTA BARBARA SUB
MP 380.49
UPRR MILE POST

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

NOTES

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DRAINAGE SYSTEM (8) PROFILE

DRAINAGE - 08

SCALE 1"=10' H&V

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design HS | Drawn SD | Chk'd

RENEAL
380 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE PLANS

441148Y
UPRR PROJECT NO.

04/23/21 | D-08
DATE | SHT. DES.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

DRAINAGE SYSTEM 1

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L2	1+00.00	1964097.82	6114406.25	22.39'	S61° 06' 40.08"W	1+22.39	1964087.00	6114386.64

DRAINAGE SYSTEM 2

START STATION	START NORTHING	START EASTING
1+00	1964049.15	6114461.32

DRAINAGE SYSTEM 3

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L3	1+00.00	1963900.67	6114358.40	22.80'	N64° 33' 17.79"W	1+22.80	1963910.46	6114337.81
L4	1+22.80	1963910.46	6114337.81	63.81'	S47° 55' 46.31"W	1+86.61	1963867.71	6114290.45
L5	1+86.61	1963867.71	6114290.45	54.90'	S47° 55' 19.65"W	2+41.51	1963830.92	6114249.70
L6	2+41.51	1963830.92	6114249.70	79.49'	S47° 55' 32.67"W	3+21.00	1963777.66	6114190.70

DRAINAGE SYSTEM 5

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L10	0+85.49	1963526.74	6114567.62	61.75'	S55° 26' 47.76"W	1+47.24	1963491.72	6114518.76
L11	1+47.24	1963491.72	6114516.76	71.49'	S55° 27' 27.65"W	2+18.74	1963451.18	6114457.87

DRAINAGE SYTEM 6

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L13	1+00.89	1963330.72	6114793.58	81.72'	S60° 11' 37.43"W	1+82.61	1963290.10	6114722.67
L14	1+82.61	1963290.10	6114722.67	8.00'	S28° 09' 33.87"E	1+90.61	1963283.04	6114726.45
L15	1+90.61	1963283.04	6114726.45	45.61'	S60° 10' 21.97"W	2+36.23	1963260.36	6114686.88
L16	2+36.23	1963260.36	6114686.88	75.44'	S60° 12' 09.30"W	3+11.67	1963222.87	6114621.41

DRAINAGE SYSTEM 7

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L17	0+90.73	1963089.91	6114952.72	88.27'	S46° 51' 36.95"W	1+79.00	1963029.55	6114888.30
L18	1+79.00	1963029.55	6114888.30	8.00'	S45° 23' 07.82"E	1+87.00	1963023.93	6114894.00
L19	1+87.00	1963023.93	6114884.00	37.06'	S46° 44' 07.18"W	2+24.06	1962998.53	6114867.01
L20	2+24.06	1962998.53	6114867.01	70.64'	S46° 55' 24.64"W	2+94.70	1962950.28	6114815.41

DRAINAGE SYSTEM 8

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L21	1+25.00	1962998.53	6114867.03	117.84'	S41° 37' 48.49"E	2+42.84	1962910.45	6114945.30

DRAINAGE - 09

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design / Drawn / Chkd: SD / HS / SD

BENGAL ENGINEERING
350 E. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE LAYOUT

441148Y
UPRR PROJECT NO

04/23/21 | D-09
DATE | SHT. NO.

SANTA BARBARA SUB
MP 380.68
UPRR MILE POST

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

DRAINAGE QUANTITIES

DRAINAGE SYSTEM NUMBER	DRAINAGE PLAN SHEET #	DRAINAGE UNIT	MODIFY EXISTING 30" RCP SD TYPE GCP CAL TRANS STD PLANS D75B	CONNECT TO EXISTING JUNCTION STRUCTURE	2 TON ROCK SLOPE PROTECTION 10FTX10FT PAD	30" RCP	CORRUGATED SMOOTH LINER HDPE CALTRANS STD PLANS D87B			PLASTIC PIPE JOINT RESTRAINER ASSEMBLY CALTRANS STD PLANS D87B SEE NOTE 6 ON PROFILES			PIPE ELBOW (N)	STRUCTURE CONCRETE	STRUCTURE CONCRETE, DRAINAGE INLET	MISCELLANEOUS METAL (FRAME & GRATE)	HEIGHT OF INLET (N)	DESCRIPTION & (CALTRANS STD PLANS SHEET #)	DRAINAGE UNIT	DRAINAGE PLAN SHEET #	DRAINAGE SYSTEM NUMBER
			(EA)	(EA)	(TONS)	(LF)	12" (LF)	18" (LF)	24" (LF)	12" (EA)	18" (EA)	24" (EA)			(EA)	(EA)	(LF)					
1	D-1	a				28													a	D-1	1
		b												1				30" SINGLE HEADWALL (D89)	b		
		c		1															c		
2	D-1	a													1	1	12	TYPE GCP (D75B) w/ LADDER, GRATE TYPE 36R (D77B)	a	D-1	2
		b	1																b		
3	D-1	a					24												a	D-1	3
		b					64												b		
		c *					72			6			1						c *		
		d *					96			8			2						d *		
		e													1	1	4.3	TYPE G1 (D72B), GRATE TYPE 24-12X (D77B)	e		
		f													1	1	5.3	TYPE G1 (D72B) w/ LADDER, GRATE TYPE 24-12X (D77B)	f		
		g													1	1	5.4	TYPE GO (D72E) w/ LADDER, GRATE TYPE 24-12X (D77B)	g		
		h													1	1	6.2	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	h		
		x			18														x		
4	not used																				4
5	D-1	a *							72			4	1						a *	D-1	5
		b *							88			6	2						b *		
		c													1	1	4.6	TYPE GO (D72E), GRATE TYPE 24-12X (D77B)	c		
		d													1	1	8	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	d		
		x			18														x		
6	D-2	a *						106			7		2						a *	D-2	6
		b							8										b		
		c *							52			2	1						c *		
		d *							90			7	2						d *		
		e													1	1	5	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	e		
		f													1	1	5.1	TYPE GO (D72E) w/ LADDER, GRATE TYPE 24-12X (D77B)	f		
		g													1	1	5.2	TYPE GO (D72E) w/ LADDER, GRATE TYPE 24-12X (D77B)	g		
		h													1	1	8	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	h		
		x			18														x		
7	D-2	a *						108			6		2						a *	D-2	7
		b							8										b		
		c							38										c		
		d *							88			6	2						d *		
		e													1	1	5.6	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	e		
		f													1	1	5.1	TYPE GO (D72E) w/ LADDER, GRATE TYPE 24-12X (D77B)	f		
		g													1	1	5.2	TYPE GO (D72E) w/ LADDER, GRATE TYPE 24-12X (D77B)	g		
		h													1	1	9	TYPE OCP (D75B) w/ LADDER, GRATE TYPE OCP STEEL COVER (D75B)	h		
		x			18														x		
8	D-2	a							118										a	D-2	8
		b													1	1	4	TYPE GO (D72E), GRATE TYPE 24-12X (D77B)	b		
TOTALS			1	1	72	28	256	214	562	14	13	25		1	16	16					

*ELBOW USED & INCLUDED IN LENGTH

DRAINAGE QUANTITIES ARE ROUNDED UP TO NEAREST 2'

(N) = NOT A SEPARATE BID ITEM

DRAINAGE - 10

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design: SO | HS
Drawn: SO
Check:

BENGAL ENGINEERING, INC. 302 E. Haley Ave., E-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
DRAINAGE QUANTITIES

441148Y
UPRR PROJECT NO.

04/23/21 | D-10
DATE | SHT. NO.

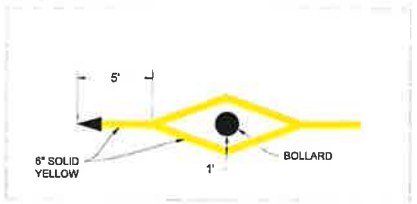
SANTA BARBARA SUB
MP 390.48
UPRR MILE POST

LEGEND

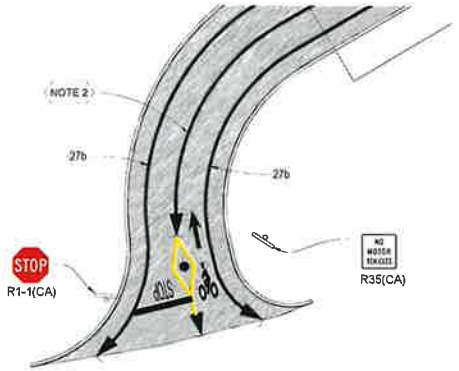
- BEGIN / END TRAFFIC STRIPE DETAIL
- CHANGE OF TRAFFIC STRIPE DETAIL
- (#) TRAFFIC STRIPE DETAIL NUMBER
- CHANNELIZER

NOTES

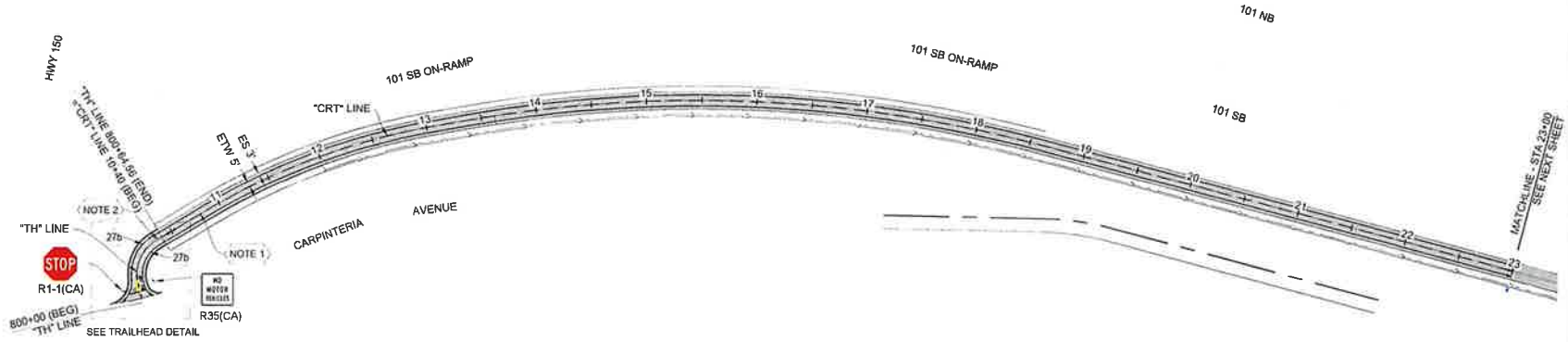
A. THIS PLAN IS FOR THE LAYOUT OF SIGNS AND STRIPING ONLY.
1. 6" YELLOW RETROREFLECTIVE DASHED - 3' SEGMENT - 9'GAP (MUTCD FIGURE 9C-2).
2. 6" YELLOW RETROREFLECTIVE SOLID.
3. 36" CHANNELIZER CAL TRANS A73SC. MIN. OF 2' FROM EDGE OF SHOULDER. RETROREFLECTIVE SHEETING ON BOTH SIDES.
4. LOCATIONS OF SIGNS ARE APPROXIMATE AND MAY BE MOVED IN FIELD TO ACCOMMODATE OBSTRUCTION.
5. ALL POST-MOUNTED SIGNS MUST BE PLACED MIN. OF 2' FROM EDGE OF SHOULDER.



TRAIL BEGIN & END PAVEMENT MARKING DETAILS
NOT TO SCALE



TRAILHEAD DETAIL
SCALE: 1" = 10'



PAVEMENT DELINEATION PLAN
SCALE: 1" = 50'

NORTH

PAVEMENT DELINEATIONS - 1
SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved Matt Roberts Project Manager

Design Drawn Chkd 99 99 99

BENGAL ENGINEERING
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT DELINEATIONS

441148Y
UPRR PROJECT NO.
04/23/21 DATE
PD-1 SHT. NO.
SANTA BARBARA SUB
MP 380.48
UPRR MILE POST
40 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES
0 1 2

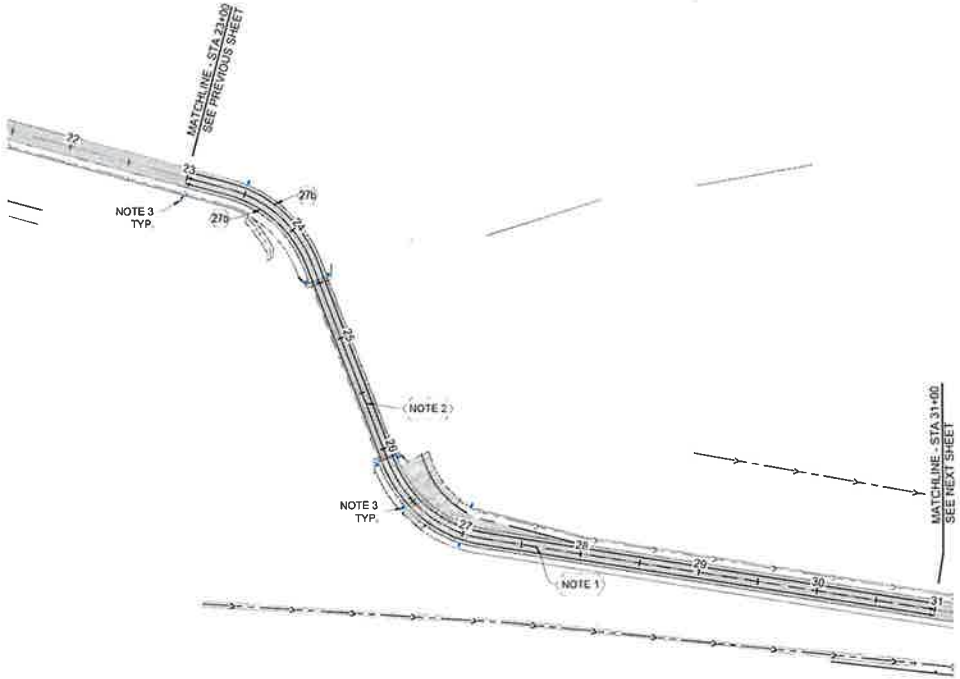
I:\projects\...\pavement delineations.dwg BY: Michael Bergen

LEGEND

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PAVEMENT DELINEATION PLAN
SCALE: 1" = 50'

NORTH

PAVEMENT DELINEATIONS - 2

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design: SO
Drawn: HS
Check'd: SO

BENGAL ENGINEERING, INC. 360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT DELINEATIONS

441148Y
UPRR PROJECT NO.

04/23/21 | PD-2
DATE | SHT. NO.

SANTA BARBARA SUB
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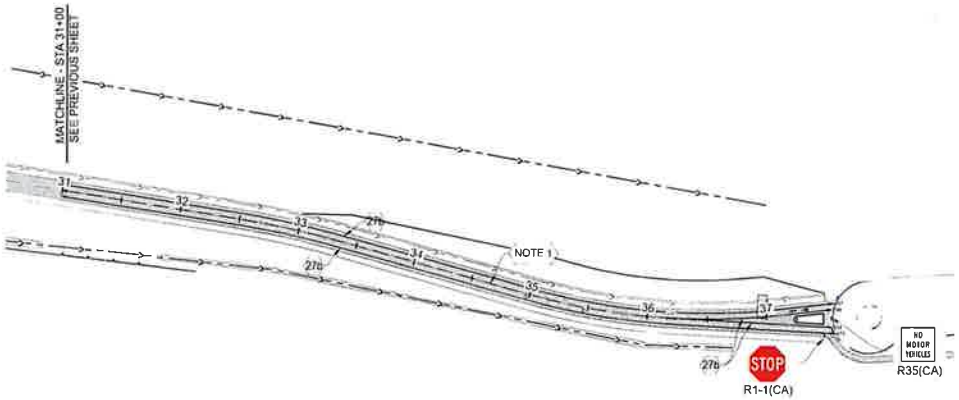
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

LEGEND

- BEGIN / END TRAFFIC STRIPE DETAIL
- CHANGE OF TRAFFIC STRIPE DETAIL
- TRAFFIC STRIPE DETAIL NUMBER
- CHANNELIZER

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PAVEMENT DELINEATION PLAN
SCALE 1" = 50'

STRIPING QUANTITIES

SHEET NUMBER	DETAIL NO. OR PAVEMENT MARKING	ALIGNMENT NAME	STATION LIMITS BEGIN	STATION LIMITS END	LOCATION	TRAFFIC STRIPE (RETROREFLECTIVE) 6 inch SOLID WHITE	6 inch SOLID YELLOW	6 inch DASHED YELLOW (3' SEGMENT - 9' GAP)
						LF	LF	LF
PD-1	CUSTOM	TH	800+17	800+65	CL		48	
PD-1	CUSTOM	CRT	10+40	10+50	CL		10	
PD-1	CUSTOM	CRT	10+50	23+00	CL			1250
PD-1	27B	TH	800+00	800+65	LT	65		
PD-1	27B	CRT	10+40	22+00	LT	1260		
PD-1	27B	TH	800+00	800+65	RT	65		
PD-1	27B	CRT	10+40	23+00	RT	1260		
PD-2	27B	CRT	23+00	31+00	LT	800		
PD-2	27B	CRT	23+00	31+00	RT	800		
PD-2	CUSTOM	CRT	23+00	26+50	CL		350	
PD-2	CUSTOM	CRT	26+50	31+00	CL			450
PD-3	27B	CRT	31+00	37+57	LT	657		
PD-3	27B	CRT	31+00	37+55	RT	655		
PD-3	CUSTOM	CRT	31+00	36+20	CL			570
PD-3	27B	CRT	36+20	37+55	LT	135		
PD-3	27B	CRT	36+20	37+53	RT	133		
TOTALS								
UNROUNDED						5830	408	2220

(N)=Not a Pay Item
*Striping Quantity includes length for two parallel lines

SIGN & OBJECT MARKER QUANTITIES

SHEET NUMBER	LOCATION	DESCRIPTION	ROADSIDE SIGN - POST: SIGN POST	R1-1	R35	OBJECT MARKER: 36" TALL CHANNELIZER CALTRANS A73C
			EA	EA	EA	EA
PD-1	RIGHT OF CRT STA: 10+00	NO MOTOR VEHICLES	1		1	
PD-1	LEFT OF CRT STA: 10+00	BIKE PATH STOP 18"X18"	1	1		
PD-2	LEFT OF CRT STA: 23+00	CHANNELIZER				1
PD-2	RIGHT OF CRT STA: 23+00	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 23+50	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 24+00	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 24+46	CHANNELIZER				1
PD-2	RIGHT OF CRT STA: 24+46	CHANNELIZER				1
PD-2	RIGHT OF CRT STA: 26+10	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 26+10	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 26+50	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 26+59	CHANNELIZER				1
PD-2	LEFT OF CRT STA: 27+00	CHANNELIZER				1
PD-3	RIGHT OF CRT STA: 37+25	CHANNELIZER				1
PD-3	RIGHT OF CRT STA: 37+58	CHANNELIZER				1
PD-3	LEFT OF CRT STA: 37+60	CHANNELIZER				1
PD-3	RIGHT OF CRT STA: 37+55	NO MOTOR VEHICLES	1		1	
PD-3	RIGHT OF CRT STA: 37+39	BIKE PATH STOP 18"X18"	1	1		

PAVEMENT MARKING QUANTITIES

SHEET NUMBER	BIKE SYMBOL & ARROW WHITE THERMOPLASTIC QTY (N)	BIKE SYMBOL & ARROW WHITE THERMOPLASTIC SF	AHEAD MARKING WHITE THERMOPLASTIC QTY (N)	AHEAD MARKING WHITE THERMOPLASTIC SF	STOP MARKING WHITE THERMOPLASTIC QTY (N)	STOP MARKING WHITE THERMOPLASTIC SF	STOP LIMIT LINE WHITE THERMOPLASTIC SF
PD-1							13
PD-1	1	10.5					
PD-1			1	31			
PD-1					1	5	
PD-1					1	5	
PD-3					1	5	
PD-3			1	31			
PD-3					1	5	
PD-3	1	10.5					
PD-3							5
PD-3							
TOTALS							
UNROUNDED		21		62		20	18

NORTH

PAVEMENT DELINEATIONS - 3

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design
Drawn
Chk'd

BENGAL ENGINEERING, INC.
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT DELINEATIONS

441148Y
URBB PROJECT NO

04/23/21 DATE | PD-3 SHT. DES

SANTA BARBARA SUB
MP 386.49
UPRR MILE POST

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Updated: 4/23/2021 3:09:47 PM by Michael Bendon

GENERAL UTILITY NOTES

1. 10-INCH OIL PIPELINE (FORMALLY VENOCO–NOW CHEVRON) - BELIEVED TO BE "ABANDONED".

LOCATION / ALIGNMENT

- THIS LINE GENERALLY FOLLOWS THE CALTRANS RIGHT-OF-WAY (OUTSIDE OF STATE RIGHT OF WAY), TRAVELING FROM FWY 150, TOWARD THE "WAVE OVERHEAD" WHERE IT DESCENDS TO THE UPRR, THEN TRAVELS EASTWARD.

DEPTH

- DEPTH OF PIPELINE IS UNKNOWN.

PROJECT WILL

- EXCAVATE NEAR/OVER THIS PIPELINE IN LOCATIONS.
- EXCAVATIONS MAY EXPOSE OR "CUT" THIS LINE.
- DESIGNERS HAVE BEEN TOLD THAT THIS LINE IS "FULL OF WATER"

REFERENCE INFORMATION

- CALTRANS RECORD DRAWINGS FOR CONSTRUCTION ON STATE HIGHWAY, CONTRACT 07-260704, PROJECT 0700000490, PAGE 205/757 (SHEET U-16).
- VENOCO RECORD DRAWING S2656-A-101 "PAREDON PROJECT: EXISTING 10-INCH PIPELINE ALIGNMENT". THIS DRAWING IS PAGE C-23 OF THE "PROPOSED FINAL EIR".
- BENGAL HAS ATTEMPTED TO FIND MORE DATA, BUT WITH THE BANKRUPTCY OF VENOCO WE WERE UNABLE TO REACH STAFF FROM BEACON WEST WITH BETTER INFORMATION.

2. 6-INCH WATER PIPELINE: LATERAL 27-R-F: CARPINTERIA VALLEY WATER DISTRICT: "ABANDONED".

LOCATION / ALIGNMENT

- THIS LINE ONCE CROSSED HWY 150 FROM CARPINTERIA AVE TO CAMINO CARRETA, EAST OF HWY 150

DEPTH

- UNKNOWN.

PROJECT WILL

- EXCAVATE THROUGH THE LOCATION OF OLD WATERLINE.

REFERENCE INFORMATION

- CVWD ATLAS MAPS PROVIDED IN APRIL, 2016, NAME THIS AS "ABANDONED LINE; LATERAL 27-R-F."
- PIPELINE IS SHOWN AS "ABANDONED" ON THE DRAWINGS FOR THE CONSTRUCTION ON STATE HIGHWAY, CONTRACT 07-260704, PROJECT 0700000490, PAGE 205/757 (SHEET U-16).

3. 4-INCH PRESSURE SEWER: CARPINTERIA SANITARY DISTRICT (CSD) "SEPTIC TO SEWER CONVERSION PROJECT"

LOCATION / ALIGNMENT

- THIS LINE CONNECTS A GRAVITY SEWER, DRAINING WEST FROM THE INTERSECTION OF HWY 150/CARPINTERIA AVE., WITH A PRESSURE SEWER LINE FROM A PUMPING PLANT IN RINCON COUNTY PARK. THE LINE GENERALLY FOLLOWS THE SOUTHBOUND SIDE OF THE FREEWAY, AND I LOCATED ABOUT 5-FEET BEHIND THE DIKE / EDGE OF SHOULDER.

DEPTH

- THE PIPELINE IS SHOWN TO GENERALLY BE ABOUT 8-FEET DEEP, EXCEPT AT "WAVE OVERHEAD", WHERE IT BECOMES SHALLOWER TO CROSS UPRR. RECORD DRAWINGS SHOW AS-BUILT DEPTHS WHICH VARY GREATLY.

PROJECT WILL

- CROSS THIS PIPELINE IN VARIOUS LOCATIONS.

REFERENCE INFORMATION

- PIPELINE IS SHOWN ON CSD DRAWINGS 15-1-5 THROUGH 15-1-7. DESIGNED BY PENFIELD AND SMITH FOR THE "SEPTIC TO SEWER CONVERSION PROJECT".

4. FRONTIER COMMUNICATION LINE (ON OLD RAILROAD BENCH–LEADING TO RINCON PARK)

LOCATION / ALIGNMENT

- BECAUSE OF THE LIMITED DATA PROVIDED ON THE ATLAS DRAWINGS WE ARE UNSURE OF THE LOCATION OF THIS LINE.
- ACCORDING TO THE ATLAS MAPS, A FRONTIER FACILITY NAMED "CRPRCAXF" LINE FOLLOWS THE AT&T LINE FROM CARPINTERIA AVE, CROSS COUNTRY TO THE UPRR, WHERE IT FOLLOWS THE ACTIVE UPRR CORRIDOR TO THE EAST.
- BUT IN JANUARY, 2019 FRONTIER MARKED A FIBER OPTIC LINE ON THE OLD RAILROAD BENCH, LEADING TO RINCON COUNTY PARK, WE COULD SEE BOTH THE CONDUIT AND THE MANHOLES ALONG THE OLD BENCH, BUT WE ARE UNSURE IF THE EXISTING FRONTIER FACILITY WHICH TRAVELS WESTWARD FROM RINCON PARK IS THE SAME LINE AS "CRPRCAXF" SHOWN ON THE ATLAS MAPS.

DEPTH

- ALONG THE OLD RAILROAD BENCH, THE LINE IS VISIBLE AT SOME LOCATIONS AT THESE LOCATIONS IT APPEARS TO BE ABOUT 4-FEET DEEP.

PROJECT WILL:

- CONSTRUCT EMBANKMENTS ON TOP OF IT.
- CONSTRUCT NUMEROUS STORM DRAINS UNDER THIS LINE.
- CONSTRUCT A SOIL RETAINING STRUCTURE BELOW IT AT ABOUT STATION 31+00.
- CONSTRUCT A SLOPE BELOW IT AT ABOUT STATION 36+50.

DESIGNERS NOTE

- THE LANDMASS AROUND THIS EXISTING FACILITY IS FAILING IN SOME LOCATIONS. THIS IS THE REASON DESIGNERS PROPOSE TO BUILD THE RETAINING WALLS AND SLOPE REPAIRS TO SUPPORT THE RINCON TRAIL. THIS SLOPE INSTABILITY IS LIKELY ONE REASON THE RAILROAD WAS MOVED IN THE 1960'S.
- THE OLD "WOOD SUPPORT STRUCTURE" WHICH WAS BUILT TO SUPPORT THIS FACILITY APPEARS TO BE FAILING AT ABOUT STATION 31+00.
- THE CONDUIT IS VISIBLE IN SOME LOCATIONS BECAUSE THE LANDMASS BELOW IT HAS SLID AWAY.
- AFTER THE RINCON TRAIL IS CONSTRUCTED, ACCESS TO THIS FACILITY WILL BE MORE DIFFICULT.
- PERHAPS FRONTIER WOULD LIKE TO RELOCATE A PORTION OF THIS LINE TO FOLLOW THE RINCON TRAIL.

REFERENCE INFORMATION

- "FRONTIER UG UTILITY ATLAS MAP" (NOT MUCH DETAIL SHOWN) PROVIDED TO BENGAL IN 2017 & 2019.

5. AT&T / PACIFIC BELL: IN UPRR CORRIDOR

LOCATION / ALIGNMENT

- THIS LINE CONNECTS CROSS-COUNTRY FROM A POINT ON CARPINTERIA AVE, EAST OF HWY 150, ACROSS PRIVATE PROPERTY AND THEN DOWN THE CUT SLOPE TO THE RAILROAD CORRIDOR WHERE THIS LINE THEN FOLLOWS THE RAILROAD TRACKS ON THE "FREEWAY SIDE" TO THE EAST.

DEPTH

- UNKNOWN.

PROJECT WILL

- HAVE NO EFFECT ON THIS FACILITY. EARTHWORK AND BRIDGE WORK WILL MUCH HIGHER ON SLOPE. NO CONSTRUCTION TRAFFIC WILL CROSS THIS LINE.

REFERENCE INFORMATION

- AT&T RECORD DRAWINGS WT 129DN0687 AND 689.

6. MCI & SPRINT FIBER SYSTEMS: IN UPRR CORRIDOR

LOCATION / ALIGNMENT

- THIS LINE FOLLOWS THE RAILROAD TRACKS ON THE "OCEAN SIDE".

DEPTH

- UNKNOWN.

PROJECT WILL

- HAVE NO EFFECT ON THIS FACILITY. EARTHWORK AND BRIDGE WORK WILL MUCH HIGHER ON SLOPE. NO CONSTRUCTION TRAFFIC WILL CROSS THIS LINE.

REFERENCE INFORMATION

- THESE LINES ARE SHOWN ON THE 2010 DRAWINGS FOR THE CONSTRUCTION ON STATE HIGHWAY, CONTRACT 07-260704, PROJECT 0700000490, PAGE 205/757 (SHEET U-15). LINES ARE SHOWN NEAR THE WAVE OVERHEAD. THE LOCATIONS SHOWN ARE APPROXIMATE MATCHES TO THE FIELD MARKERS WE LOCATED FURTHER WEST.
- IN 2017 SPRINT PROVIDED A SKETCH.
- 2019 SPRINT RECORD DRAWING NTWRK416 EXCERPT FROM FIBER OPTIC ROUTE RECORD DRAWING

UTILITY CONFLICT PLAN
GENERAL NOTES

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

As-Noted
Matt Roberts, Project Manager

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

Design SO
Drawn HS
Ck'd SO

BENGAL ENGINEERING & SURVEY, INC.
303 E. Haley Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
UTILITY CONFLICT PLANS

441148Y
UPRR PROJECT NO.

04/23/21 DATE
UC-NOTES SHT. NO.

SANTA BARBARA SUB
MP 386.49
UPRR MILE POST

Updated_when preliminary design is complete by BY Michael Bandich

NOTES

A. THIS PLAN SHOWS THE APPROXIMATE LOCATION OF EXISTING UTILITIES WITHIN THE FOOTPRINT OF THE PROJECT ONLY.
B. THE UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND OBSERVATIONS IN THE FIELD FROM 2016 - 2019.
C. CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES PER SPECIAL PROVISIONS.
D. SEE SPECIAL PROVISIONS FOR CONTRACT TIME ALLOWANCES FOR UTILITY WORK PREFORMED BY OTHERS.
E. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES TO PROVIDE ACCESS FOR RELOCATED UTILITY LINES.
F. EXISTING DRAINAGE SYSTEMS ARE GIVEN IDENTIFICATION FROM CAL TRANS 1966 DRAINAGE PLANS
G. CARPINTERIA SANITARY DISTRICT TO BE NOTIFIED WHEN EXCAVATION ACTIVITIES ARE OCCURRING BETWEEN STATION 21+00 - 24+00. PH: (805) 684-7214.

PROJECT IMPACTED UTILITIES:

1. 10" OIL PIPELINE - CHEVRON - ABANDONED
2. 6" WATER PIPELINE - CVWD - ABANDONED
3. 4" HDPE SEWER FORCE MAIN - CSD
4. COMMUNICATION LINE - FRONTIER

UTILITIES UNDER BRIDGE NOT AFFECTED:

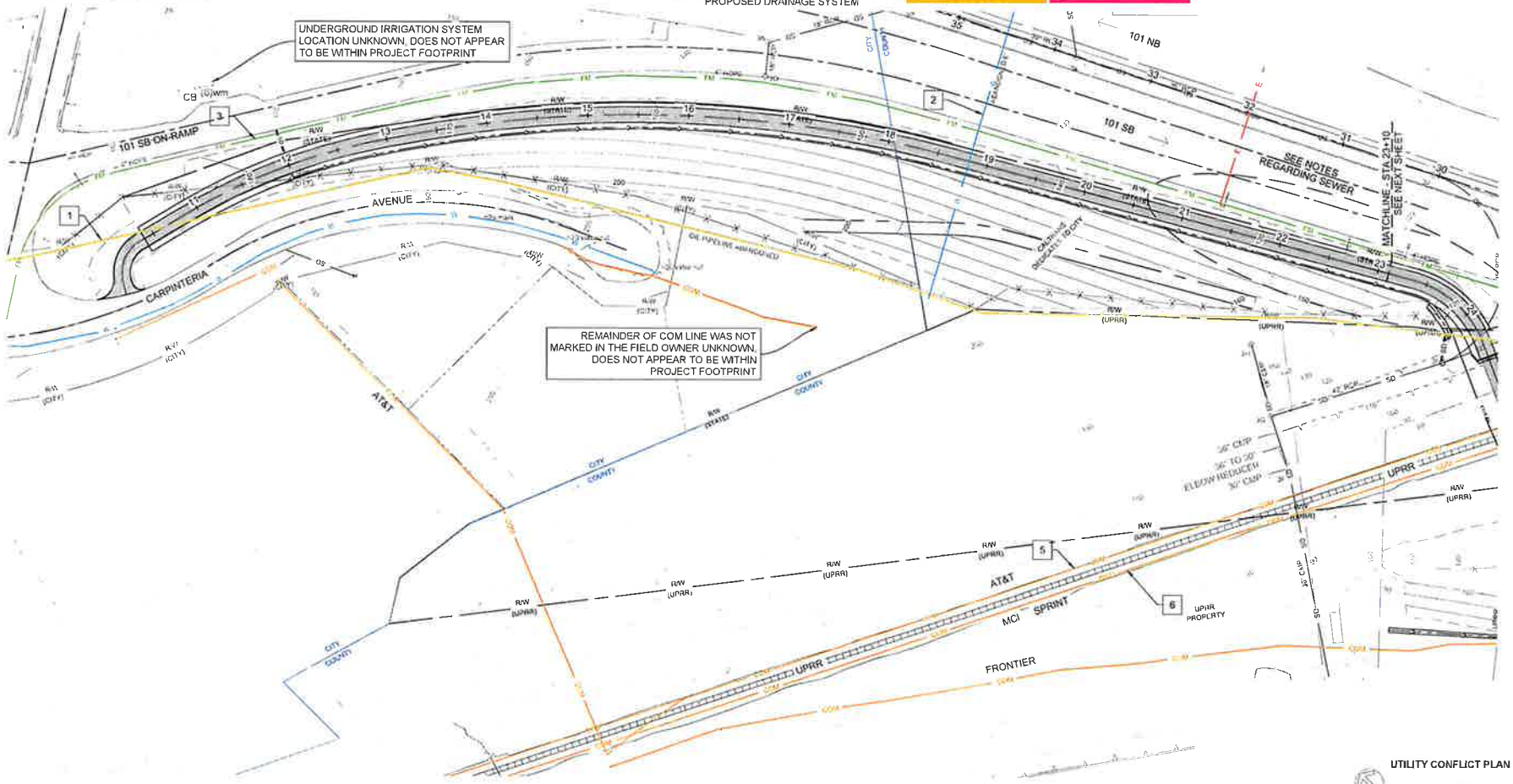
5. COMMUNICATION LINE - AT&T / PAC BELL
6. COMMUNICATION LINE - SPRINT
7. COMMUNICATION LINE - MCI

LEGEND

— SD — PROPOSED DRAINAGE SYSTEM

APWA Utility Color Code

Red = Electric	Blue = Potable Water Lines
Yellow = Gas-Oil-Steam	Green = Sewer Lines
Orange = Communication and TV	Purple = Reclaimed Water Lines



UTILITY CONFLICT PLAN - 1

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

APPROVED Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design Drawn Chk'd

BENGAL ENGINEERING, INC. 369 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
UTILITY CONFLICT PLANS

441148Y
UPRR PROJECT NO.

04/23/21 | UC-1
DATE | SHT. DES

SANTA BARBARA SUB
MP 388.49
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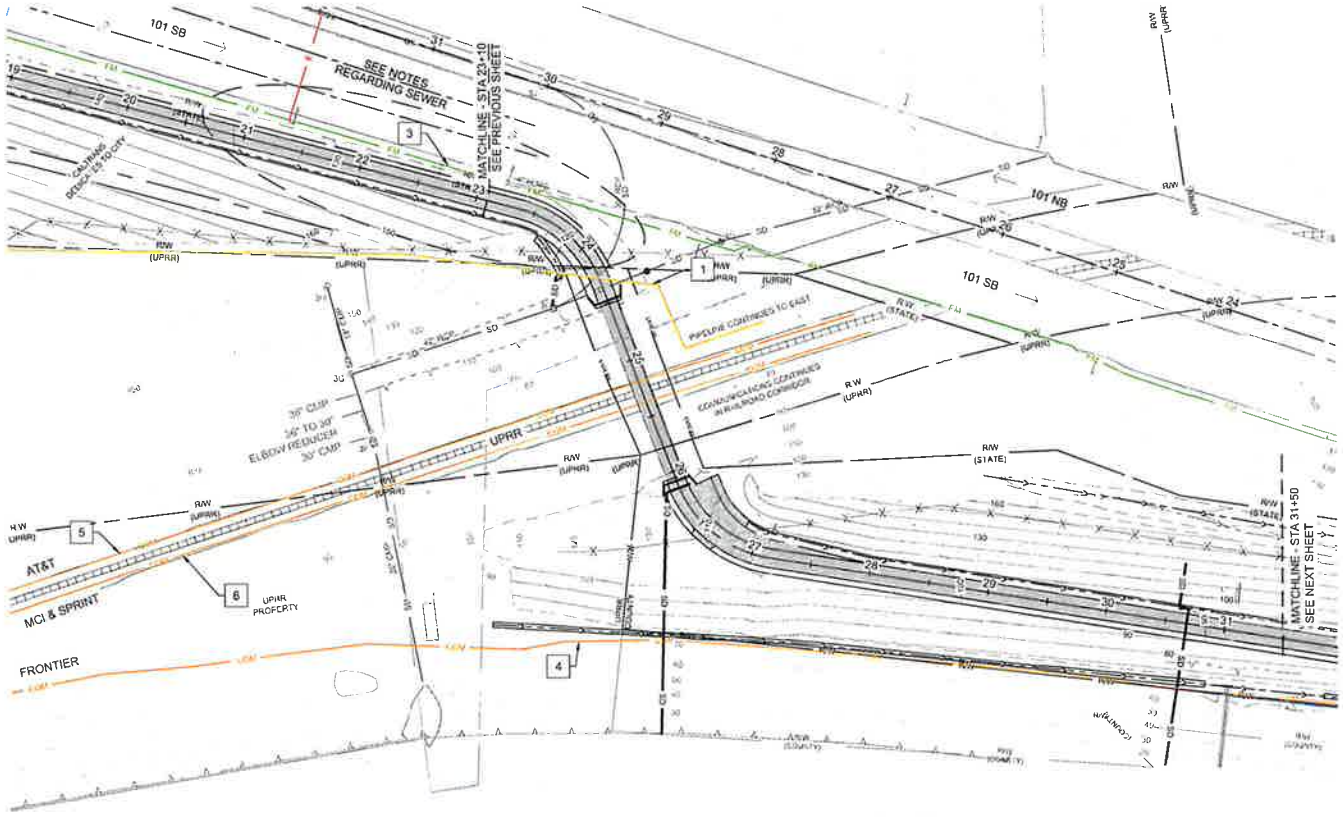
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6. COMMUNICATION LINE - SPRINT
7. COMMUNICATION LINE - MCI

LEGEND

SD PROPOSED DRAINAGE SYSTEM

APWA Utility Color Code

Red = Electric	Blue = Potable Water Lines
Yellow = Gas-Oil-Steam	Green = Sewer Lines
Orange = Communication and TV	Purple = Reclaimed Water Lines



UTILITY CONFLICT PLAN - 2

NORTH

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design SC Drawn HS Chkd SD

BENCAL — 302 E. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

UTILITY CONFLICT PLANS

441146Y

UPRR PROJECT NO

04/23/21 DATE | UC-2 SHT. NO.

SANTA BARBARA SUB MP 380.48 UPRR MILE POST

45 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

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NOTES

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PROJECT IMPACTED UTILITIES:

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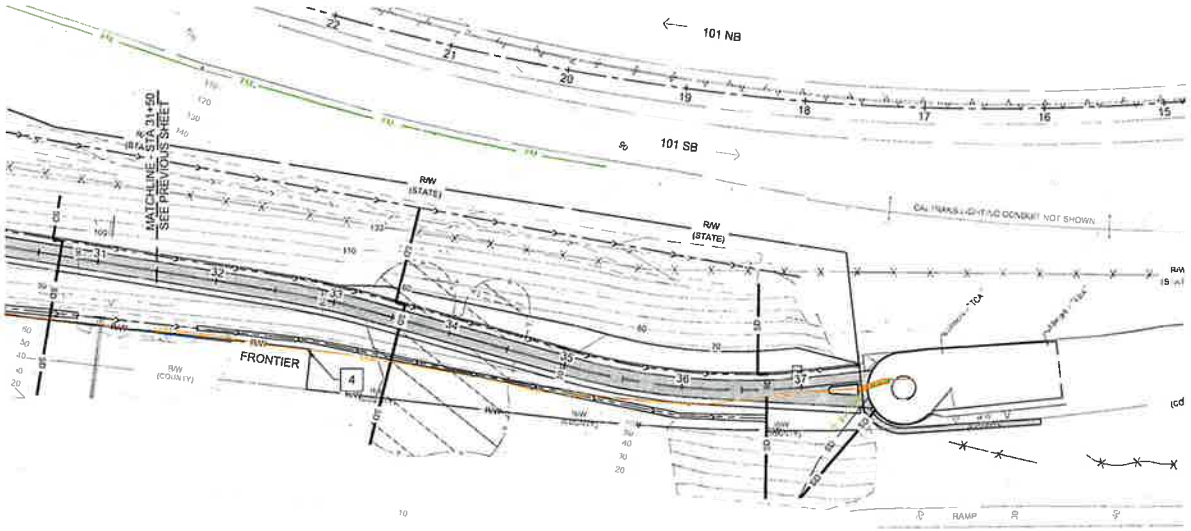
UTILITIES UNDER BRIDGE NOT AFFECTED:

[5] COMMUNICATION LINE - AT&T / PAC BELL
[6] COMMUNICATION LINE - SPRINT
[7] COMMUNICATION LINE - MCI

LEGEND

— SD — PROPOSED DRAINAGE SYSTEM

APWA Utility Color Code	
Red = Electric	Blue = Potable Water Lines
Yellow = Gas-Oil-Steam	Green = Sewer Lines
Orange = Communication and TV	Purple = Reclaimed Water Lines



THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design | Detail | Check: SG | SG | SG

BENGAL ENGINEERING
303 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
UTILITY CONFLICT PLANS

441148Y
UPRR PROJECT NO

04/23/21 | UC-3
DATE | SHT. DES.

SANTA BARBARA SUB
MP 380.49
UPRR MILE POST

46 of 119

UTILITY CONFLICT PLAN - 3

NORTH

SCALE 1"=50' H

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

I:\plans\0_active projects\rincon trail\production drawings\ut-cf-3.dwg 04/23/2021 BY Michael Bandich

Contractor's Concrete Placement Plan
The Contractor shall submit a concrete placement plans for approval by the the Engineer at least 14 Calendar days before each proposed pour. Work may not proceed until this plan is approved.
The key components of the include description/provisions/sequencing for each of the following

- Construction of two components of the cross section: the (generally) 16-foot-wide trail, and (generally) 6.5-foot-wide concrete ditch. Note the ditch concrete is tinted--the trail is "grey".
- Proposed cure time to accommodated construction of these 2 components
- Method for concrete formwork / slip forming
- Placement of square dowel bars in baskets (for transverse joints) and plate dowels (for longitudinal joints)
- Method for Concrete placement
- Saw cutting of the control joints
- Application of curing compound
- Provisions to protect concrete already in place from damage/cracking from subsequent loaded concrete trucks
- Approach to replace portions of concrete which may be accidentally damaged, so that the replaced concrete closely matches the texture, joints, finish and color of the adjacent "original" concrete which was not damage.

Engineer's Notes to the Contractor

- The Contractor's attention is directed to note the narrow work access which will be available from the "based subgrade" during placement of the concrete trail / ditches.
- Because of the limited thickness of the concrete pavement, loaded concrete trucks shall not drive over previously placed concrete. If the Contractor can provide appropriate measures to protect the previously-placed concrete from damage from UNLOADED trucks, such may be included in the concrete placement plan for consideration by the Engineer
- The Engineer envisions that these narrow corridors, which exist on a sloping profile, will affect the maneuverability / access of concrete trucks on the "based subgrade".
- Along the 101 Freeway / Carpinteria Ave. segment, The Contractor may wish to consider using boom pumps for some portions of the trail.
- On the "Ocean side" of the railroad, Note that access for concrete deliveries is isolated, no parallel roads exists.
- At the time of the design, Engineers envisioned the paving could be constructed either by slip-forming of by fixed forms, either method is acceptable.
- Engineer's envisioned that slip-forming would be the preferred method for paving.
- The contractor may wish to pour alternating components of the trail perhaps alternating "the trail", then "the ditch", paving. Such is acceptable, providing the Contractor maintains a uniform finish and grade .

Ditch Plate Dowels
The longitudinal joint between the edge of pavement and the ditch are reinforced with Diamond-Shaped Plate Dowels similar to PNA-Brand Diamond Dowels, as approved by the Engineer .
These shall have the following properties

- 4.5 inch x4.5 inch x $\frac{1}{4}$ inches-thick
- Hot-dipped galvanized or epoxy coated
- Spaced to match sawcuts as shown

Square Dowels supported by "Baskets"
The transverse joints are reinforced with dowels are similar to PNA-Brand Square Dowel Basket, shown on Drawing SDB-1

- 1/2 -inch square x 9-inches long
- Hot-dipped galvanized or epoxy coated
- Spaced to match sawcuts as shown
- Note some baskets on the ocean side of bridge are "long" to accommodate the wider pavement here.
- Note some baskets at the east end where the trail forks are "short". Both sides of the fork are considered in one length of basket.

Concrete Mix / Finish
The concrete mix specifications and color are defined in the special provisions

Saw Cutting

- Placed at the spacing shown on the plans
- Completed within 4 hours of concrete placement
- Cut 2-inches deep

Concrete shall be treated with curing compound or cure-control measures (tarps, rugs, visqueen) as defined in the special provisions. Curing compounds shall be appropriate for "colored concrete" when used on the such surfaces.

Second Concrete Pour--path wear surface

Concrete placement for the wear surface shall start "at the bridge" and proceed away from bridge toward either trailhead
The concrete pour for the "trail" shall not occur sooner than 7 calendar days after the ditch pour
No concrete trucks shall drive on the previously-constructed ditch.
Prior to concrete placement Contractor shall place sturdy survey reference stakes along the trail to allow dowel basket to be quickly and accurately placed at the intervals shown. These stakes also identify the center of the basket to the sawcutting personal so they may accurately sawcut the joint after the basket is covered with concrete.

The sliding Square dowels are Similar to PNA-Brand Square Dowels, as approved by the Engineer, and shall have the following properties

- Dowels measure $\frac{1}{2}$ x $\frac{1}{2}$ inch x 18-inches long.
- Dowels are hot-dipped galvanized
- Dowels are inside dowel clips supported by baskets.
- Vertical placement of dowels: dowels are place inn the middle--mid-height of the slab
- Are spaced along the basket at 24-inch on centers (Transverse to the centerline of the trail)

Sawcuts shall be completed within 4 hours of concrete placement.
Sawcuts are 2-inches deep.

Contractor shall have spare concrete sawing equipment on stand-by during cutting procedures.

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

Design
Drawn
Check
SO
HG
SD

BENCAL
360 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT JOINT DETAILS

441148Y
UPRR PROJECT NO.

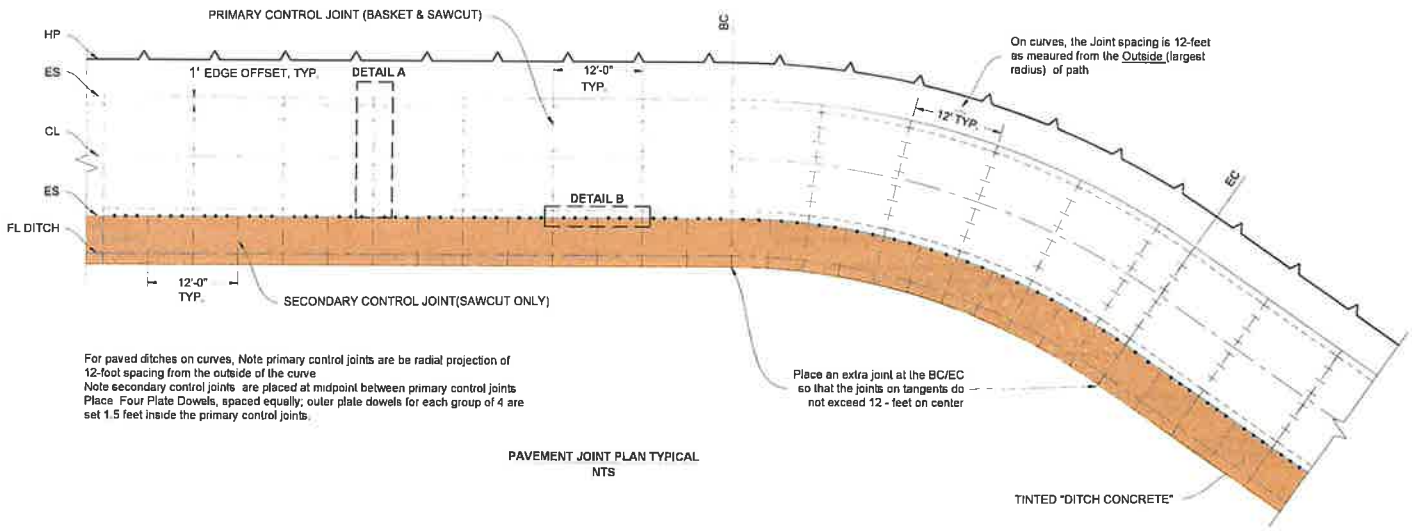
04/23/21 | PJD 1
DATE | SHT. DES.

SANTA BARBARA SUB
MP 350.49
UPRR MILE POST

I:\projects\Rincon project\Rincon trail\Construction drawings\pavement joint details.dwg BY: Michael Baroch

NOTES

SEE TYPICAL SECTIONS NOTES FOR PAVEMENT THICKNESS



For paved ditches on curves, Note primary control joints are be radial projection of 12-foot spacing from the outside of the curve
Note secondary control joints are placed at midpoint between primary control joints
Place Four Plate Dowels, spaced equally; outer plate dowels for each group of 4 are set 1.5 feet inside the primary control joints.

PAVEMENT JOINT PLAN TYPICAL
NTS

PAVEMENT JOINT REINFORCEMENT SUMMARY OF QUANTITIES

AREA	SQUARE DOWEL BASKETS	PLATE DOWELS
	(EA)	(EA)
FWY SIDE	123	590
OCEAN SIDE	102	570
TOTALS	225	1160
TOTALS ROUNDED FOR BID	280	1200

PAVEMENT JOINT DETAILS - 2

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SG
Drawn SG
Check

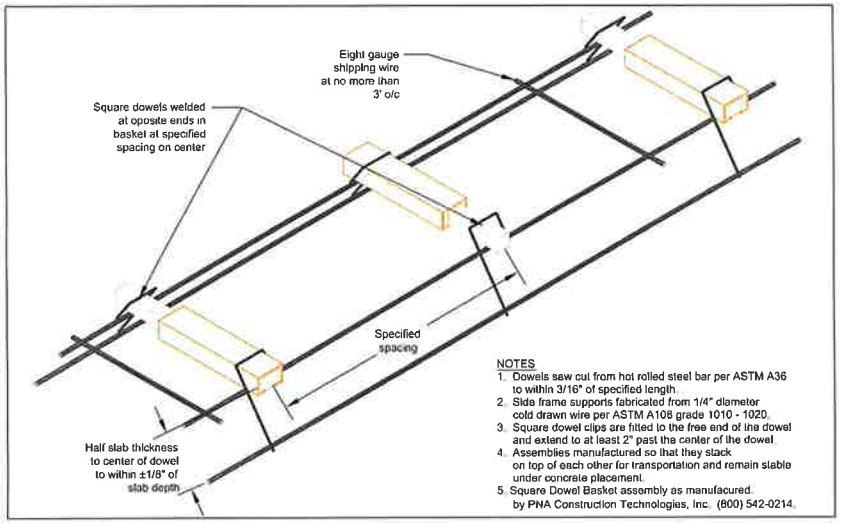
BENGAL ENGINEERING
360 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT JOINT DETAILS

441148Y
UPRR PROJECT NO.
04/23/21 DATE
PJD 2 SHT. DES.
SANTA BARBARA SUB MP 380.48 UPRR MILE POST
48 of 119

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

I:\jobs\PJD_active projects\441148 multi use trail\construction drawings\pavement joint details.dwg, BY: Michael Bancroft



NOTES
1. Dowels saw cut from hot rolled steel bar per ASTM A36 to within 3/16" of specified length.
2. Side frame supports fabricated from 1/4" diameter cold drawn wire per ASTM A108 grade 1010 - 1020.
3. Square dowel clips are fitted to the free end of the dowel and extend to at least 2" past the center of the dowel.
4. Assemblies manufactured so that they stack on top of each other for transportation and remain stable under concrete placement.
5. Square Dowel Basket assembly as manufactured by PNA Construction Technologies, Inc. (800) 542-0214.

SHEET# SDB-1

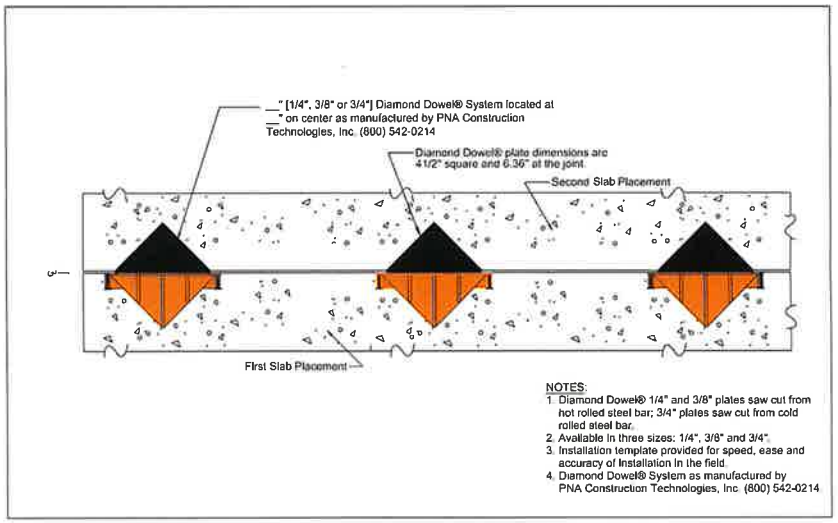
PNA Square Dowel Basket Isometric

DATE August 2007 | SCALE NTS | JOB # | DRAWN BY | APPROVED

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www.pna-inc.com
Nine Dunwoody Park, Suite 111 (800) 542-0214
Atlanta, GA 30338 fax (770) 455-6803

DETAIL A



NOTES:
1. Diamond Dowel® 1/4" and 3/8" plates saw cut from hot rolled steel bar; 3/4" plates saw cut from cold rolled steel bar.
2. Available in three sizes: 1/4", 3/8" and 3/4".
3. Installation template provided for speed, ease and accuracy of installation in the field.
4. Diamond Dowel® System as manufactured by PNA Construction Technologies, Inc. (800) 542-0214.

SHEET# DD-3

Diamond Dowel® System Plan View

DATE August 2007 | SCALE 1" = 6" | JOB # | DRAWN BY | APPROVED

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www.pna-inc.com
Nine Dunwoody Park, Suite 111 (800) 542-0214
Atlanta, GA 30338 fax (770) 455-6803

DETAIL B

PAVEMENT JOINT DETAILS

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design — SQ
Drawn — HS
Chk'd — SQ

BENGAL ENGINEERING, INC. 302 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
PAVEMENT JOINT DETAILS

441148Y
UPRR PROJECT NO.
04/23/21 | PJD 3
DATE | SHT. NO.
SANTA BARBARA SUB.
MP 380.49
UPRR MILE POST

IF THIS REDUCED PLAN IS NOT ORIGINAL SCALE IS IN INCHES

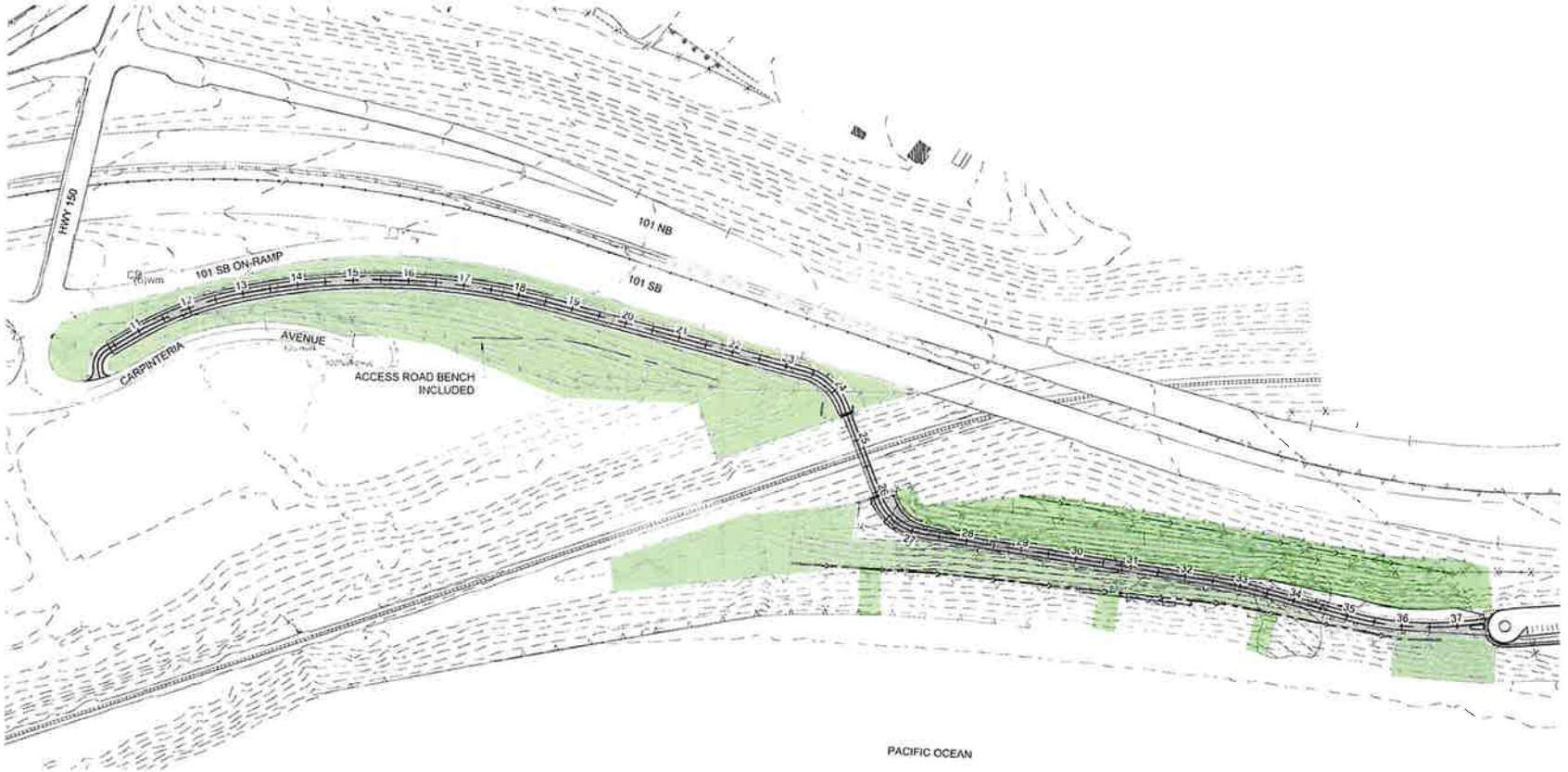
I:\pdata\0_active projects\pw dept\pjd\pavement_joint details.dwg BY: Michael Bancroft

NOTES

1. THESE PLANS ARE FOR BONDED FIBER MATRIX QUANTITIES ONLY
2. DOWNDRAIN AREAS ARE NOT SHOWN ALLOWANCE FOR .5AC AT THE DOWNDRAINS ARE INCLUDED IN BONDED FIBER MATRIX AREA

LEGEND

BONDED FIBER MATRIX AREA
TOTAL: APPROX. 9 ACRES



QUANTITIES - 1
BONDED FIBER MATRIX

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Matt Roberts, Project Manager

Design: SO
Drawn: HS
Chk'd: SO

BENGAL ENGINEERING, INC.
369 S. Hope Ave. C-110, Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
QUANTITIES

441148Y
UPRR PROJECT NO.
04/23/21 DATE
Q-1 SHT. DES.
SANTA BARBARA SUB
MP 380.49
UPRR MILE POST
50 of 119

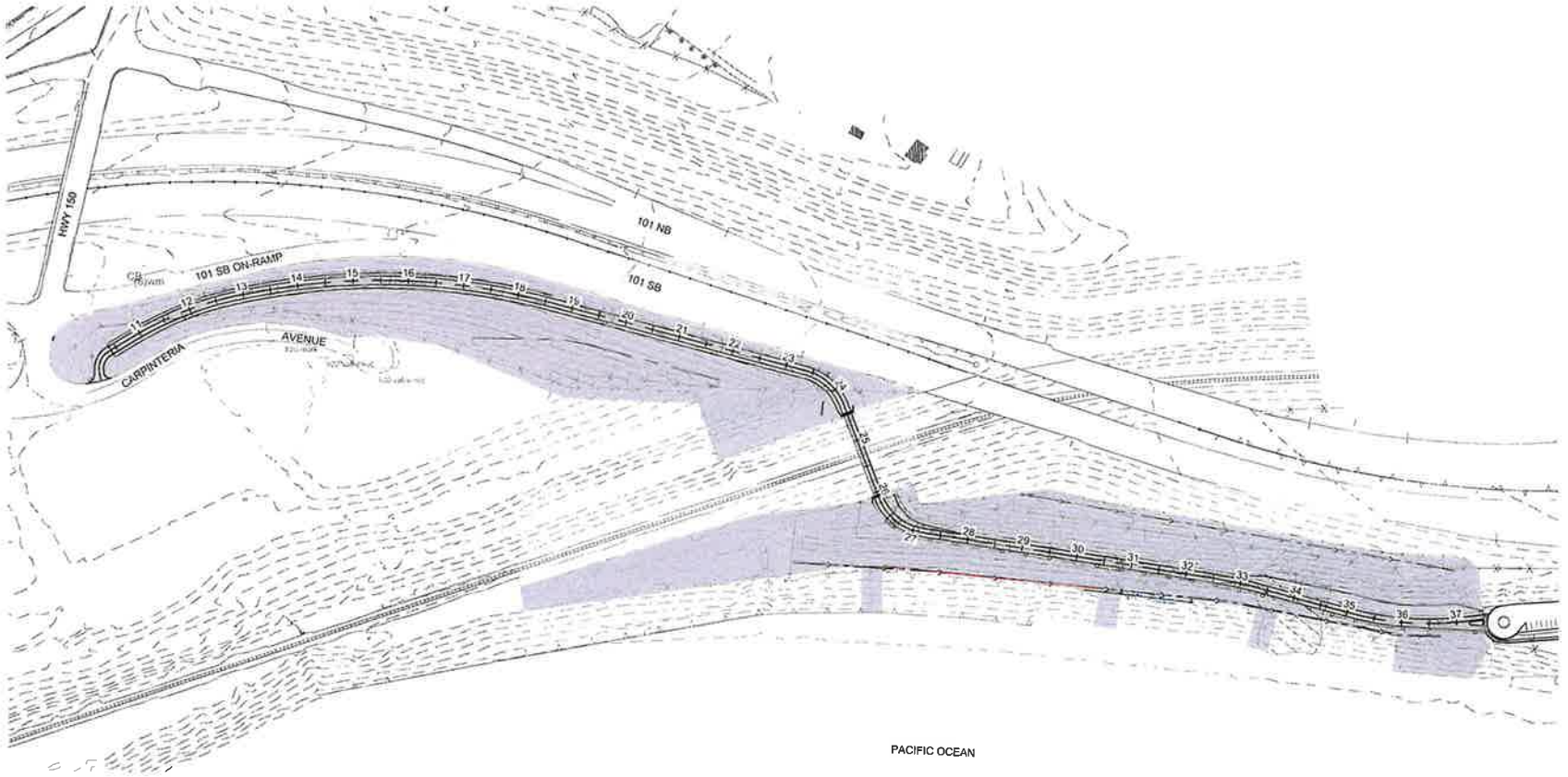
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

NOTES

1. THESE PLANS SHOW APPROXIMATE LIMITS OF CLEARING AND GRUBBING.
2. CONTRACTOR TO MAKE THEIR OWN ESTIMATE AND BID ACCORDINGLY.

LEGEND

CLEARING & GRUBBING
TOTAL: APPROX. 10.5 ACRES
PLAN VIEW AREA



QUANTITIES - 2
CLEARING & GRUBBING

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SO
Drawn NS
Ck'd SO

BENGAL ENGINEERING & SURVEY, INC.
303 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
QUANTITIES

441148Y
LOCAL PROJECT NO.

04/23/21 DATE | O-2 SHT. NO.

SANTA BARBARA SUB
MP 366.69
LOCAL MILE POST

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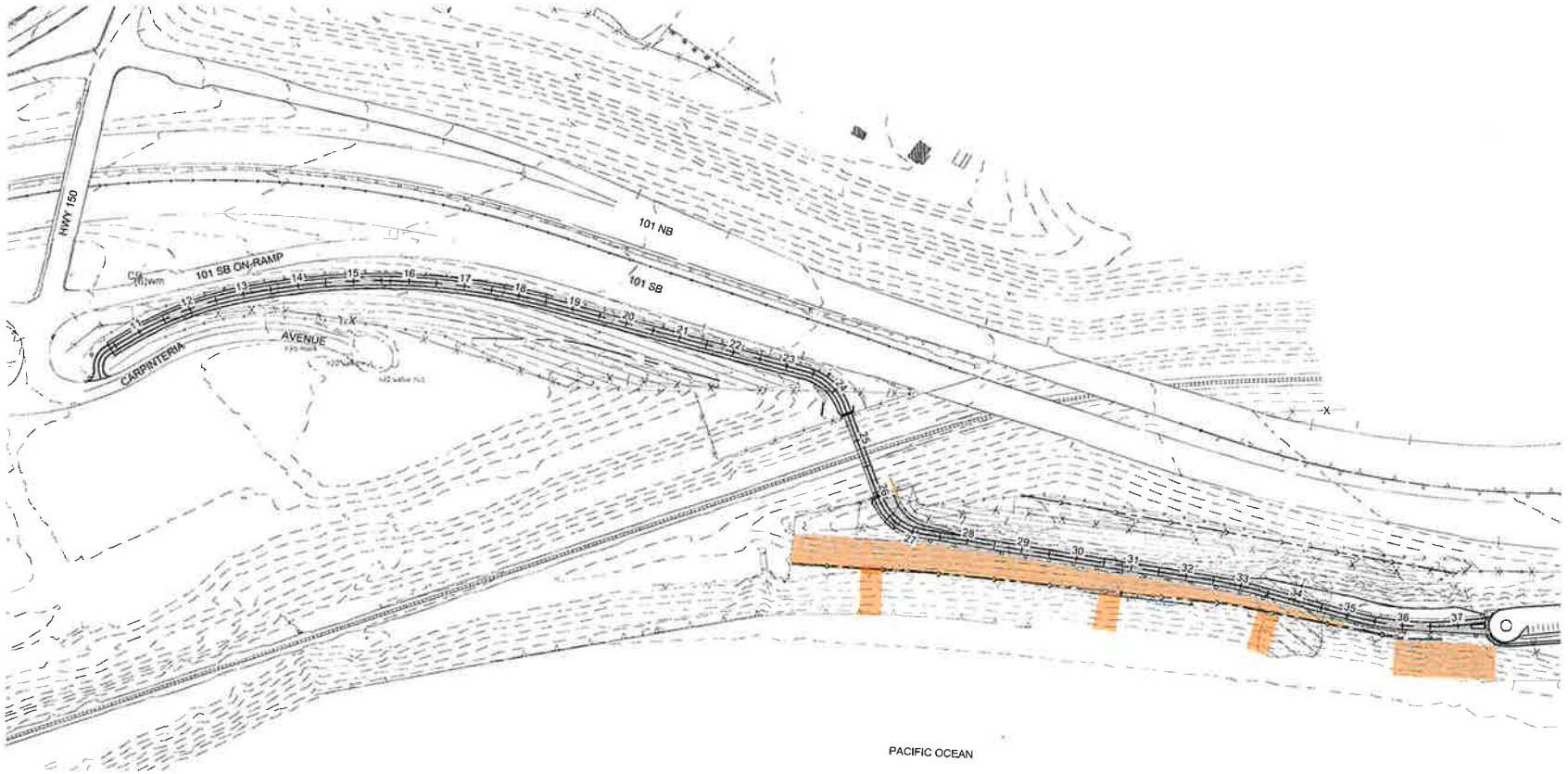
I:\projects\...\quantities.dwg BY: Michael Bardach

NOTES

1. THESE PLANS ARE FOR EROSION CONTROL QUANTITIES ONLY

LEGEND

ROLLED EROSION CONTROL
TOTAL: APPROX. 76,500 SF
SLOPE SURFACE AREA



THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design: SO
Drawn: KS
Chkd: SO

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360 S. Hope Ave, C-110, Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
QUANTITIES

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04/23/21 DATE | Q-3 SHT. DES.

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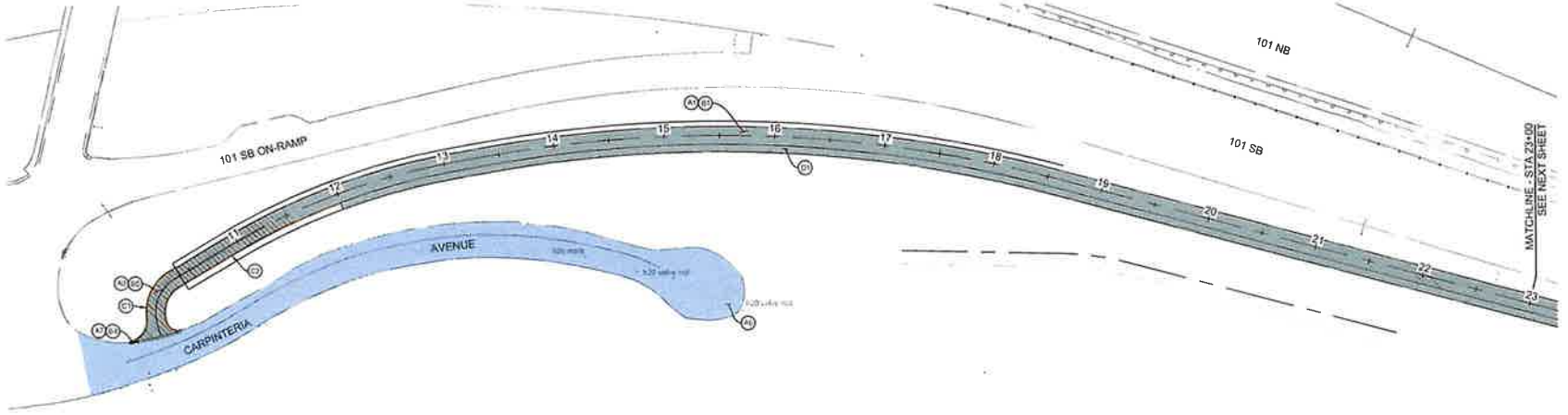
I:\projects\0_active projects\rincon trail\construction drawings\bid - quantities 2.dwg BY: Michael Sanchez

NOTES

1. THESE PLANS ARE FOR QUANTITIES ONLY
2. CIRCLED TEXT CORRESPONDS TO SUMMARY TABLE ON LAST QUANTITIES SHEET

LEGEND

- SOIL CEMENT
- TOP SOIL
- BASE
- SLURRY SEAL
- DITCH CONCRETE
- HMA PAVING
- TRAIL CONCRETE
- GRAVEL
- CURB



NORTH

QUANTITIES - 4

SCALE 1"=50' H

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design — SD
Drawn — HS
Chk'd — SD

RINCON CONSULTANTS, INC. 369 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

QUANTITIES

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UPRR PROJECT NO

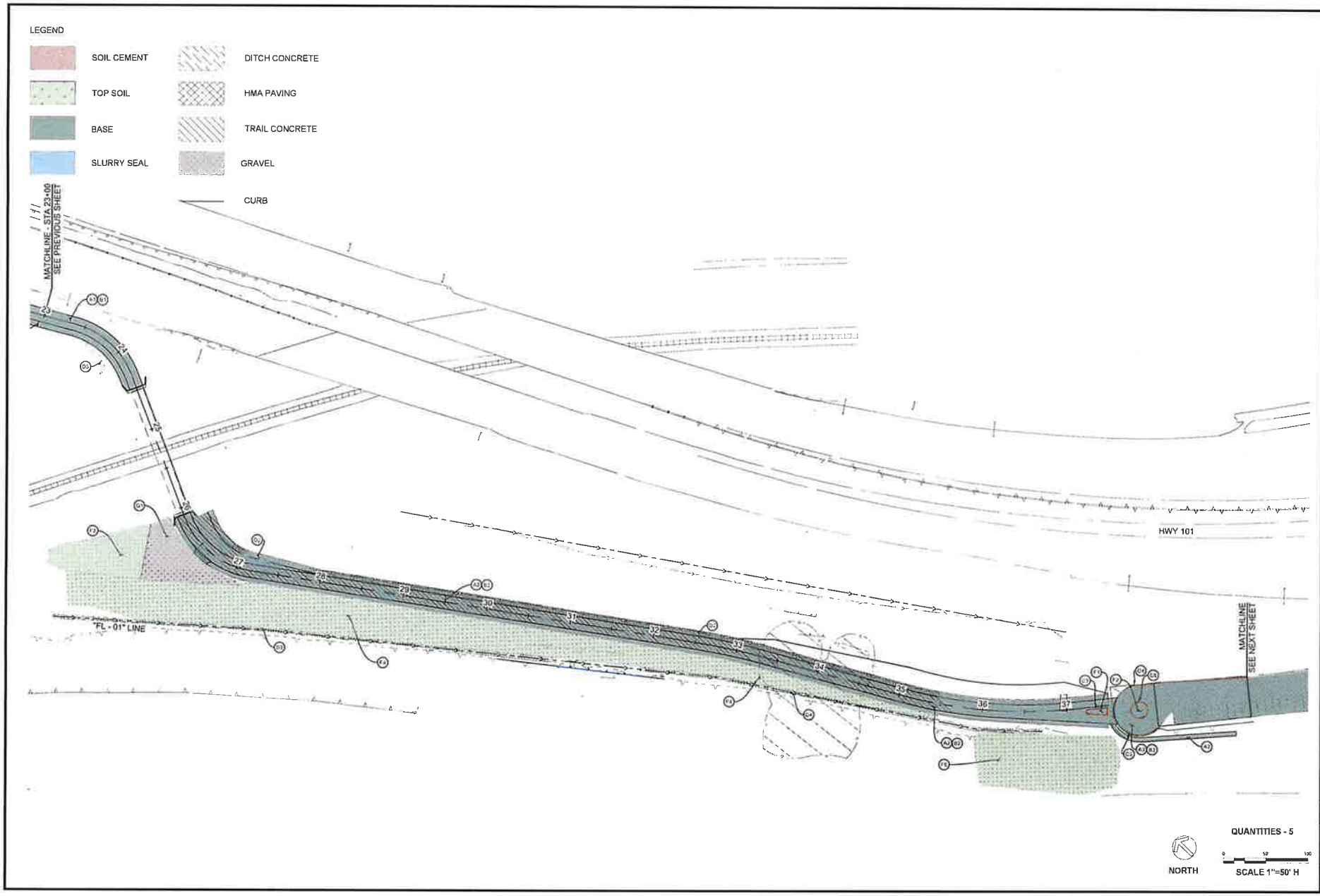
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SANTA BARBARA Sub
MP 380.48
UPRR MILE POST

53 of 119

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THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design
Drawn
Chkd

SD
SD
HS

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360 S. Hope Ave. C-10 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

QUANTITIES

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URS PROJECT NO.

04/23/21
DATE

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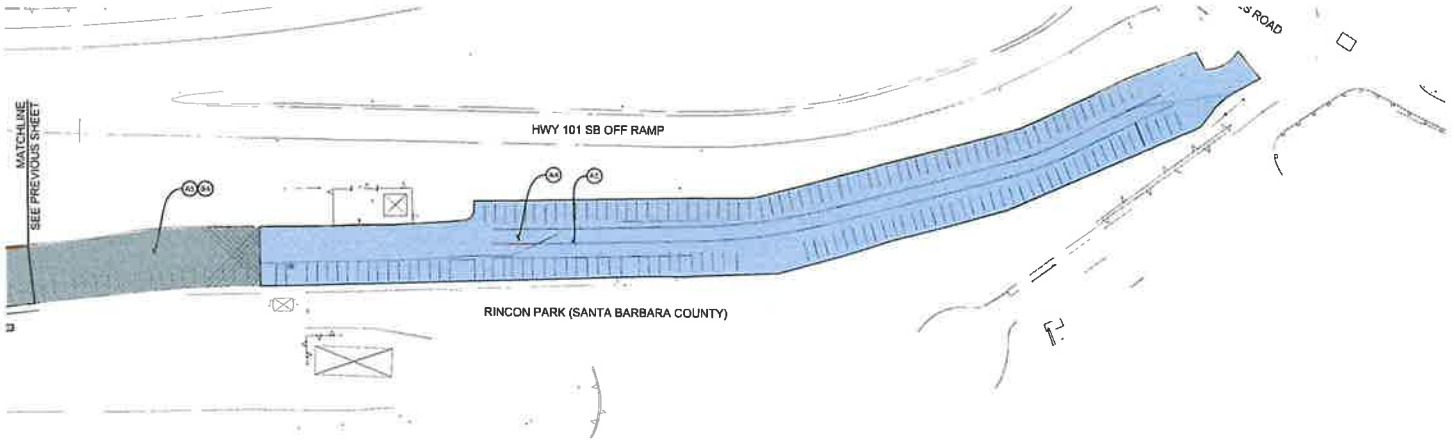
54 of 119

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LEGEND

- SOIL CEMENT
- TOP SOIL
- BASE
- SLURRY SEAL
- DITCH CONCRETE
- HMA PAVING
- TRAIL CONCRETE
- GRAVEL
- CURB



NORTH

QUANTITIES - 6

SCALE 1"=50' H

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved
Matt Roberts, Project Manager

Design
Drawn
Chkd

BENGAL
360 S. Hope Ave, C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
QUANTITIES

44114BY
UPRR PROJECT NO

04/23/21
DATE

Q-6
SHT NO.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

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FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

BASE & PAVING SUMMARY OF QUANTITIES

AREA	DESCRIPTION	CLASS TWO AGGREGATE BASE			JOINTED PLAIN CONCRETE PAVEMENT			HOT MIXED ASPHALT				TYPE TWO SLURRY SEAL			PAVEMENT REMOVAL
		AREA (N)	THICKNESS (N)	VOLUME	AREA (N)	THICKNESS (N)	VOLUME	AREA (N)	THICKNESS (N)	VOLUME (N)	TONNAGE 135 LBS/ CF	AREA	APPLICATION RATE	SLURRY SEAL	AREA
		(SF)	(FT)	(CY)	(SF)	(FT)	(CY)	(SF)	(FT)	(CF)	(TONS)	(SY)	(LBS/SY)	(TONS)	(SF)
A0	Western Trailhead Paving				1,160	0 42	18 0								
A1	Trail Paving - Fwy				22,530	0 42	350 5								
A2	Trail Paving - Ocean				21,630	0 42	336 5								
A3	Parking Lot @ Trailhead Paving							7,600	0 40	3,040	205				7600
A4	Parking Lot Paving							35,000	0.40	14,000	945				35000
A5	Parking Lot Slurry Seal											7444	15	55	
A6	Carpinteria Ave. Slurry Seal											21600	15	164	
A7	Miscellaneous Paving							100	0 40	40	3				
B0	Western Trailhead Base	1,160	0 50	21 5											
B1	Trail & Ditch Base - Fwy	30,100	0 50	557 4											
B2	Trail & Ditch Base - Ocean	34,330	0 50	635 7											
B3	Parking Lot Round About Base	7,930	0 50	146 9											
B4	Miscellaneous Base	100	0 50	1 9											
TOTALS	(Unrounded)	73,620		1363	45,320		705	42,700		17,080	1,153	29,244		219	42,600
TOTALS	(Rounded for Bid 10% and sig. digit)	81,000		1500	49,900		780	47,000		18,800	1,300	32,200		240	46,900

(N)="Not a Pay Item": for information only

CURB & DITCH SUMMARY OF QUANTITIES

AREA	DESCRIPTION	CURB			DITCH					
		CALTRANS TYPE A1-6			CONCRETE DITCH ALONG TRAIL			AIR BLOWN MORTAR ALONG FL-01		
		LENGTH (N)	CY PER LF (N)	VOLUME	AREA (N)	THICKNESS (N)	VOLUME	AREA (N)	THICKNESS (N)	VOLUME
		(LF)	(CY)	(CY)	(SF)	(FT)	(CY)	(SF)	(FT)	(CY)
C1	Minor Concrete - Curb @ Lt. West Trailhead	86	0 02585	2 22						
C2	Minor Concrete - Curb @ Rt. West Trailhead and Rt. CRT	220	0 02585	5 69						
C3	Minor Concrete - Curb @ Planter East Trailhead	64	0 02585	1 65						
C4	Minor Concrete - Curb @ Rincon Park Parking - North Side	160	0 02565	4.14						
C5	Minor Concrete - Curb @ Rincon Park Parking - South Side	55	0 02585	1 42						
C6	Minor Concrete - Curb @ Rincon Park Roundabout	63	0 02585	1 63						
D1	Minor Concrete - "CRT" Line Ditch Right Side				7,570	0 42	117 6			
D2	Minor Concrete - "CRT" Line Ditch Left Side				6,870	0.42	106 9			
D3	Minor Concrete - "FL - 01" Line Ditch							872	0 33	8 2
D4	Minor Concrete - "FL - 01" Line Ditch							543	0 33	6 6
D5	Minor Concrete - "CRT" Line Ditch Drainage System 1							605	0 33	7 4
TOTALS	(Unrounded)			16 8			224 6			22 2
TOTALS	(Rounded for Bid 10% and sig. digit)			20			250			24

(N)="Not a Pay Item": for information only
SEE SPECIAL PROVISIONS REGARDING TINTED CONCRETE

LANDSCAPING SUMMARY OF QUANTITIES

AREA	DESCRIPTION	LANDSCAPED AREAS			OBSERVATION AREA SURFACING		
		TOP SOIL			3/4" CALIFORNIA GOLD GRAVEL MIX		
		AREA (N)	THICKNESS (N)	VOLUME	AREA (N)	THICKNESS (N)	VOLUME
		(SF)	(FT)	(CY)	(SF)	(FT)	(CY)
F1	Top Soil (Planted Median East Trailhead)	240	1	8 9			
F2	Top Soil (Planted Median in Round About)	280	1	10 4			
F3	Top Soil (Slope West of Observation Area)	2900	0.5	53.7			
F4	Top Soil (Slope Reinforcement)	10100	2	748 1			
F5	Top Soil (Slope Reinforcement)	50800	2	3763 0			
F6	Top Soil (Buttress Fill)	16300	2	1207 4			
G1	Gravel (Observation Area)				4500	0.3	50 0
TOTALS	(Unrounded)	80,620		5,791	4,500		50
TOTALS	(Rounded for Bid 15% and sig. digit)	92,700		6,660	5,200		60

(N)="Not a Pay Item": for information only

QUANTITIES - 7

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approve Matt Roberts, Project Manager

Design - SQ
Quantities - SQ
Check

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

BENGAL ENGINEERING
302 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
SUMMARY OF QUANTITIES

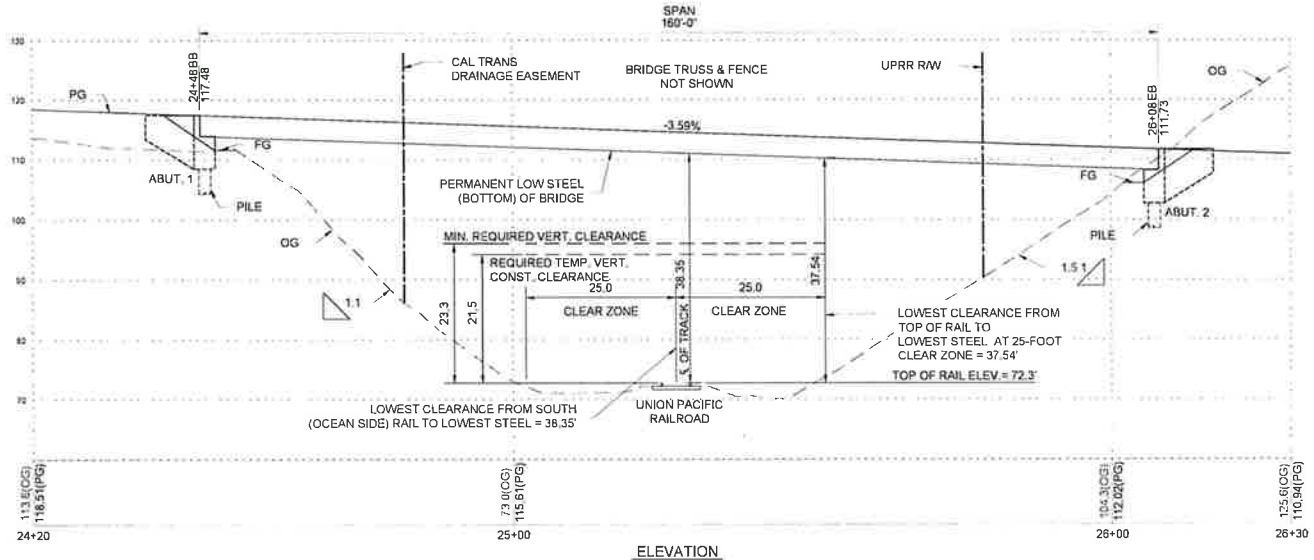
441148Y
WORK PROJECT NO

04/23/21 | Q-7
DATE | SHT. NO.

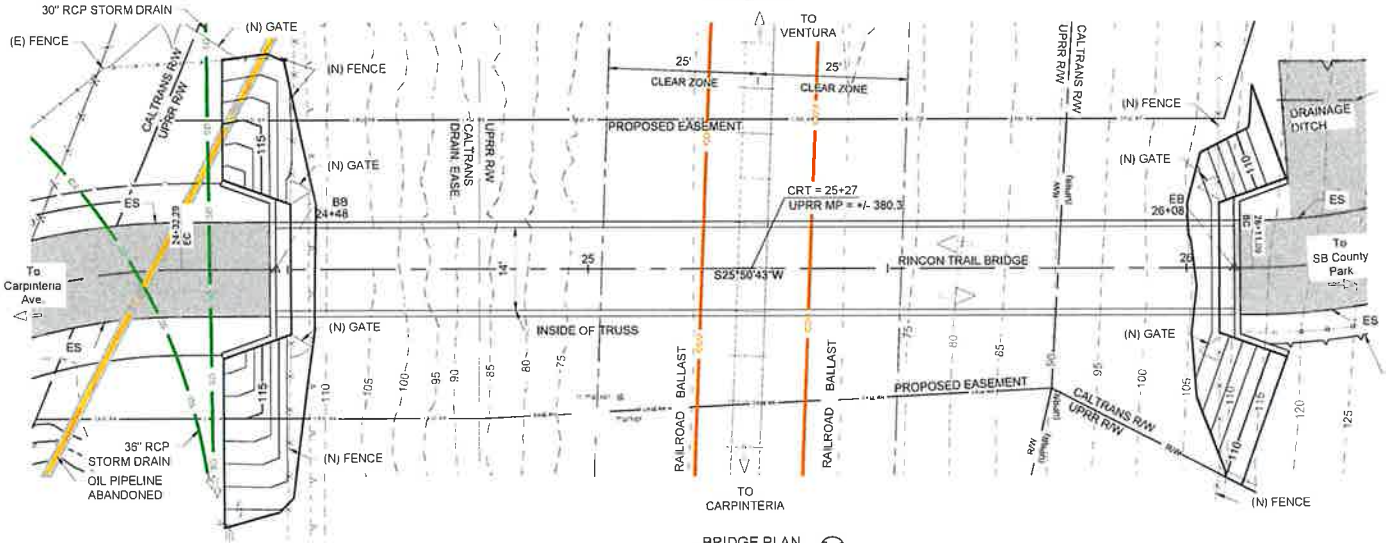
SANTA BARBARA 5(28)
MP 38.49
LIMB MILE POST

56 of 119

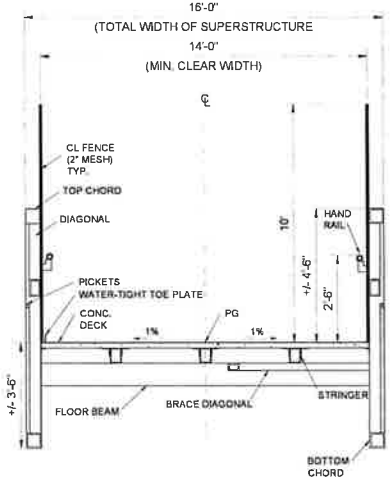
I:\pw\WC_Work projects\cc rincon trail\construction drawings\q1-summary.dwg, BY: M.Chad Burdick



ELEVATION
SCALE 1" = 10'



BRIDGE PLAN
SCALE 1"= 10'



TYPICAL SECTION - MIDDLE SPAN
No Scale

PROJECT INFORMATION
1. MILE POST 380.3 SANTA BARBARA SUB, CARPINTERIA, CA
2. LATITUDE: 34°22'48.18"N LONGITUDE: 119°28'57.20"W

INDEX TO BRIDGE PLANS

BR-1 GENERAL PLAN
BR-2 STRUCTURAL DESIGN CRITERIA
BR-3 GENERAL NOTES
BR-4 FOUNDATION PLAN
BR-5 BRIDGE ABUTMENT DETAILS 1
BR-6 BRIDGE ABUTMENT DETAILS 2

BR-1 BRIDGE GENERAL PLAN

SCALE 1"=10'

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

Design: SD
Drawn: KS
Chkd: MDW

BENGAL
ENGINEERING STONE, INC.
360 S. Hope Ave., C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
BRIDGE PLANS

441148Y
UPRR PROJECT NO.

04/23/21
DATE

BR-1
SHT. NO.

SANTA BARBARA SUB
MP 380.49
UPRR MILE POST

STRUCTURE DESIGN CRITERIA

STRUCTURE IS DESIGNED PER AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION, 2015

CONSTRUCTION METHODS

OVERVIEW
THIS IS A PREFABRICATED STEEL BRIDGE, WITH A CAST-IN-PLACE CONCRETE DECK. THE BRIDGE IS SUPPORTED BY A DEEP FOUNDATION SYSTEM USING CAST-IN-DRILL HOLE (CIDH) CONCRETE PILES.

DETAILS OF CONSTRUCTION METHODS,

THE BRIDGE WILL BE BUILT USING THE FOLLOWING CONSTRUCTION SEQUENCE

BRIDGE FOUNDATION:

A) **PILES:** CAST-IN-DRILL HOLE (CIDH). THESE ABUTMENT PILES WILL BE BUILT BY DRILLING TO AN ELEVATION SHOWN IN "BRIDGE FOUNDATION PLAN".

AFTER THE HOLE IS COMPLETE BAR REINFORCING STEEL WILL BE PLACED INSIDE THE HOLE USING CENTRALIZERS TO POSITION THE STEEL IN THE HOLE. FINALLY, CONCRETE WILL BE PLACED "FROM THE BOTTOM-UP", USING CONCRETE TREMIES.

B) **REINFORCED CONCRETE ABUTMENTS / WING WALLS:**
REINFORCED CONCRETE ABUTMENTS WILL BE CONSTRUCTED ON TOP OF THE CIDH PILES. THE ABUTMENTS / WINGWALLS WILL BE BUILT IN-PLACE USING STANDARD PLYWOOD FORMWORK. THE ABUTMENTS INCLUDE BOLTS TO TIE THE BRIDGE SUPERSTRUCTURE TO THE ABUTMENT.

BRIDGE SUPERSTRUCTURE:
THE BRIDGE SUPERSTRUCTURE IS A SHOP-BUILT STEEL TRUSS SYSTEM. THE STEEL USED IN THE BRIDGE SHALL BE COR-TEN STEEL WHICH WILL BE PAINTED LIGHT SKY BLUE, CONTRACTOR TO PROVIDE A SAMPLE/PAINT CHIP FOR APPROVAL. THE BRIDGE WILL BE FABRICATED BY A PREQUALIFIED SUPPLIER WITH SHOP-CERTIFIED PROCEDURES.

BRIDGE DECK:
AFTER THE PREFABRICATED STEEL SUPERSTRUCTURE IS BOLTED TO THE BRIDGE ABUTMENTS, THE CONTRACTOR WILL PLACE DECK REINFORCEMENT, SUPPORTED ON THE FACTORY-BUILT "DECK PAN" BY CHAIRS OR DOBIES. BRIDGE DECK REINFORCEMENT IS BY BRIDGE FABRICATOR. NO FALSEWORK WILL BE NEEDED TO SUPPORT THIS DECK FROM BELOW. NEXT THE DECK CONCRETE WILL BE PLACED USING A BOOM PUMP. THIS DECK WILL BE FINISHED LIKELY USING HAND METHODS (COMPARED TO MECHANIZED "BIDWELL" FINISHING).

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SD
Drawn HS
Check JKOH

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CARPINTERIA RINCON MULTI USE TRAIL
BRIDGE PLANS

441148Y
UPRR PROJECT. NO

04/23/21 | BR-2
DATE | SHT. NO.

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1 2

Plotted: _date proposed | Xref: full directory to image file | BY: Manuel Burdon

GENERAL NOTES:

1. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE DRAINAGE IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.
2. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
4. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
5. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
6. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
7. RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.
8. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.
9. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.
10. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD MINIMUM REQUIREMENTS AS PART OF SPECIAL PROVISIONS.

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PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design — SD
Drawn — MS
Check — MDW

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CARPINTERIA RINCON MULTI USE TRAIL
BRIDGE PLANS

441148Y
UPRR PROJECT NO.
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SANTA BARBARA SUB MP 330.49 UPRR MILE POST
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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2



FOUNDATION PLAN
SCALE 1"= 10'-0"

NOTES

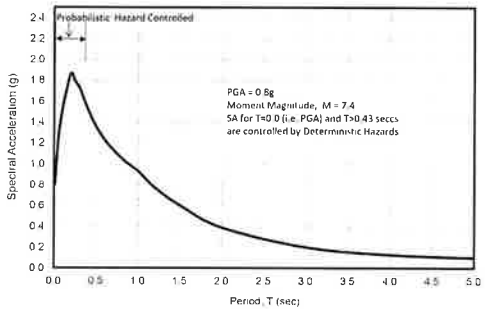
1. VERIFY AND PROTECT ALL UPRR COMMUNICATION & SIGNAL LINES AND OTHER UTILITIES IN AREA

CALTRANS STANDARD PLANS, 2018

A3 - A-C	ACRONYMS AND ABBREVIATIONS
A10 - A-D	LINES AND SYMBOLS
A62-A	EXCAVATION AND BACKFILL - MISCELLANEOUS DETAILS
A62-C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE
RSP B0-1	BRIDGE DETAILS
B2-3	24" CAST-IN-DRILLED-HOLE CONCRETE PILE

LOAD RESISTANCE FACTOR DESIGN NOTES

Design	AASHTO LRFD Specifications, Eighth Edition with California Amendments (AASHTO-CA BDS-8)
Seismic Design	Caltrans Seismic Design Criteria (SDC) Version 2.0, April 2019
Live Loading	H 10 Design, Pedestrian Loading = 90 PSF
Seismic Loading	Site Specific Acceleration Response Spectra Curve
Piles	See "Pile Data" table on "BRIDGE FOUNDATION PLAN" sheet
Reinforced Concrete	f_y = 60,000 psi f_c = 4,000 psi (Unless otherwise shown or specified)
Structural Steel	ASTM A709 Grade 50
Steel Pipe Piles	ASTM A252, Grade 3



ACCELERATION RESPONSE SPECTRA

PILE DATA TABLE

LOCATION	PILE TYPE	NOMINAL RESISTANCE (KIPS)		DESIGN TIP ELEVATION (FT)	SPECIFIED TIP ELEVATION (FT)
		COMPRESION	TENSION		
ABUT 1	24" CIDH	250	0	70 (a) 80 (b)	70
ABUT 2	24" CIDH	250	0	64 (a) 75 (b)	64

Notes

1. Design tip elevations are controlled by (a) Compression (static), (b) Lateral Load, respectively.
2. The Specified Tip Elevation shall not be raised above the design tip elevations for lateral, and tolerable settlement.
3. For the specified pile tip elevations, support settlement due to the total vertical load based on the service limit state I load combination is estimated to be less than one (1) inch for both abutments.

POINT TABLE

POINT #	NORTHING	EASTING
1	1964060.35	6114410.27
2	1964055.28	6114420.74
3	1964050.20	6114431.21
4	1963917.70	6114341.18
5	1963912.63	6114351.65
6	1963907.56	6114362.12

BR-4 BRIDGE FOUNDATION PLAN

SCALE 1"=10'

THE CITY OF CARPINTERIA
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design 3D — Check 10/07

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BRIDGE PLANS

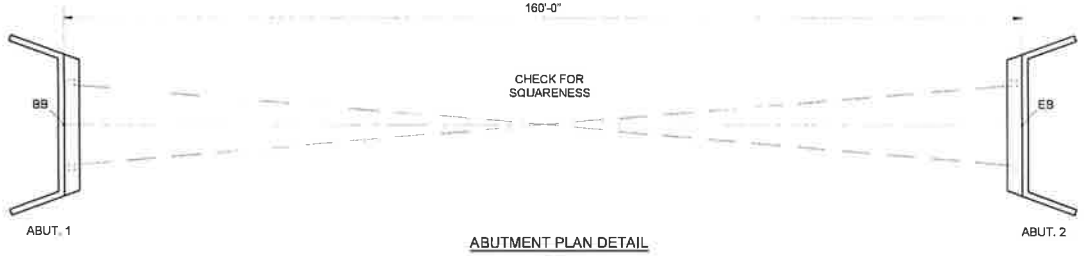
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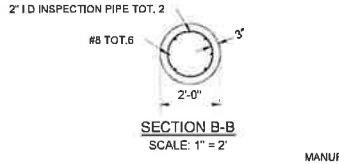
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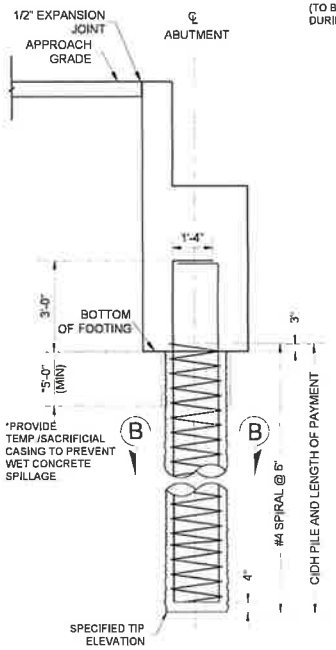
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ORIGINAL SCALE IS IN INCHES



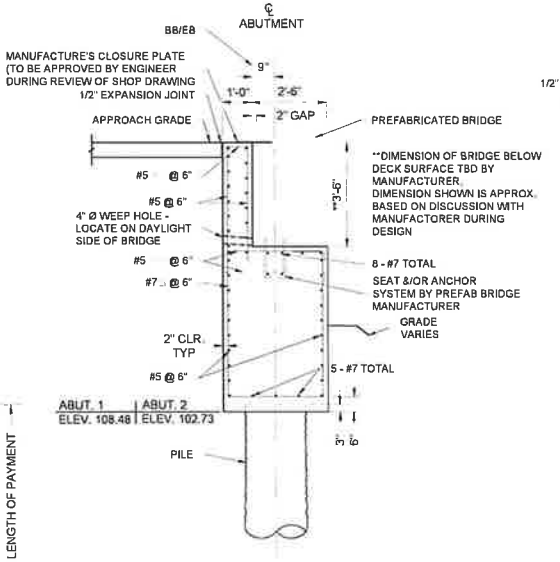
ABUTMENT PLAN DETAIL
SCALE: 1"= 10'-0"



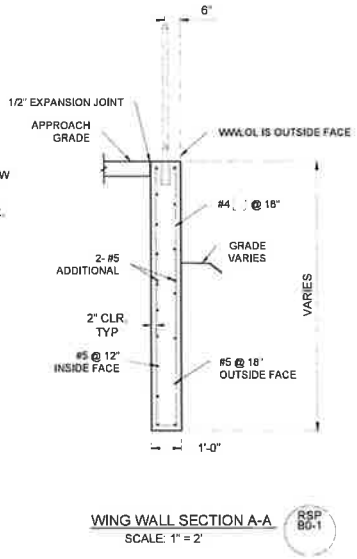
SECTION B-B
SCALE: 1" = 2'



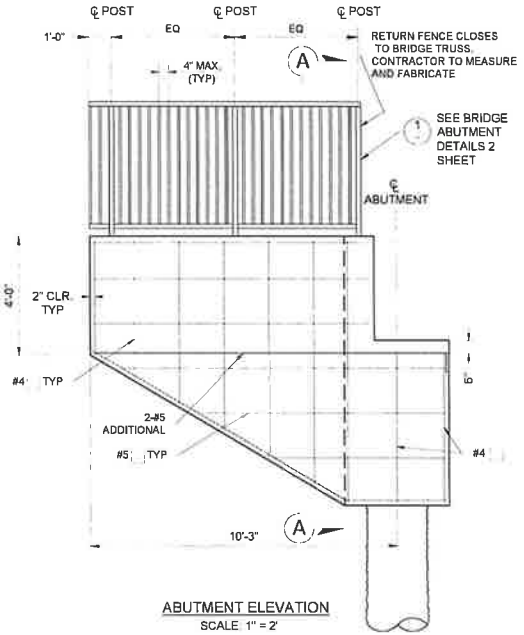
CAST-IN-DRILL HOLE (CIDH)
SCALE: 1" = 2'



ABUTMENT SECTION
SCALE: 1" = 2'
RSP B0-1
RSP B0-3 3-1



WING WALL SECTION A-A
SCALE: 1" = 2'
RSP B0-1



ABUTMENT ELEVATION
SCALE: 1" = 2'

BR-5 ABUTMENT DETAILS 1
SCALE 1"=2'

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PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

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BRIDGE PLANS

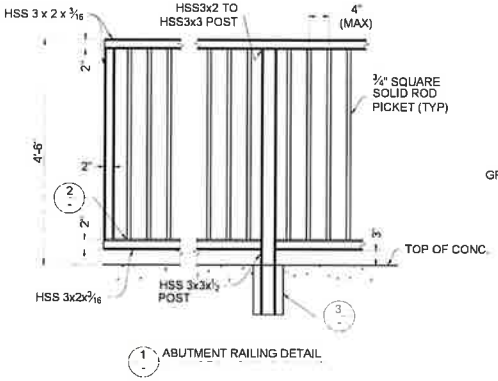
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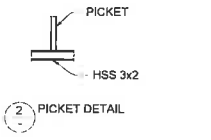
04/23/21 DATE | BR-5 SHT. DES.

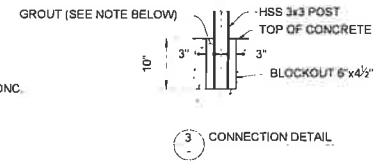
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NOTE

CONTRACTOR TO FIELD MEASURE WING WALL WITH BRIDGE IN PLACE AND PREPARE SHOP DRAWINGS FOR FABRICATION OF ABUTMENT RAILING FOR APPROVAL BY THE ENGINEER







NOTE
USE CEMENTITIOUS GROUT WITH 1/2" MAXIMUM PEA GRAVEL. 28-DAY COM. STRENGTH = 4000 PSI

ABUTMENT RAILING DETAILS
SCALE: 1" = 2'

BR-6 ABUTMENT DETAILS 2
SCALE 1"=2'

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Approved: Matt Roberts, Project Manager

Design: SQ
Drawn: KS
Check: MDK

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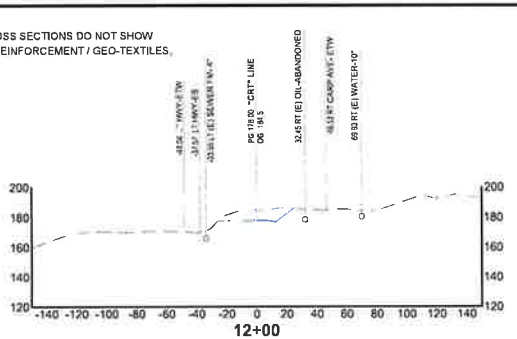
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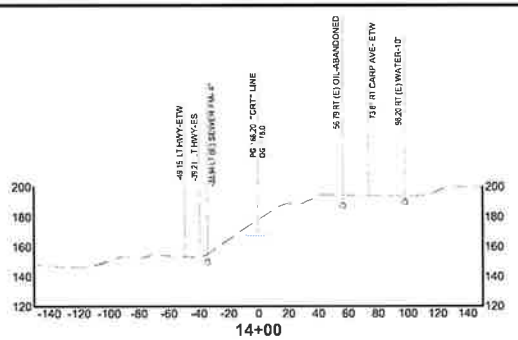
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DATE | SHT. NO.

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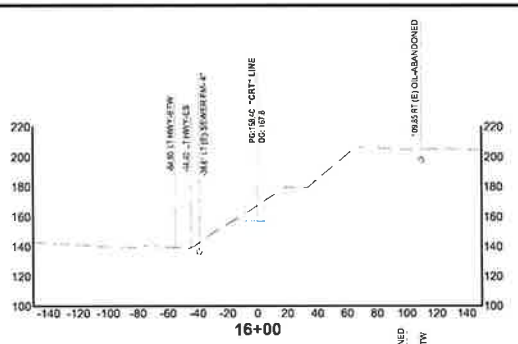
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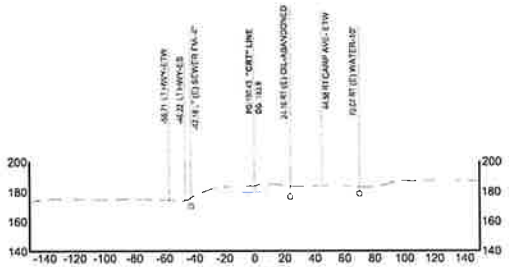
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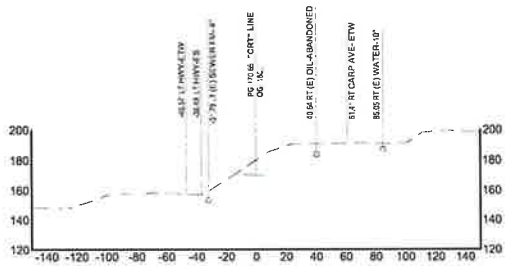
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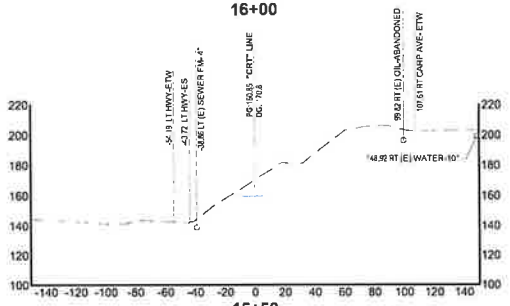
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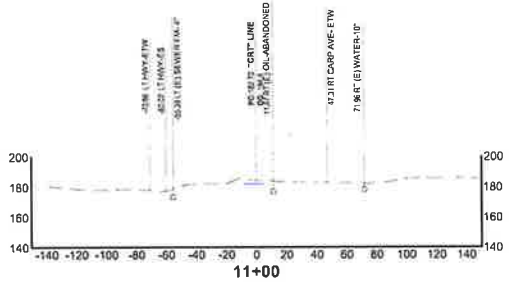
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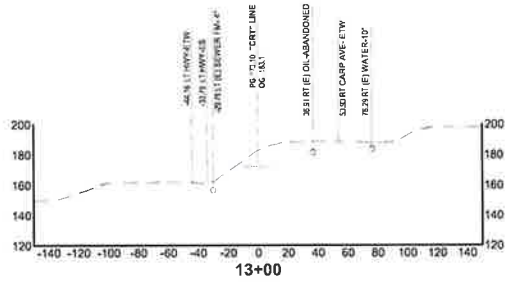
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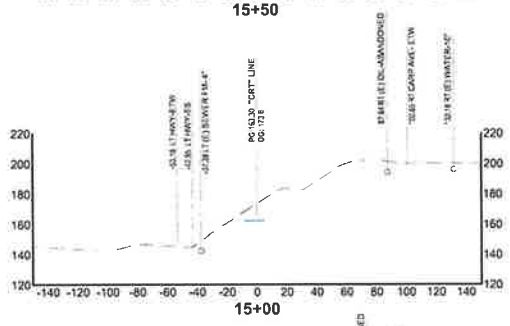
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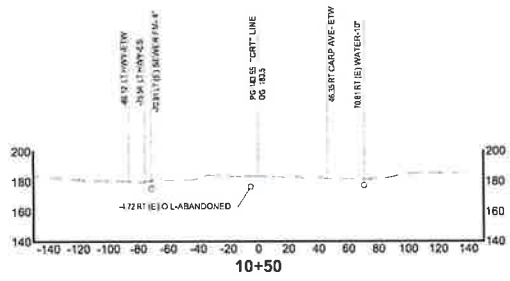
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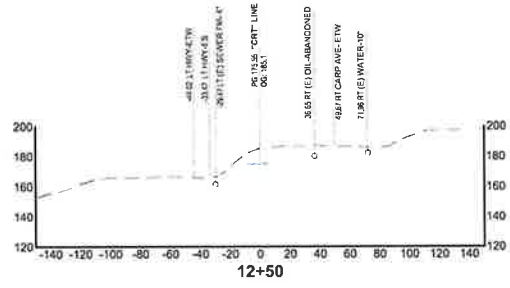
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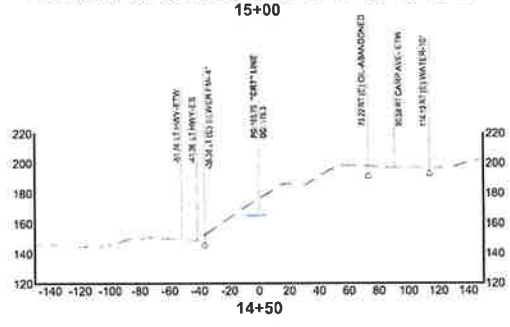
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12+50



14+50

TRAIL CROSS SECTIONS -1

0 40 80

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

Design: SO
Drawn: HS
Check: SO

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380 S. Hope Ave, C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

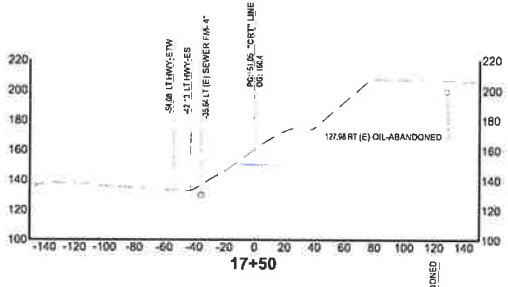
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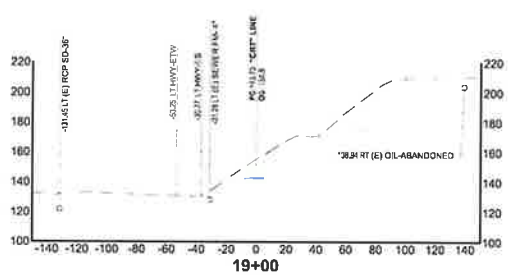
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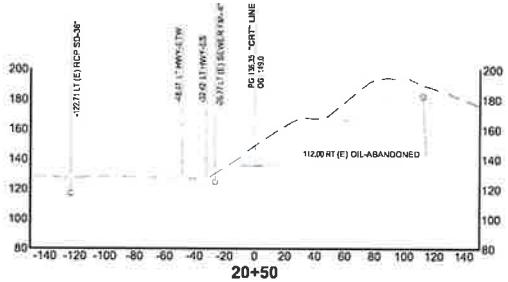
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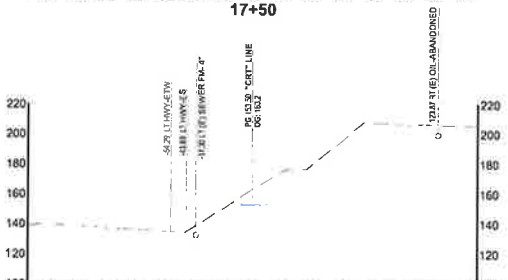
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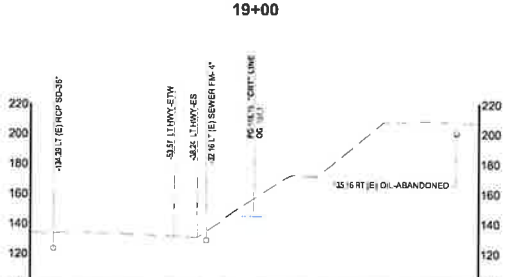
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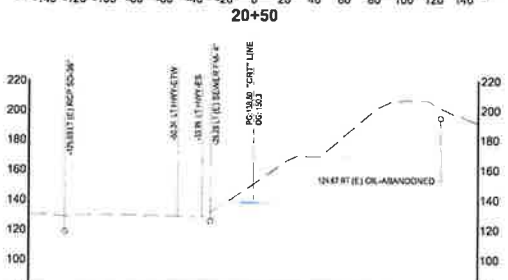


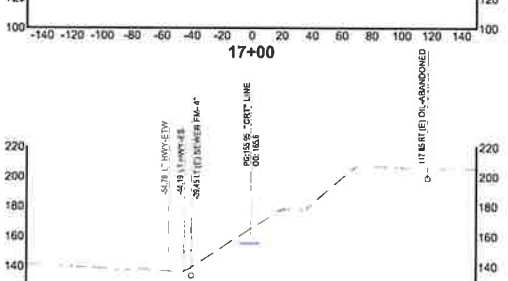


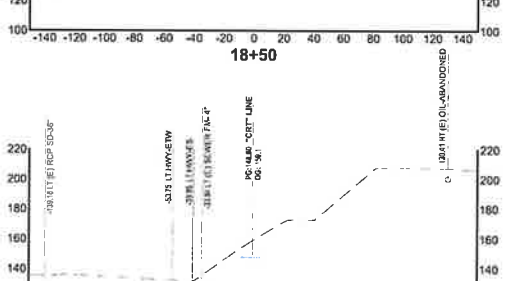


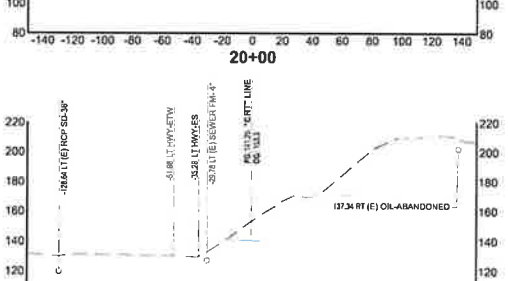












TRAIL CROSS SECTIONS -2

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design | Drawn | Chk'd

BENGAL ENGINEERING, INC.

365 S. Hope Ave. C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

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04/23/21 | CS-2
DATE | SHT. NO.

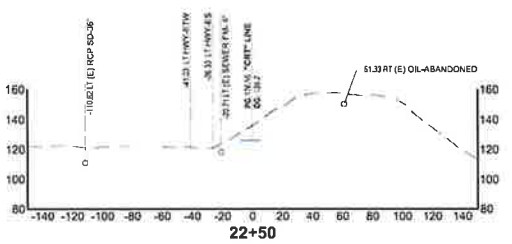
SANTA BARBARA Sub
MP 386.45
UPRR MILE POST

64 of 119

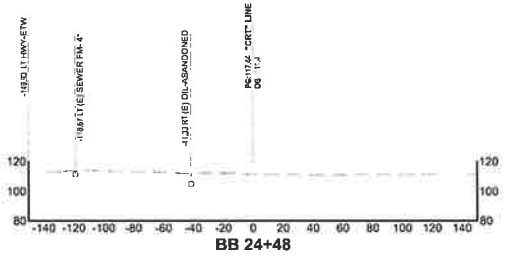
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

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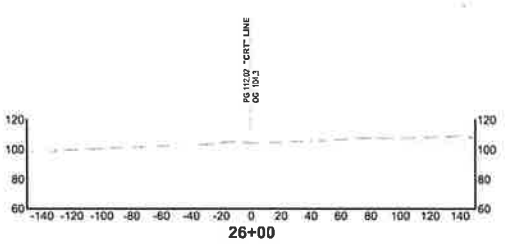
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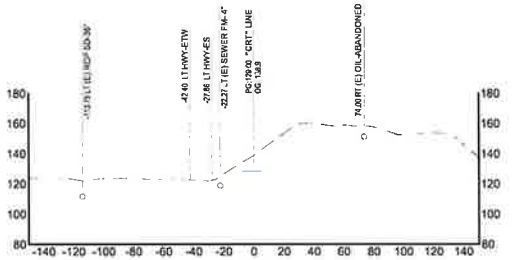
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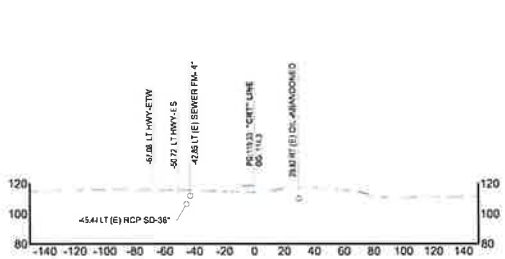
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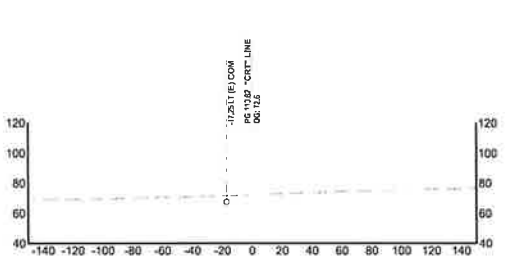
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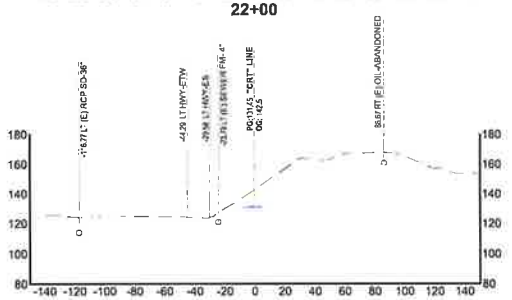
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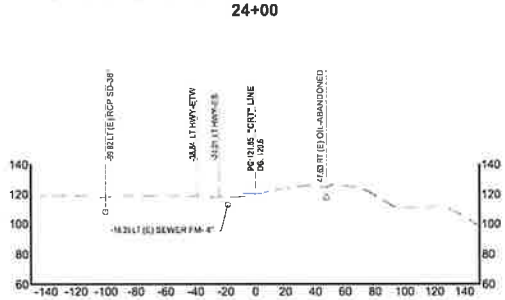
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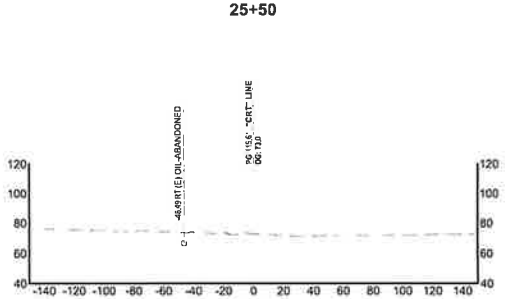
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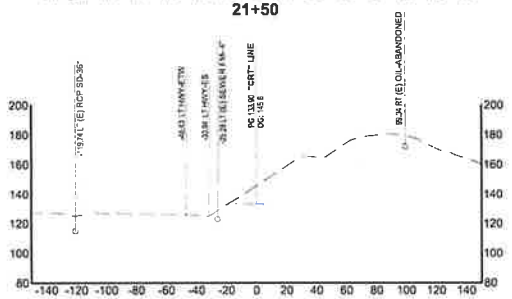
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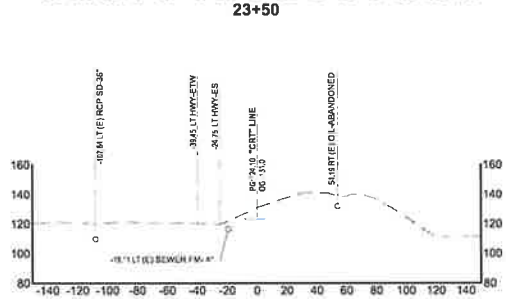
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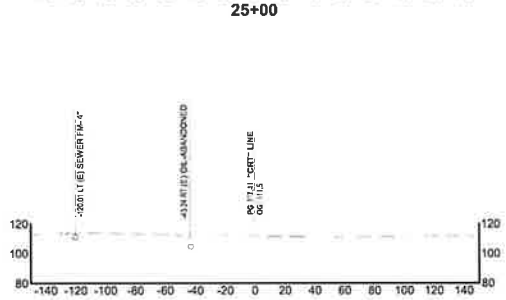
25+00



21+00



23+00



24+50

TRAIL CROSS SECTIONS -3

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design: SD
Drawn: HS
Check: SD

BENGAL ENGINEERING INC.

360 S. Hope Ave., C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

441148Y
UPRR PROJECT NO.

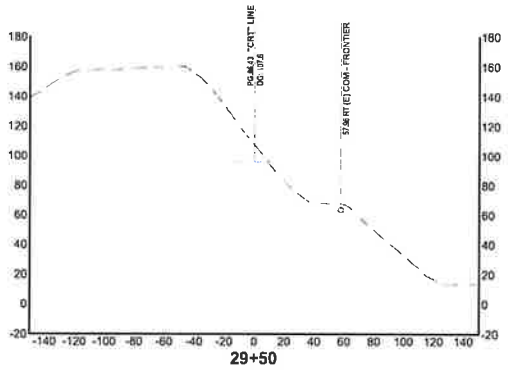
04/23/21 | CS-3
DATE | SHT. NO.

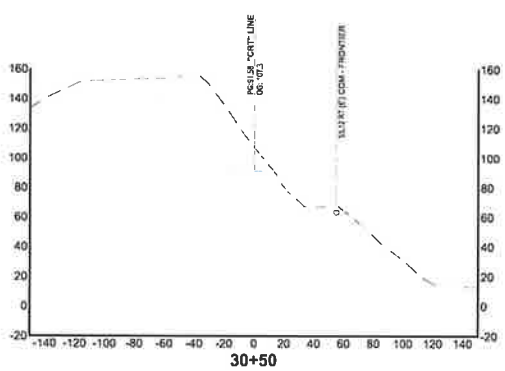
SANTA BARBARA SUB
MP 392.49
UPRR MILE POST

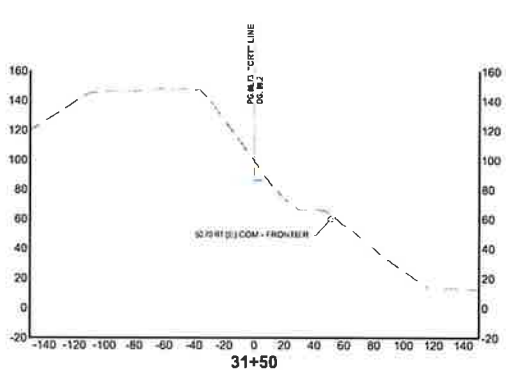
65 of 119

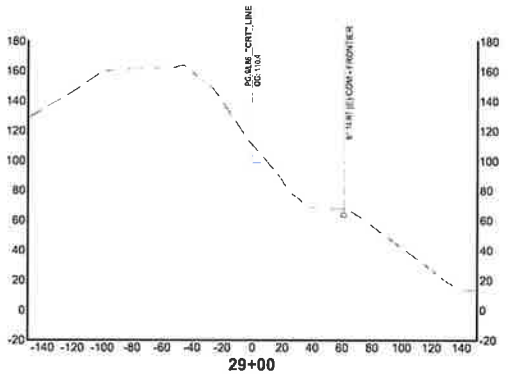
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1

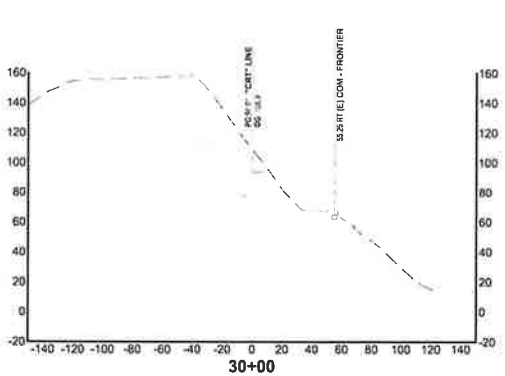
I:\projects\...\cross sections\dwg BY: Michael Bendich

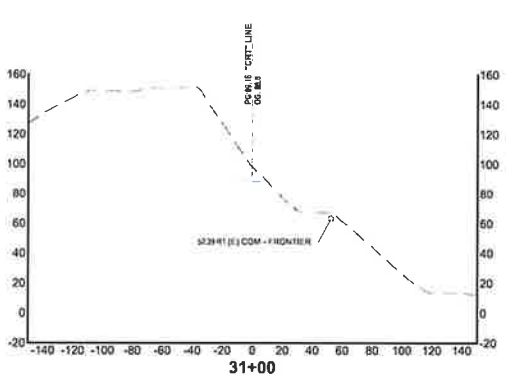












TRAIL CROSS SECTIONS -5

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SQ
Drawn HS
Check SQ

BENCAL

360 S. Hope Ave., C-110,Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

441148Y
URBA PROJECT NO.

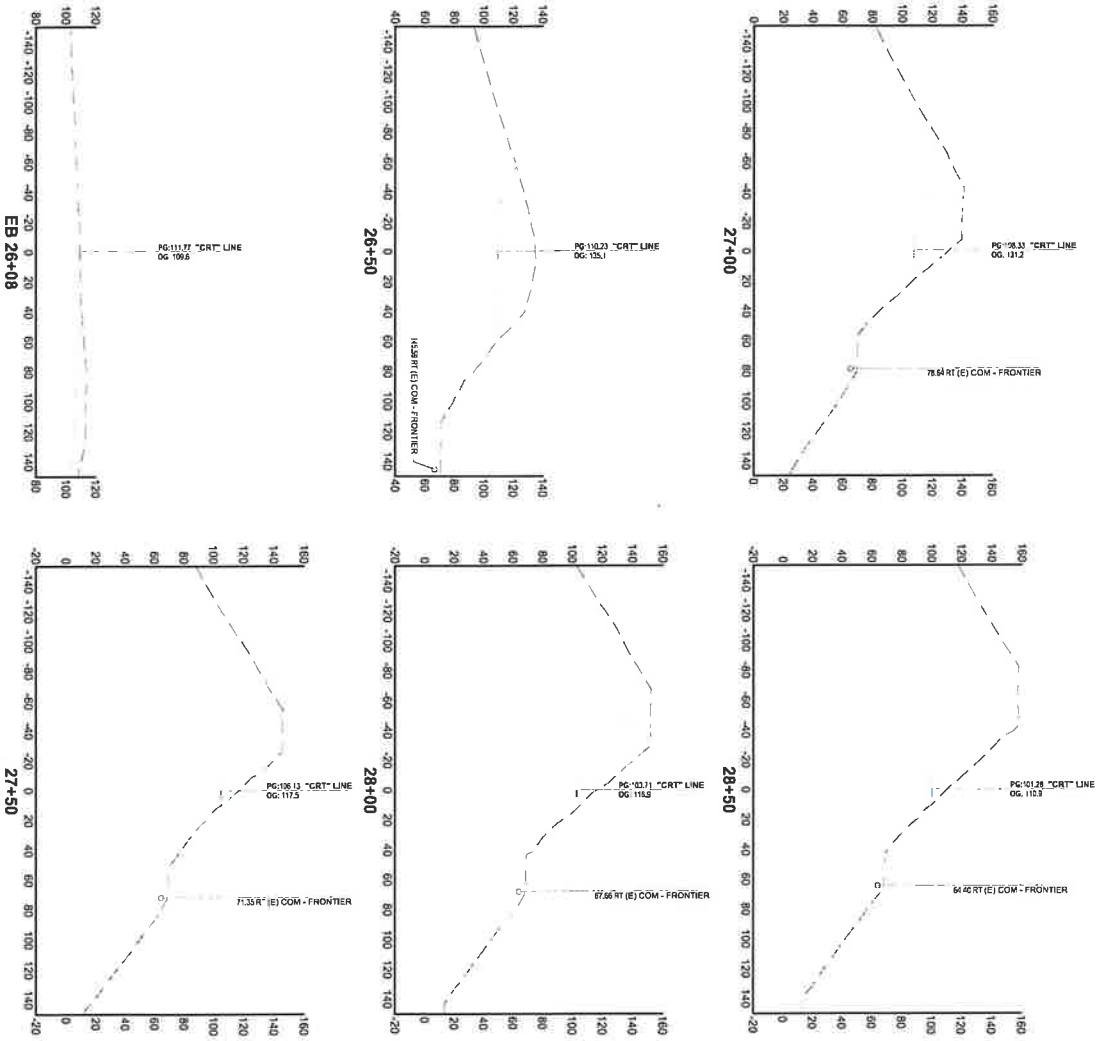
04/23/21 DATE | CS-5 SHT. DES.

SANTA BARBARA SUB. MP 380.49 UPRR MILE POST

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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2

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SCALE 1"=40'

TRAIL CROSS SECTIONS -4

67 of 119	04/22/21	CS-4	44114BY

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

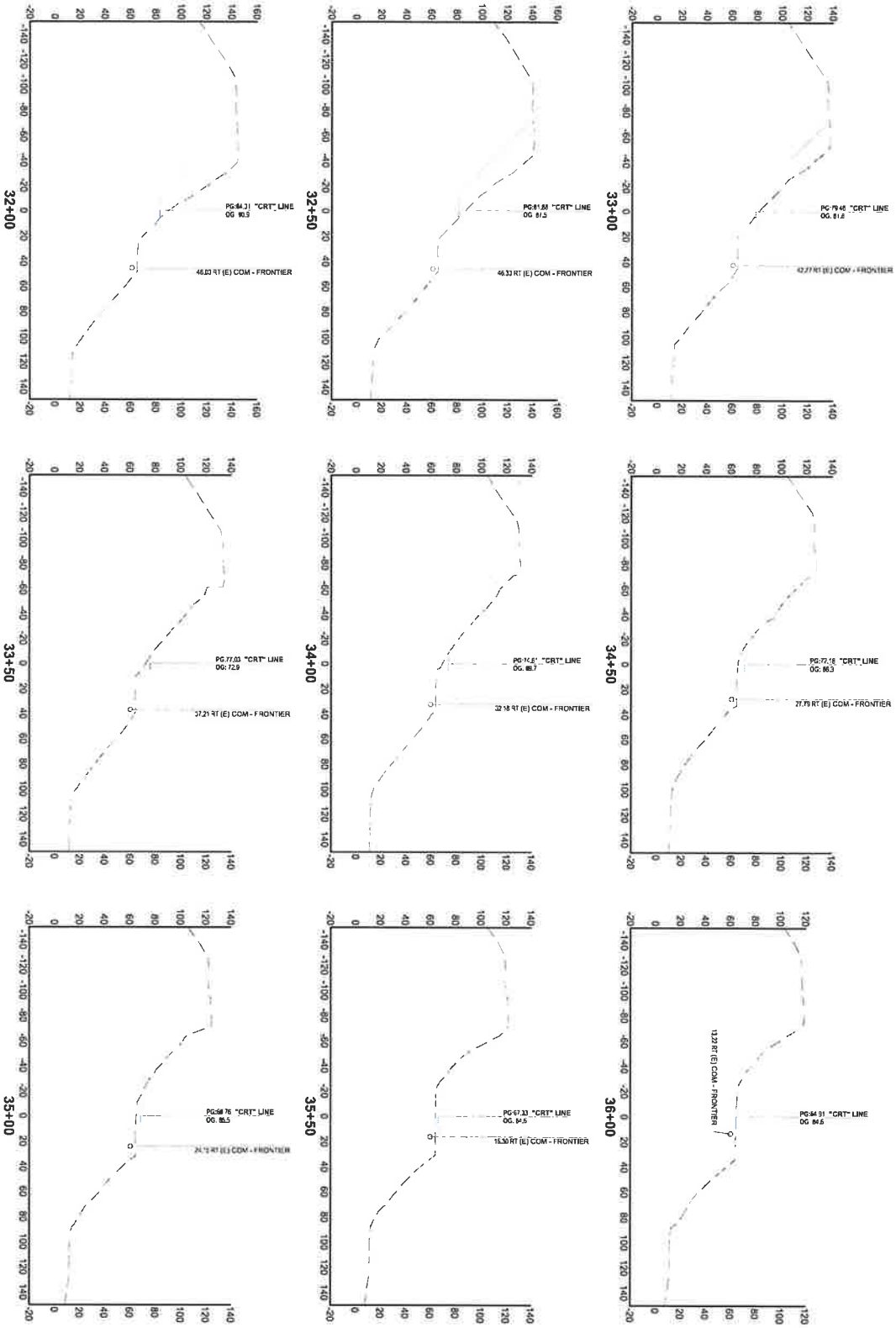
BENGAL ENGINEERING GROUP, INC.
360 S. Hope Ave, C-110,Santa Barbara, CA 93105

Design SO
Drawn HS
Chk'd SO

Approved
Matt Roberts, Project Manager

CITY OF CARPINTERIA
PUBLIC WORKS ENGINEERING DIVISION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2



SCALE 1"=40'

TRAIL CROSS SECTIONS -6

68 of 119

44114BY

CS-6

04/23/21

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

BENGAL ENGINEERING INC

360 S. Hope Ave, C-110,Santa Barbara, CA 93105

Design SO
Drawn HS
Chkd SO

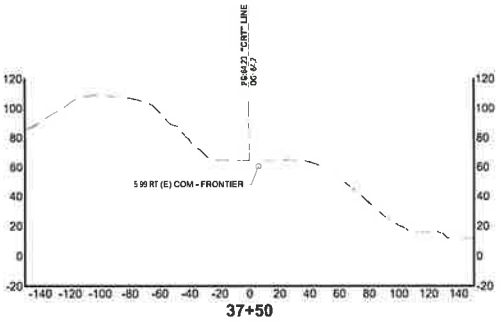
Approved
Matt Roberts, Project Manager

THE CITY OF CARPINTERIA

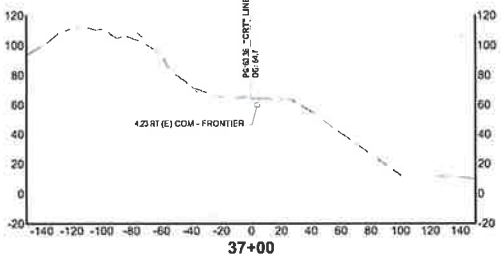
PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

t:\projects\0_active projects\carp rincon trail\production drawings\tcr-trail cross sections.dwg BY: Michael Bandich

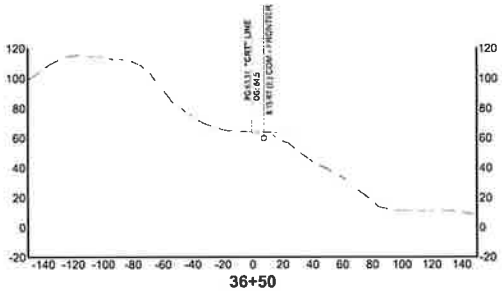
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2



37+50



37+00



36+50

TRAIL CROSS SECTIONS -7

0 40' 80'

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved Matt Roberts, Project Manager

Design SD
Drawn HB
Chk'd SD

BENCAL

365 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

TRAIL CROSS SECTIONS

441148Y
UPRR PROJECT NO.

04/23/21 DATE | CS-7 SHT. NO.

SANTA BARBARA SUB
MP 380.49
UPRR MILE POST

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FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

0 1 2

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FREEWAY SIDE

EARTHWORK VOLUME
[STA: 10+40 to 24+48]

STATION	FILL AREA (SF)	CUT AREA (SF)	FILL VOLUME (CY)	CUT VOLUME (CY)	CUM. FILL VOL (CY)	CUM. CUT VOL (CY)	NET VOL (CY)
10+40.00	3.85	46.37	0.00	0.00	0.00	0.00	0
10+50.00	1.97	51.53	0.83	18.13	0.83	18.13	17
10+75.00	0.42	57.27	1.11	50.37	2.03	68.50	66
11+00.00	0.00	73.72	0.20	60.98	2.23	129.46	127
11+25.00	0.00	151.08	0.00	105.15	2.23	234.61	232
11+50.00	0.00	191.87	0.00	160.45	2.23	395.06	393
11+75.00	0.00	231.67	0.00	197.47	2.23	592.53	590
11+96.52	0.00	260.57	0.00	196.73	2.23	789.26	787
12+00.00	0.00	277.48	0.00	34.67	2.23	823.92	822
12+20.00	0.00	321.48	0.00	221.01	2.23	1044.94	1043
12+25.00	0.00	328.82	0.00	60.21	2.23	1105.15	1103
12+50.00	0.00	353.78	0.00	313.25	2.23	1418.40	1416
12+75.00	0.00	392.37	0.00	341.15	2.23	1759.55	1757
13+00.00	0.00	443.10	0.00	380.79	2.23	2140.25	2138
13+04.84	0.00	454.20	0.00	77.07	2.23	2217.32	2215
13+25.00	0.00	500.60	0.00	360.03	2.23	2577.35	2575
13+34.27	0.00	518.15	0.00	174.94	2.23	2752.28	2750
13+50.00	0.00	550.97	0.00	311.37	2.23	3063.65	3061
13+75.00	0.00	616.93	0.00	534.03	2.23	3597.68	3595
14+00.00	0.00	660.71	0.00	583.57	2.23	4181.25	4179
14+25.00	0.00	703.76	0.00	622.73	2.23	4803.97	4802
14+50.00	0.00	726.83	0.00	652.53	2.23	5456.50	5454
14+75.00	0.00	738.51	0.00	667.90	2.23	6124.40	6122
15+00.00	0.00	766.31	0.00	686.17	2.23	6809.57	6807

EARTHWORK VOLUME
[STA: 10+40 to 24+48]

STATION	FILL AREA (SF)	CUT AREA (SF)	FILL VOLUME (CY)	CUT VOLUME (CY)	CUM. FILL VOL (CY)	CUM. CUT VOL (CY)	NET VOL (CY)
15+25.00	0.00	834.66	0.00	727.51	2.23	7537.08	7535
15+50.00	0.00	878.77	0.00	775.79	2.23	8312.87	8311
15+75.00	0.00	927.42	0.00	816.27	2.23	9129.14	9127
15+97.48	0.00	935.20	0.00	756.59	2.23	9885.73	9883
16+00.00	0.00	936.68	0.00	87.42	2.23	9973.15	9971
16+25.00	0.00	862.38	0.00	857.03	2.23	10830.18	10828
16+50.00	0.00	974.48	0.00	873.38	2.23	11703.56	11701
16+75.00	0.00	1000.78	0.00	886.72	2.23	12590.28	12588
17+00.00	0.00	1041.99	0.00	919.38	2.23	13512.57	13510
17+25.00	0.00	1005.15	0.00	920.46	2.23	14433.02	14431
17+50.00	0.00	1049.41	0.00	922.35	2.23	15355.38	15353
17+75.00	0.00	1137.57	0.00	979.83	2.23	16335.21	16333
18+00.00	0.00	1241.84	0.00	1063.98	2.23	17399.18	17397
18+25.00	0.00	1352.23	0.00	1137.59	2.23	18556.77	18555
18+50.00	0.00	1472.09	0.00	1257.64	2.23	19814.42	19812
18+60.68	0.00	1534.91	0.00	594.91	2.23	20409.33	20407
18+75.00	0.00	1638.55	0.00	841.25	2.23	21250.68	21248
19+00.00	0.00	1818.65	0.00	1600.56	2.23	22851.24	22849
19+25.00	0.00	1913.59	0.00	1727.89	2.24	24579.13	24577
19+50.00	0.00	1999.58	0.00	1911.66	2.24	26490.78	26489
19+75.00	0.00	2048.02	0.00	1874.35	2.24	28365.14	28263
20+00.00	0.00	1994.88	0.00	1872.09	2.24	30137.22	30135
20+25.00	0.00	1887.43	0.00	1797.27	2.24	31934.50	31932
20+50.00	0.00	1580.44	0.00	1651.79	2.24	33586.28	33584

EARTHWORK VOLUME
[STA: 10+40 to 24+48]

STATION	FILL AREA (SF)	CUT AREA (SF)	FILL VOLUME (CY)	CUT VOLUME (CY)	CUM. FILL VOL (CY)	CUM. CUT VOL (CY)	NET VOL (CY)
20+75.00	0.01	1477.54	0.00	1462.03	2.24	35048.31	35046
21+00.00	0.00	1343.87	0.00	1306.21	2.25	36354.52	36352
21+25.00	0.00	1208.81	0.00	1180.84	2.25	37535.36	37533
21+50.00	0.00	1082.77	0.00	1059.96	2.25	38593.31	38593
21+75.00	0.01	970.33	0.00	950.51	2.29	39545.82	39544
22+00.00	0.00	900.84	0.00	866.19	2.25	40412.01	40410
22+25.00	0.00	911.99	0.00	839.18	2.25	41251.19	41249
22+50.00	0.00	857.37	0.00	819.15	2.25	42070.33	42068
22+75.00	0.00	827.98	0.00	687.66	2.25	42758.00	42756
23+00.00	0.00	0.00	0.00	290.73	2.25	43048.73	43046
23+25.00	15.78	136.36	7.30	83.13	9.58	43111.88	43102
23+37.15	16.93	68.40	7.36	48.06	16.92	43157.91	43141
23+50.00	33.66	24.40	13.48	19.99	30.40	43177.91	43148
23+75.00	105.69	12.10	69.66	14.59	99.06	43192.50	43093
23+84.72	124.86	11.76	43.14	3.38	142.20	43195.87	43054
24+00.00	161.88	10.47	83.61	4.81	225.81	43200.68	42975
24+25.00	253.04	0.00	191.48	3.64	417.29	43204.32	42787
24+32.29	292.78	0.00	71.64	0.00	488.93	43204.32	42715
24+40.00	161.54	0.00	84.90	0.00	553.83	43204.32	42650
24+47.50	129.87	0.00	40.47	0.00	594.30	43204.32	42610
24+48.00	127.30	0.00	2.38	0.00	596.68	43204.32	42608

Surface Properties - Vol (TH West) 02 18 21

Information | Definition | Analysis | Statistics

Statistics	Value
General	
TIN	
Volume	
Base Surface	EG (2018)
Comparison Surface	Trail Head (North) Surface - (Datum)
Cut Factor	1.00
Fill Factor	1.00
Cut volume (adjusted)	40.28 Cu. Yd.
Fill volume (adjusted)	18.97 Cu. Yd.
Net volume (adjusted)	21.31 Cu. Yd. <Cut>
Cut volume (unadjusted)	40.28 Cu. Yd.
Fill volume (unadjusted)	18.97 Cu. Yd.
Net volume (unadjusted)	21.31 Cu. Yd. <Cut>

TRAILHEAD (WEST)

CUT - 40 CY
FILL - 19 CY

Surface Properties - Vol (ocean) 02 18 21

Information | Definition | Analysis | Statistics

Statistics	Value
General	
TIN	
Volume	
Base Surface	EG (2018)
Comparison Surface	Datum (ocean) 02 18 21
Cut Factor	1.00
Fill Factor	1.00
Cut volume (adjusted)	52762.33 Cu. Yd.
Fill volume (adjusted)	9979.26 Cu. Yd.
Net volume (adjusted)	42883.07 Cu. Yd. <Cut>
Cut volume (unadjusted)	52762.33 Cu. Yd.
Fill volume (unadjusted)	9979.26 Cu. Yd.
Net volume (unadjusted)	42883.07 Cu. Yd. <Cut>

OCEAN SIDE

CUT - 52,800 CY
FILL - 9,900 CY

EARTHWORK TOTALS		
	CUT (CY)	FILL (CY)
FREEWAY SIDE	43,200	600
TRAILHEAD (WEST)	40	19
OCEAN SIDE	52,800	9,900
TOTALS	96,040	10,519

TRAIL CROSS SECTIONS -8

SCALE 1"=40'

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

App'd: Matt Roberts, Project Manager

Design
Drawn
Chk'd

BENGAL ENGINEERING

360 S. Hope Ave., C-10 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL
TRAIL CROSS SECTIONS

44114BY
URBS PROJECT NO

04/23/21 DATE | CS-8 SHT. NO.

SANTA BARBARA SUB
MP 380.48
UPRR MILE POST

70 of 119

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2

I:\jobs\40_active projects\project info\3 plan\production drawings\sheets\cross sections.dwg BY: Michael Bandich

GENERAL NOTES: SURVEY DATUMS INFORMATION

1. The horizontal datum for this map is based on ground control positions as contained in digital files for the 2007 aerial mapping by Golden State Aerial Surveying. Photography dated 12.12.2007. The datum is unknown but appears to be or proximate to NAD83. Epoch is unknown.
2. The vertical datum for this map is based on ground control orthometric heights as contained in digital files for the 2007 aerial mapping by Golden State Aerial Surveying. Photography dated 2007.07.07. The datum is unknown but appears to be or proximate to NAVD88.
3. Grid coordinates for aerial mapping appear to be or proximate to California State Plane Coordinate System Zone 5.
4. Survey units appear to be US Survey feet.
5. Surveying for location of monuments and other ground control were performed by REESE Water & Land Surveying Services in August & September, 2017, using both static and RTK GNSS methods. Orthometric heights for surveyed points were derived by applying a high-precision geoid model to surveyed ellipsoid heights.
6. The local survey benchmarks are points #2005 & #2006 from 2007 mapping as listed.
7. The basis of bearings is the line between points #2005 and #2006 as shown: N40°15'49"W 3633.72ft.

GENERAL NOTES: RIGHT OF WAY INFORMATION

1. Data for right of way, easements, or other title lines shown are derived from compiled record information tied to surveyed positions of found monumentation.
2. A Condition of Title Report, No. 5026900-5688306, dated 2018.05.10, by First American Title Insurance Co. has been used as the basis for the easement and other title information shown hereon.
3. Sources of information for title lines include, but are not limited to: Santa Barbara County deeds, State Highway Map Books, State Highway Monumentation Map Books; Santa Barbara County Assessor information; California Department of Transportation right of way maps; Union Pacific Right of Way and Track Maps.
4. No attempt to resolve gaps, gores, hiatuses, or other misalignment of record information has been made to establish a lotline or boundary that does not appear of record. This mapping shall not be construed as an establishment of record information per California B&P Code sec 8700 et seq.
5. To resolve any particular deed or map line, a survey and map shall be performed according to provisions in the Professional Land Surveyors Act, B&P sec. 8700 et seq.

SURVEY CONTROL

THE CITY OF CARPINTERIA

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

Approved: Matt Roberts, Project Manager

Design: SO
Drawn: MB
Chkd: SO

BENGAL ENGINEERING INTERACTIVE, INC.
360 S. Hope Ave. C-110 Santa Barbara, CA 93105

CARPINTERIA RINCON MULTI USE TRAIL

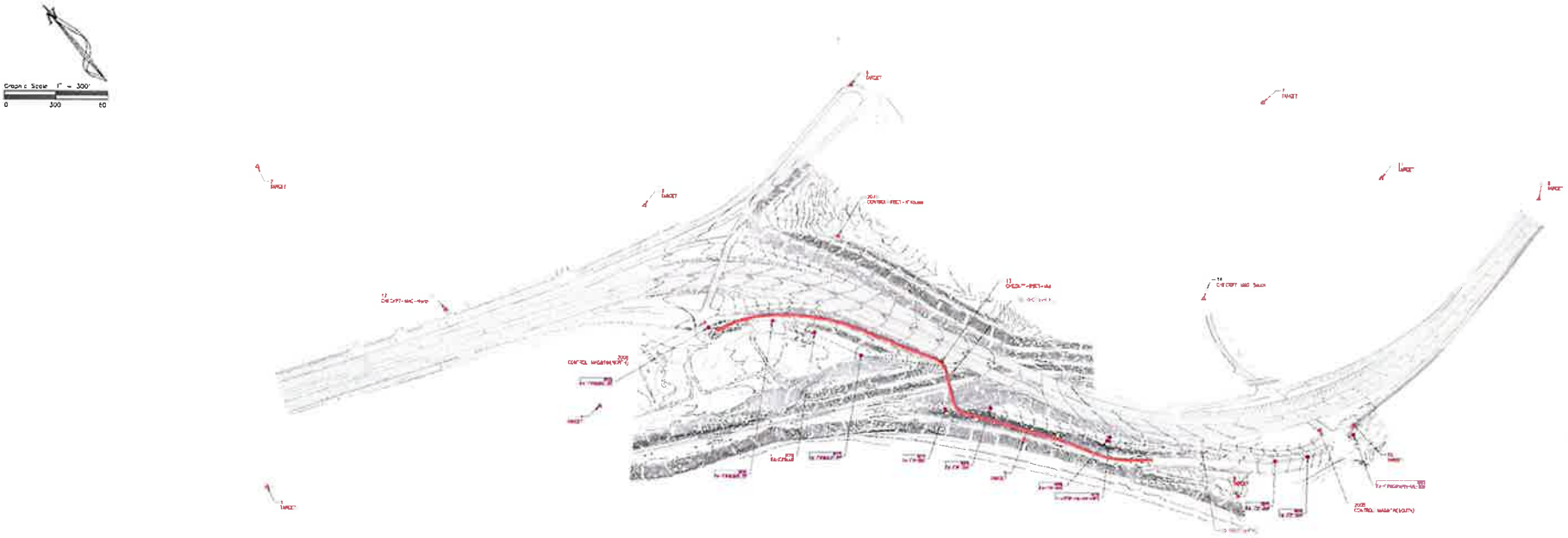
441148Y
URS PROJECT NO.

04/23/21 DATE | SC-01 SHT. NO.

SANTA BARBARA SUB.
MP 380.48
UPRR MILE POST

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2

I:\projects_active projects\hwy 101 traffic reduction cmmg\plans\civil\dwg BY: Michael Bendon



GENERAL NOTES

SURVEY DATUMS INFORMATION

1. The horizontal datum for this map is based on ground control positions as consumed in digital files for the 2007 aerial mapping by Golden State Aerial Surveying. Photography dated 12.12.2007.
The datum is unknown but appears to be NAD83. Epoch is unknown
2. The vertical datum for this map is based on ground control orthometric heights as contained in digital files for the 2007 aerial mapping by Golden State Aerial Surveying. Photography dated 2007.07.07.
The datum is unknown but appears to be NAVD88.
3. Grid coordinates for aerial mapping appear to be California State Plane Coordinate System Zone 5.
4. Survey units appear to be US Survey feet.
5. Surveying for location of monuments and other ground control were performed by REESE Water & Land Surveying Services in August & September, 2017, using both static and RTK GNSS methods. Orthometric heights for surveyed points were derived by applying a high precision geoid model to surveyed ellipsoid heights.
6. The local survey benchmarks are points #2006 & #2008 from 2007 mapping as noted.
7. The basis of bearings is the line between points #2005 and #2006 as shown: N42°25'49"E 2633.72ft.
8. The proposed locations for the 16' wide paved portion of the multi-use trail has been shown for information only. Its alignment is subject to change

SURVEYOR'S STATEMENT

This map was prepared by me and is based on a field survey performed by me in August & September, 2017, at the request of Bengal Engineering, Inc.
This map delineates the monumented and surveyed locations of visible features, natural and man-made, within the areas shown for the purpose of site planning and engineering study. No warranty as to the size, type and location of non-visible features, natural and man made, that may exist, is expressed or implied.
Utility agencies should be contacted prior to any excavation.

DIGITAL DATA

These data may have been delivered as a courtesy to the client or other third parties in digital form. Delivery of this electronic file does not constitute the delivery of our professional services. The most recent signed and sealed paper print represents the delivery of professional services and must be referred to for correct information. REESE Water & Land Surveying Services (RWLSS) shall not be responsible for modifications to or products derived from the electronic files which are not approved, signed and sealed by RWLSS.
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Robert J. Reese, LS6208 — 2019.11.12 date

ROBERT J. REESE LS 6208 LICENSED LAND SURVEYOR STATE OF CALIFORNIA

COORDINATE DATA: CONTROL POINTS

Pt	North(Y)	East(X)	Elev(Z)	Description
1	1966276.10	6110962.67	131.80	TARGET
2	1965548.22	6112108.71	157.37	TARGET
3	1965938.02	6113696.06	183.19	TARGET
4	1963702.56	6112747.10	172.19	TARGET
5	1963433.75	6114525.74	67.27	TARGET
6	1965710.00	6115069.26	201.53	TARGET
7	1964099.12	6116849.30	97.56	TARGET
8	1962646.17	6117711.38	30.21	TARGET
9	1962420.88	6115266.50	64.05	TARGET
10	1962306.82	6116048.86	33.23	TARGET
11	1963321.35	6117099.48	260.24	TARGET
12	1965207.62	6112417.71	166.90	CHECKPT-MAG-North
13	1964127.80	6114445.37	116.78	CHECKPT-RBCT-Mid
14	1963436.61	6115852.05	69.45	CHECKPT-MAG-South
15	1964038.46	6114449.47	112.33	RBCP(u,RTK)
2003	1962412.62	6115877.53	31.48	CONTROL-MAG(N/SOUTH)
2005	1965185.61	6113528.95	180.74	CONTROL-MAG(N/NORTH)
2021	1965086.38	6114420.14	273.75	CONTROL-RBCT-RT(Mid)
3005	1962287.32	6116010.26	41.45	Fd-1"IP&CAP-RWN-CAL-DOH
3006	1962338.48	6115123.84	47.82	Fd-1"IP-DOH
3007	1962439.37	6115561.58	58.76	Fd-1"IP-DOH
3008	1963155.77	6114889.19	120.41	Fd-1"IP-DOH
3009	1963736.68	6114488.96	163.75	Fd-1"IP-DOH
3010	1963899.08	6114281.89	123.97	Fd-1"IP-DOH
3015	1964454.77	6114106.00	210.73	Fd-1"P&COOT-PP
3019	1964733.15	6113983.82	204.39	Fd-1"P&COOT
3020	1964941.82	6113838.93	189.34	Fd-1"P&COOT-PP
3022	1965150.43	6113927.22	180.91	Fd-1"IP&NAIL-PP
4026	1963161.36	6114914.88	118.13	1-1/2"IP-CAL-DOT-HWY5

TARGET = aerial target point
RBCP = rebar, plastic cap & tack
MAG&PK = magnet & control point washer

RINCON MULTI-USE TRAIL PROJECT
SURVEY CONTROL LAYOUT
in the County of Santa Barbara California

project title: SURVEY CONTROL LAYOUT

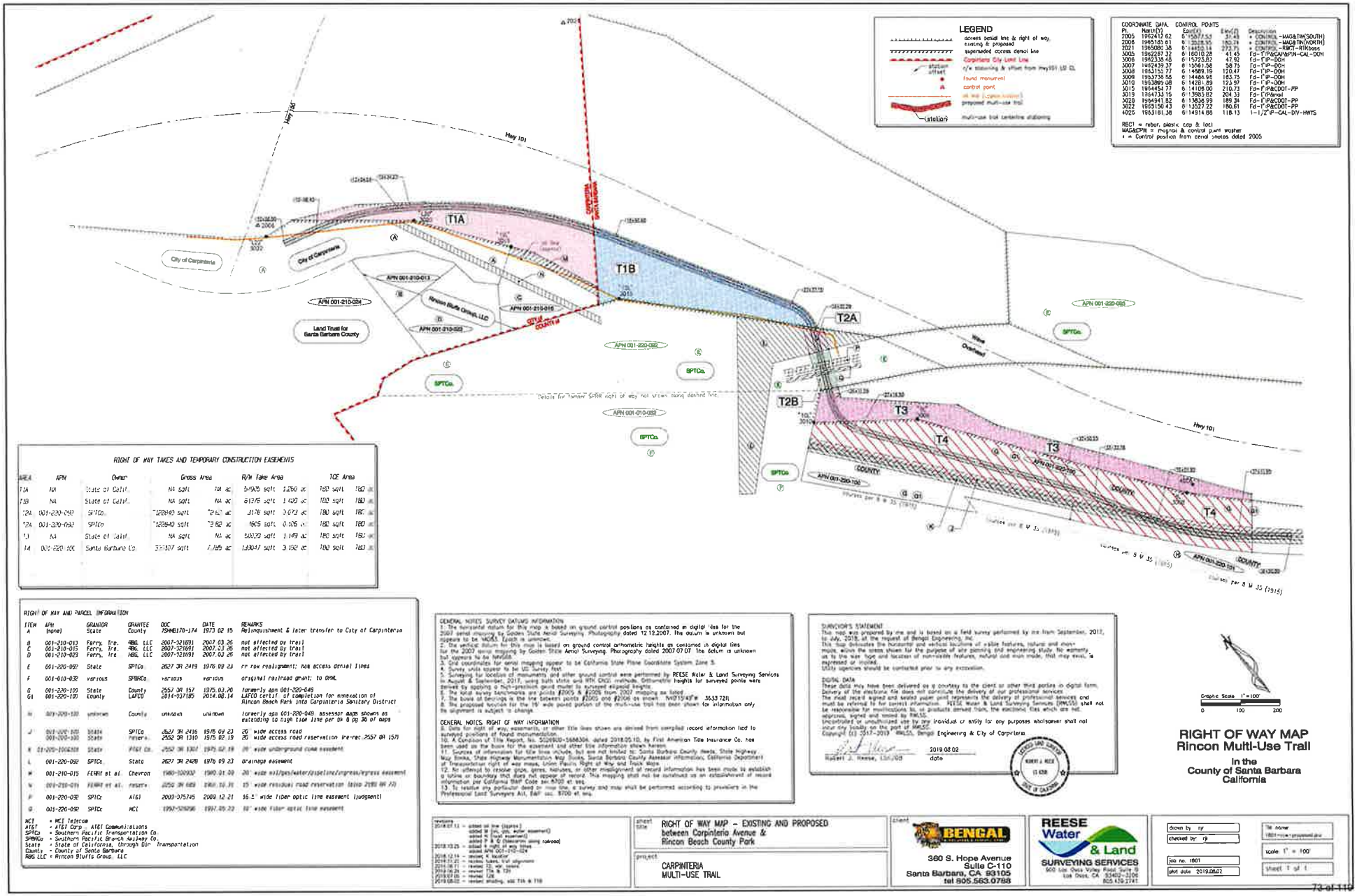
project: RINCON MULTI-USE TRAIL PROJECT in the County of Santa Barbara, California

client: BENGAL — 360 Hope Ave, Suite C-110 Santa Barbara, CA 93105 tel 805.563.0788

REESE Water & Land SURVEYING SERVICES 900 Los Osos Valley Road, Suite B Los Osos, CA 93402 805.459.2741

drawn by: rjr
checked by: rjr
Job No. 1801
plot date 2019.11.12
file name 1801-control.pro
scale 1" = 300
sheet 1 of 1

2/10/2021 C:\1 JOBS BENGAL\1801-bengal-rincon mapping\survey-control\1801-control.pro



RIGHT OF WAY TAKES AND TEMPORARY CONSTRUCTION EASEMENTS

AREA	APN	Owner	Gross Area		R/W Take Area		TCE Area	
T1A	NA	State of Calif.	NA sqft	NA ac	54935 sqft	1.260 ac	150 sqft	150 sf
T1B	NA	State of Calif.	NA sqft	NA ac	61376 sqft	1.409 ac	100 sqft	100 sf
T2A	001-220-062	SPTCo.	122840 sqft	2.820 ac	3176 sqft	0.073 ac	180 sqft	180 sf
T2A	001-220-062	SPTCo	122840 sqft	2.82 ac	1605 sqft	0.036 ac	180 sqft	180 sf
T3	NA	State of Calif.	NA sqft	NA ac	50020 sqft	1.149 ac	180 sqft	150 sf
T4	001-220-106	Santa Barbara Co.	331107 sqft	7.605 ac	130347 sqft	3.192 ac	100 sqft	760 sf

RIGHT OF WAY AND PARCEL INFORMATION

ITEM	APN	GRANTOR	GRANTEE	DOC	DATE	REMARKS
A	(none)	State	County	75MM8170-174	1973 02 15	Relinquishment & later transfer to City of Carpinteria
B	001-210-013	Ferry, Ira.	RBG, LLC	2007-321691	2007 03 26	not affected by trail
C	001-210-015	Ferry, Ira.	RBG, LLC	2007-321691	2007 03 26	not affected by trail
D	001-210-023	Ferry, Ira	RBG, LLC	2007-321691	2007 03 26	not affected by trail
E	001-220-062	State	SPTCo.	2627 OR 2419	1976 09 23	rr row realignment; has access denial lines
F	001-010-032	various	SPTRRCo.	various	various	original railroad grant; to ORML
G	001-220-102	State	County	2557 OR 157	1975 03 26	formerly apn 001-220-048
G1	001-220-101	County	LAFCO	2014-027185	2014 08 14	LAFCO certif. of completion for annexation of Rincon Beach Park into Carpinteria Sanitary District
H	001-220-120	unknown	County	unknown	unknown	formerly apn 001-220-048. assessor maps shows as extending to high tide line per bk 8 pg 36 of maps
J	001-000-001 001-220-100	State State	SPTCo reserve	2627 OR 2416 2452 OR 1310	1976 09 23 1975 02 19	20' wide access road 20' wide access road reservation (re-rec 2557 OR 157)
K	51-220-100(20)	State	AT&T Co.	2452 OR 1302	1975 02 19	20' wide underground conduit easement
L	001-220-062	SPTCo.	State	2627 OR 2428	1976 09 23	drainage easement
M	001-210-015	FERRY et al.	Chevron	1980-100932	1980 01 09	20' wide oil/gas/water/pipeline/ingress/egress easement
N	001-210-014	FERRY et al.	reserve	2452 OR 1310	1975 02 19	15' wide residual road reservation (also 2185 OR 72)
P	001-220-062	SPTCo	AT&T	2003-075745	2003 12 21	16.5' wide fiber optic line easement (judgment)
Q	001-220-062	SPTCo	MCI	1997-026096	1997 05 22	10' wide fiber optic line easement

MCI • MCI Telecom
AT&T • AT&T Corp. AT&T Communications
SPTCo • Southern Pacific Transportation Co.
SPRRCo • Southern Pacific Branch Railway Co.
State • State of California, through Dir. Transportation
County • County of Santa Barbara
RBG LLC • Rincon Bluffs Group, LLC

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SURVEYOR'S STATEMENT
This map was prepared by me and is based on a field survey performed by me from September, 2017, to July, 2018, at the request of Bengal Engineering, Inc.
This map delineates the horizontal and vertical locations of visible features, natural and man-made, within the areas shown for the purpose of site planning and engineering study. No warranty, as to the size, type and location of non-visible features, natural and man made, that may exist, is expressed or implied.
Utility agencies should be contacted prior to any excavation.

DIGITAL DATA
These data may have been delivered as a courtesy to the client or other third parties in digital form. Delivery of the electronic file does not constitute the delivery of our professional services.
The hard record signed and sealed paper print represents the delivery of professional services and must be referred to for correct information. REESE Water & Land Surveying Services (RWLSS) shall not be responsible for modifications to, or products derived from, the electronic files which are not signed, sealed and issued by RWLSS.
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Robert J. Reese, LS#7108 — 2019.08.02 date

Graphic Scale 1" = 100'
0 100 200

RIGHT OF WAY MAP
Rincon Multi-Use Trail
In the County of Santa Barbara California

revisions
2018.07.11 – added W line (approx.) added W (int. util. water easement) added N (road easement) added P & Q (locations going railroad)
2018.10.25 – added 4 rights of way lines added APN 001-210-024
2018.12.14 – revised K locator
2019.01.21 – revised tubes, trail alignment
2019.04.11 – revised T2, sqr. revised
2019.04.24 – revised T2a & T2b
2019.05.03 – revised T2B
2019.08.02 – revised grading, add T1A & T1B

sheet title: RIGHT OF WAY MAP – EXISTING AND PROPOSED between Carpinteria Avenue & Rincon Beach County Park

project: CARPINTERIA MULTI-USE TRAIL

client: BENGAL — 360 S. Hope Avenue, Suite C-110, Santa Barbara, CA 93105, tel 805.563.0788

REESE Water & Land SURVEYING SERVICES — 600 Las Olas Valley Road, Suite D, Los Osos, CA 93402-2306, 805.439.2741

drawn by: rjr
checked by: rjr
job no. 1801
plot date 2019.08.02
file name: 1801-row-proposed.dgn
scale: 1" = 100'
sheet 1 of 1

PDF generated by deskPDF Creator Trial - Get it at http://www.docudesk.com



DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	0.33 to 0.65	1	4

Ed Pongracz-Bartha
CERTIFIED ENGINEERING GEOLOGIST X DATE
PLANS APPROVAL DATE

DESIGN CONSULTANT:
BENGAL ENGINEERING
360 S. HOPE AVE., SUITE C-110
SANTA BARBARA, CA 93105
(805) 563-0768

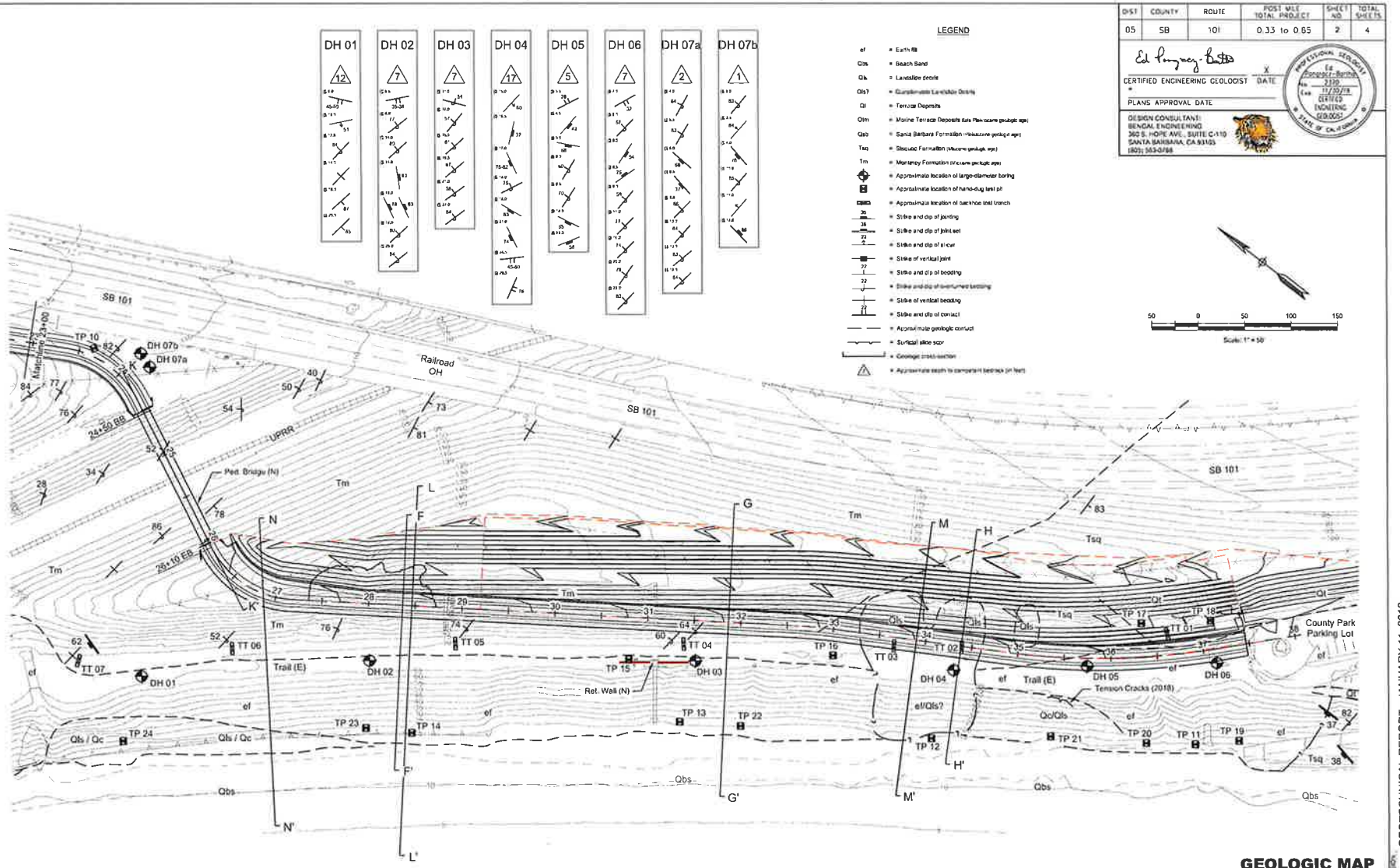
PROFESSIONAL GEOLOGIST — Ed Pongracz-Bartha — No. 2370 — Exp. 11/30/19 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

CITY OF CARPINTERIA: Matthew Roberts, Parks and Rec Director
RINCON MULTI-USE TRAIL
PROJECT GEOLOGIST: Ed Pongracz-Bartha, CEG 2370
CALCULATED/ DESIGNED BY
CHECKED BY
DATE
REVISED BY
DATE REVISED

GEOLOGIC MAP
PLATE A

GEOTECHNICAL REPORT - JANUARY 11, 2019
LAST REVISION

ORIGINAL SCALE IS IN INCHES 0 1 2 3
USER NAME:
DWG FILE:
CU EA



DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	0.33 to 0.65	2	4

CERTIFIED ENGINEERING GEOLOGIST _____ DATE _____

PLANS APPROVAL DATE _____

DESIGN CONSULTANT:
BENDAL ENGINEERING
360 S. HOPE AVE., SUITE C-110
SANTA BARBARA, CA 93105
(805) 563-0766

CALCULATED/ DESIGNED BY | DATE | DATE REVISED
CHECKED BY | REVISED BY

PROJECT GEOLOGIST
Ed Pongracz-Bartha, CEG 2370

CITY OF CARPINTERIA: Matthew Roberts; Parks and Rec Director

RINCON MULTI-USE TRAIL

GEOLOGIC MAP
PLATE B

ORIGINAL SCALE IS IN INCHES 0 1 2 3

USER NAME:
DWG FILE:

CU

EA

LAST REVISION

GEOTECHNICAL REPORT - JANUARY 11, 2019

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	0.33 to 0.65	3	4

Ed Pongracz-Bartha

CERTIFIED ENGINEERING GEOLOGIST X DATE

PLANS APPROVAL DATE

DESIGN CONSULTANT:
BENGAL ENGINEERING
360 S. HOPE AVE., SUITE C-110
SANTA BARBARA, CA 93105
(805) 563-0768

PROFESSIONAL GEOLOGIST — Ed Pongracz-Bartha — No. 2370 — Exp. 11/30/19 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF California

CALCULATED/ DESIGNED BY:

CHECKED BY

DATE | DATE REVISED:

REVISED BY

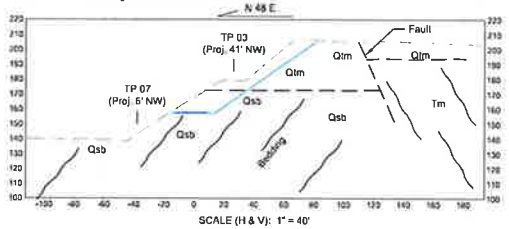
PROJECT GEOLOGIST

Ed Pongracz-Bartha, CEG 2370

CITY OF CARPINTERIA: Matthew Roberts; Parks and Rec Director

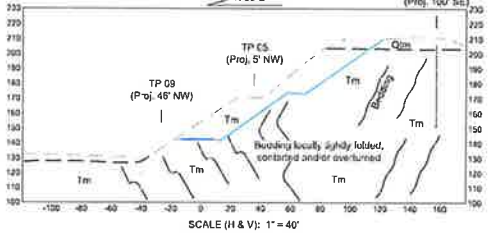
RINCON MULTI-USE TRAIL

A — Geologic Cross-Section A-A' - Sta 16+10 — A'
N 48 E



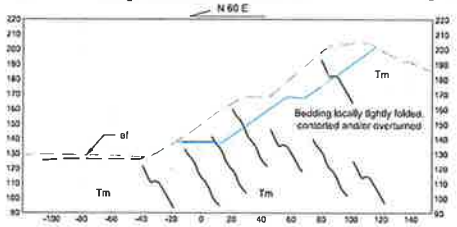
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B — Geologic Cross-Section B-B' - Sta 19+10 — B'
N 58 E
DH 08
(Proj. 100' SE)



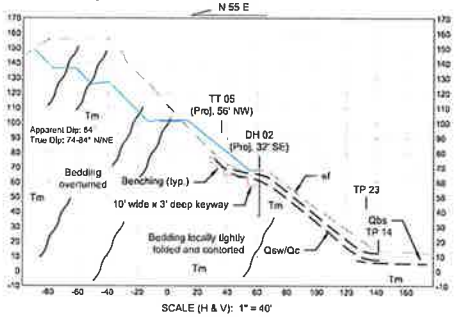
SCALE (H & V): 1" = 40'

C — Geologic Cross-Section C-C' - Sta 20+10 — C'
N 60 E



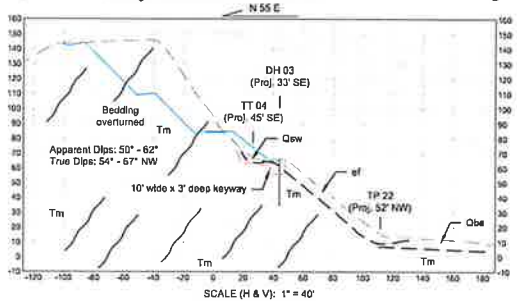
SCALE (H & V): 1" = 40'

F — Geologic Cross-Section F-F' - Sta 28+36 — F'
N 55 E



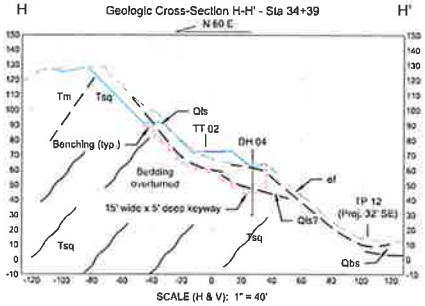
SCALE (H & V): 1" = 40'

G — Geologic Cross-Section G-G' - Sta 31+87 — G'
N 55 E



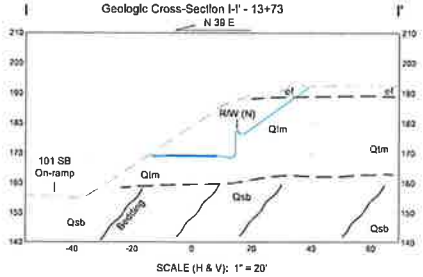
SCALE (H & V): 1" = 40'

H — Geologic Cross-Section H-H' - Sta 34+39 — H'
N 60 E



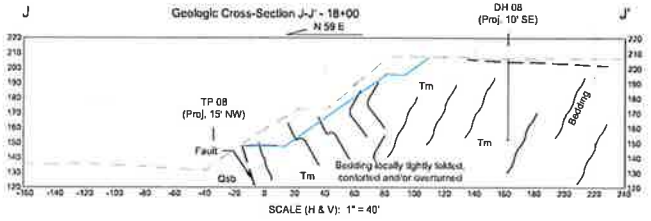
SCALE (H & V): 1" = 40'

I — Geologic Cross-Section I-I' - 13+73 — I'
N 38 E



SCALE (H & V): 1" = 20'

J — Geologic Cross-Section J-J' - 18+00 — J'
N 59 E
DH 08
(Proj. 10' SE)



SCALE (H & V): 1" = 40'

NOTES:

1. Not all benching (typ.) shown
2. All compacted fill to be placed atop firm bedrock.
3. Keyway bottom elevations and benching to be determined/approved in field by qualified geotechnical personnel.

GEOLOGIC CROSS-SECTIONS
PLATE C

GEOTECHNICAL REPORT - JANUARY 11, 2019

LAST REVISION

ORIGINAL SCALE IS IN INCHES 0 1 2 3

USER NAME:
DWG FILE:

CU

EA

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	0.33 to 0.65	4	4

Ed Pongracz-Barlha

CERTIFIED ENGINEERING GEOLOGIST X DATE

PLANS APPROVAL DATE

DESIGN CONSULTANT:
BEASAL ENGINEERING
360 S. HOPE AVE., SUITE C-110
SANTA BARBARA, CA 93105
(805) 563-0788

PROFESSIONAL GEOLOGIST — Ed Pongracz-Barlha — No. 2370 — 11/30/19 — CERTIFIED ENGINEERING GEOLOGIST — STATE OF CALIFORNIA

CALCULATED/ DESIGNED BY

CHECKED BY

DATE REVISED

REVISED BY

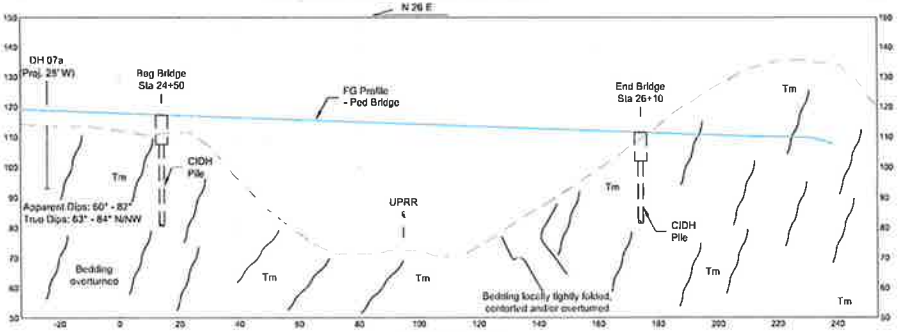
PROJECT GEOLOGIST: Ed Pongracz-Barlha, CEG 2370

CITY OF CARPINTERIA: Matthew Roberts; Parks and Rec Director

RINCON MULTI-USE TRAIL

K — Geologic Cross-Section K-K' - Profile along Bridge CL — K'

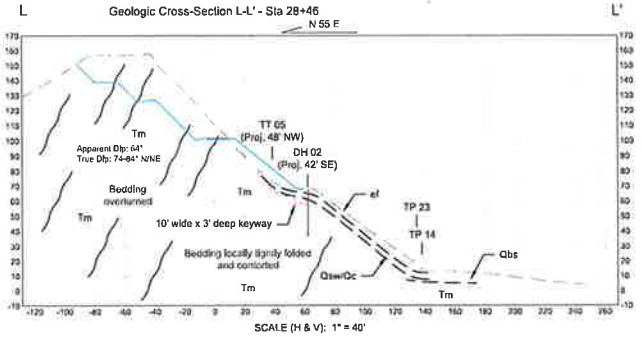
N 26 E



SCALE (H & V): 1" = 20'

L — Geologic Cross-Section L-L' - Sta 28+46 — L'

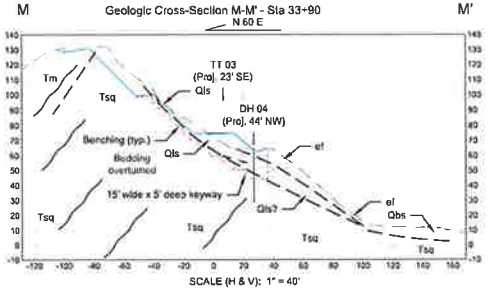
N 55 E



SCALE (H & V): 1" = 40'

M — Geologic Cross-Section M-M' - Sta 33+90 — M'

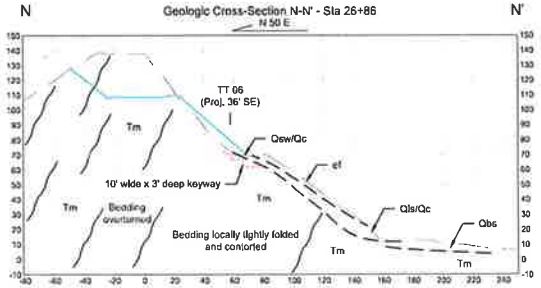
N 60 E



SCALE (H & V): 1" = 40'

N — Geologic Cross-Section N-N' - Sta 26+86 — N'

N 50 E



SCALE (H & V): 1" = 40'

NOTES:

1. Not all benching (typ.) shown.
2. All compacted fill to be placed atop firm bedrock.
3. Keyway bottom elevations and benching to be determined/approved in field by qualified geotechnical personnel.

GEOLOGIC CROSS-SECTIONS
PLATE D

LAST REVISION: GEOTECHNICAL REPORT - JANUARY 11, 2019

ORIGINAL SCALE IS IN INCHES 0 1 2 3

USER NAME:

DWG FILE:

CU EA

Bengal Engineering
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Telephone: 805-563-0788

BORING NUMBER DH 01

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/12/18 **COMPLETED** 3/12/18
GROUND ELEVATION 71 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
70	0	AU			**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry, slightly compact to locally loose, scattered roots and rootlets							R-Val
	5	MC				10	60					
65					8.0' - contact (exit): N25W, 45-50SW; ef contact exits boring							
	10	MC			**Colluvium and/or Landslide Debris (Qc/Qls)** Sandy Silt (ML) matrix with scattered to abundant shale/siltstone fragments - light gray, dry, loose, abundant rootlets	12	65	53	50	3		ATT
60					12.0' - base of colluvium / landslide debris: N50W, 51SW; slightly irregular and wavy, no clay gouge present							
	15	MC			**Bedrock: Monterey Formation (Tm)** Laminated siliceous siltstone and shale - dark gray to black, moderately hard, slabby, fractured and jointed, moderately to slightly weathered (rock weathers to light tan to cream colored), prone to sloughing and caving along bedding and jointing 12.5' - bedding: N85W, 84N (overturned); abundant rootlets and caliche 14.0' - bedding: N85W, vertical; pervasively fractured with rootlets and caliche 14.5' - 1/2" thick and discontinuous light brown silt parallel to bedding 18.0' - bedding: N80W, 87S Slight sloughing below 18' along bedding and jointing. 20.0' - bedding: N82W, 85S	18						
55	20	MC				13	68					
50												
	25	AU				19		NP	NP	NP		ATT
45												
	30	MC			Groundwater and/or seepage not encountered. Boring backfilled with native materials.	18	69					
40					Bottom of borehole at 31.0 feet.							
	35											
35												
	40											

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BORING NUMBER DH 02

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/12/18 **COMPLETED** 3/12/18
GROUND ELEVATION 68.5 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry, slightly compact to locally loose, scattered roots and rootlets							
65	5	MC			**Colluvium (Qc)** Sandy Silt (ML) matrix with rock fragments - light brown to light gray, slightly moist, medium stiff, scattered roots; includes several rock clasts dipping downslope 5.0' - Qc/bedrock contact on uphill side of boring 6.5' - contact: N49W, 35-38SW	16	65	56	54	2		ATT
60	10	MC			**Bedrock: Monterey Formation (Tm)** Laminated siliceous siltstone and shale - dark gray to black, moderately hard, slabby, fractured and jointed, moderately to slightly weathered (rock weathers to light tan to cream colored) 8.0' - bedding: N76W, 77NE (overturned) 10.0' - occasional weathered seam (light gray silt) along bedding, abundant rootlets	24	76					
		AU				23		54	49	5		ATT
55	15				14.0' - bedding: N79W, 80NE (overturned) 14.0' - joint: N43E, 83SE; rootlet-lined							
50	20	MC			18.0' - 1/2" diameter root along fracture, rock very tight 18.0' - joint: N27E, 78SE; smooth and slightly wavy with rootlets 18.0' - joint: N27E, 83SE; caliche-lined 19.0' - bedding: N80W, 80NE (overturned)	30	56					DS
45	25				24.0' - 1/2" diameter root along tight fracture 25.0' - bedding: N77W, 84NE							
40	30	MC			Groundwater and/or seepage not encountered. Boring backfilled with native materials.	21	71					
35	35				Bottom of borehole at 31.0 feet.							
30	40											

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BORING NUMBER DH 03

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION 65 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0	AU			**Earth Fill (ef)** Silty Sand - mottled light yellowish-brown and light brownish-gray, moist, loose to medium compact; abundant tabular rock fragments to 6" in dimension; abrupt, downslope contact with bedrock. 0 - 2.0' - fill depth of east side of boring 0 - 7.0' - fill depth of west side of boring							R-Val
60	5	MC				7	79					
					Bedrock: Monterey Formation (Tm) Siltstone - brownish gray, moderately hard, few very fine-grained sandstone beds; locally siliceous; intensely fractured to 10'-12' below grade; bedding is locally well developed, continuous and undulatory bedding: N23W, 54NE							
55	10	MC				13	66				45	
					bedding: N23W, 54NE (overturned) bedding: N88W, 57NE bedding: N88W, 57N (overturned)							
50	15				bedding: N79W, 81NE bedding: N79W, 81NE (overturned)							
					bedding: N78W, 67NE							
45	20	MC			bedding: N78W, 67NE (overturned)	14	73	55	46	9		ATT
					bedding: N74W, 58NE (overturned) 22.0' - medium gray in color; some caliche stringers along tight fractures and bedding							
40	25				bedding: N75W, 64NE bedding: N75W, 64NE (overturned)							
35	30	MC			Groundwater and/or seepage not encountered. Boring backfilled with native cuttings. 31.0' - end of boring - no groundwater Bottom of borehole at 31.0 feet.	28	67					
30	35											
	40											

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BORING NUMBER DH 04

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION 64.4 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry, slightly compact to locally loose, scattered roots and rootlets							
60	5	AU MC			**Questionable Landslide-affected rock (Qls?) or Creep-affected Bedrock: Sisquoc Formation (Tsq)** Mudstone/Siltstone - light brownish yellow to light yellowish brown to light brownish gray, slightly moist, slightliy hard, weakly indurated, highly fractured, scattered roots, limonite weathering along fractures, discontinuous bedding structure, locally powdery 6.0' - open fractures, discontinuous bedding and powdery (dry)	9 10	99					DS
55	10	MC			9.0' - massive with rootlets, powdery	9	105					
50	15				14.0' - light olive siltstone with abundant gypsum; discontinuous and asymetric open fractures to 1"-3" across with roots 15.0' - N85W, 60S; shear fabric with little to no matrix 16.5' - joint: N66E, 32SE; gypsum-lined 17.0' - fracture zone: N27E, 75-82NW; base of fracture zone with open voids and rootlets (no clay), rock improves below							
45	20	AU MC			**Bedrock: Sisquoc Formation (Tsw)** Mudstone/Siltstone - brownish gray to blue-gray to dark gray, slightly moist to moist, moderately hard, tight, locally jointed, slightly weathered, massive to vaguely bedded 18.0' - bedding (?): N65W, 75NE; gypsum-lined 18.0' - joint: N07W, 83W; oxidized 21.0' - joint: N26E, 74NW; gypsum-lined	18 18	89	50	35	15		ATT DS
40	25	AU			24.0' - contact (enter): N45W, 76SE; irregular, wavy and slightly gradational contact between oxidized bedrock (above) and blue-gray, unoxidized siltstone below	19						
35	30	MC			29.5' - contact (exit): N76E, 76SE; moderately hard and tight blue-gray unoxidized siltstone to very fine-grained sandstone below	12	95					
30	35				Groundwater and/or seepage not encountered. Boring backfilled with native cuttings.							
					Bottom of borehole at 35.0 feet.							
25	40											

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BORING NUMBER DH 05

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/14/18 **COMPLETED** 3/14/18
GROUND ELEVATION 64 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry, slightly compact to locally loose, scattered roots and rootlets							
60	5	MC			**Colluvium (Qc)** Silt (ML) to Silt with fine-grained sand and scattered rock fragments and widely scattered gravel/cobbles - light brown to light yellow brown, slightly moist, medium stiff to stiff, mottled, occasional charcoal fragment 3.0' - 4"-6' thick paleosol in colluvium sequence 3.5' - N65W, 28NE; soil exits boring 4.0' - sub-horizontal and slightly wavy contact with bedrock	12	91	47	46	1		ATT
55	10	MC			**Bedrock: Sisquoc Formation (Tsq)** Mudstone/Siltstone - light brown to light yellowish brown to olive/brownish gray to dark olive gray (unoxidized), slightly moist to moist, moderately hard grading to hard, tight, locally jointed, slightly weathered, massive to bedded 4.5' - joint: N86W, 42S; gypsum-lined 5.0' - joint: N28W, 68SW; root-lined and slightly oxidized 6.0' - tight below 9.0' - bedding: N84E, 60N (overturned); gypsul-lined with rootlets 9.5' - bedding: N85E, 70N (overturned)	16	88					DS
50	15											
45	20	AU			18.0' - 19.0' - gradational transition to gray mud/siltstone - moderately hard, moist, very tight 19.0' - joint: N12W, 65SW; gypsum-lined	23		46	39	7		ATT
		MC										
40	25				23.0' - joint: N60W, 58SW							
35	30	MC			Groundwater and/or seepage not encountered. Boring backfilled with native cuttings.							
					Bottom of borehole at 31.0 feet.							
30	35											
25	40											

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BORING NUMBER DH 06

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/14/18 **COMPLETED** 3/14/18
GROUND ELEVATION 64 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR RC Drilling
GROUND WATER LEVELS:
DRILLING METHOD Track-Mounted Limited Access
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0	AU			**Earth Fill (ef)** 0-1.5' - Fine-grained Sand - light tan, slightly moist, slightly dense; occasional asphalt fragment 1.5' - 1"-2" thick weak soil developed atop older fill	13						
60	5	MC			Fine-grained Sandy Silt (ML) with scattered gravel and rock fragments - mottled light brown, very slightly moist 6.33' - fill/Qns contact	19	91					
55	10	MC			**Natural Soil (Qns)** Sandy Silt (ML) - brown, slightly moist to moist, medium stiff, caliche stringers along basal contact 7.0' - contact: N68W, 32SW; thin (1"-3") and discontinuous light brown to tan fine-grained sand (aeolian?) layer atop bedrock	8	105					
50	15				**Bedrock: Sisquoc Formation (Tsq)** Mudstone/Siltstone - light brown to light yellowish brown to olive/brownish gray to dark olive gray (unoxidized), slightly moist to moist, moderately hard grading to hard, tight, locally jointed, slightly weathered, massive to bedded 8.0' - bedding: N84W, 67N (overturned) 8.5' - joints: N86E, 54S; N73W, 75NE 9.0' - bedding: N88W, 59N (overturned) 11.0' - bedding: N84W, 77N (overturned); well-bedded 11.0' - highly fractured interval with roots; tighter below 12.0' 16.0' - bedding: N84E, 74N (overturned)							
45	20	MC			20.0' - bedding: N86E, 79N; gray laminated siltstone							
40	25				23.0' - bedding: N85W, 83N; gray to brownish gray beds or concretions of fractured dolomite (?) 23.0' - 1/8" thick brown and moist clay seams along tight fractures and jointing, discontinuous 24.0' - siltstone - olive gray to dark olive gray, slightly moist to moist, hard, tight, unoxidized							
35	30	MC			Groundwater and/or seepage not encountered. Boring backfilled with native cuttings.							UC
					Bottom of borehole at 31.0 feet.							
30	35											
25	40											

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BORING NUMBER DH 07a

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 8/16/18 **COMPLETED** 8/16/18
GROUND ELEVATION 114 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR Tri-Valley Drilling
GROUND WATER LEVELS:
DRILLING METHOD Bucket Auger
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0	GB			**Earth Fill (ef)** Fine-grained Sandy Silt with scattered small shale fragments - light brown to light grayish brown, dry, loose to slightly compact 6" thick layer of pea gravel, continous around boring							
110	5	MC			**Bedrock: Monterey Formation (Tm)** Diatomaceous Shale/Siltstone and Siliceous Shale - light tan to grayish brown, moist to slightly moist, slightly hard to very hard (well-cemented), well-bedded; continuous coring required to advance boring from 6' to bottom of borehole, slight to moderate hydrocarbon odor 4.0' - bedding: N81E, 84N (overturned); caliche-lined 5.5' - bedding: N83E, 83N (overturned) 6.0' - joint: N03E, 68W	16	78					
105	10	GB			6.5' - joint: N11W, 37W 8.0' - continued coring with 18"-24" cemented and hard blocks in cuttings 9.0' - bedding: N84W, 86N (overturned) 10.0' - bedding: N86W, 84N (overturned)	14						
100	15				13.0' - bedding: N78W, 83N (overturned) 16.0' - bedding: N81W, 84N (overturned)							
95	20	GB MC			Groundwater and/or seepage not encountered. Boring backfilled to surface with 2-sack concrete slurry. Bottom of borehole at 21.0 feet.	20						
90	25											
85	30											
80	35											
75	40											

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BORING NUMBER DH 07b

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 8/16/18 **COMPLETED** 8/16/18
GROUND ELEVATION 115 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR Tri-Valley Drilling
GROUND WATER LEVELS:
DRILLING METHOD Bucket Auger
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Earth Fill (ef)** Fine-grained Sandy Silt with scattered small shale fragments - light brown to light grayish brown, dry, loose to slightly compact							
		MC			**Bedrock: Monterey Formation (Tm)** Diatomaceous Shale/Siltstone - light tan to light grayish brown, moist to slightly moist, slightly to moderately hard, well-bedded; slight to moderate hydrocarbon odor 3.0' - bedding: N88W, 83N (overturned) 3.5' - shear (bedding parallel): N86W, 84N; 1" thick sheared light tan to olive green plastic clay gouge 4.0' - joint: N11E, 78NW	19	66					
110	5	MC										
105	10	MC			10.0' - bedding: N87W, 85N (overturned) 11.0' - shear (bedding parallel): 1"-2" thick gouge zone with occasional caliche nodule 12.0' - joint: N08E, 86E	18	86					
100	15	MC			Groundwater and/or seepage not encountered. Boring backfilled to surface with 2-sack concrete slurry.	19	94					
					Bottom of borehole at 16.0 feet.							
95	20											
90	25											
85	30											
80	35											
	40											

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BORING NUMBER DH 08

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 8/17/18 **COMPLETED** 8/17/18
GROUND ELEVATION 206.5 ft NAVD88 **HOLE SIZE** 24" inches
DRILLING CONTRACTOR Tri-Valley Drilling
GROUND WATER LEVELS:
DRILLING METHOD Bucket Auger
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
205	0	GB			**Earth Fill (ef)** Fine-grained Silty Sand to Sandy Silt with scattered rock fragments - mottled light brown, slightly moist, moderately compact, scattered roots	5						
		MC	1-2		**Marine Terrace Deposits (Qtm)** Fine-grained Sand with some to trace silt - light reddish brown to light orange brown gradding to light golden brown / light tan, moist, moderately dense grading to dense	5						
200	10	MC	1-2		8.0' - wavy, sub-horizontal contact with gravelly to cobbly sand, scattered rootlets, minor sloughing 9.0' - 9.5' - sharp, irregular and wavy contact with highly weathered and very moist bedrock	25	80	67	43	24		DS, ATT
195		GB			**Bedrock: Monterey Formation (Tm)** Diatomaceous Shale/Siltstone to Phosphatic/Organic Shale - light brown to light gray to light brownish gray to light rust orange, moist to very moist, very stiff to sllightly hard to moderately hard, laminated and well-bedded, moderately grading to slightly weathered (upper 2' highly weathered)							
190		MC	1-1			17	83					DS, ATT
	20	MC	1-2		12.0' - bedding: N72W, 81NE (overturned) 13.0' - 4"-5" long, 1/2"-3/4" wide open and discontinuous fracture on SE side of borehole 18.0' - bedding ?: N55W, 82SW 18.0' - joint: N37E, 75NW; clayey silt-lined, slightly wavy, slightly polished 24.0' - joint set: N34E, 71NW; 6" spacing 24.0' - bedding: N35W, 82NE (overturned) 26.0' - bedding: N64W, 78NE (overturned) 26.0' - joint: N22E, 78NW; slightly polished	38	77	56	42	14		
185												
180	30	MC	5-8		29.5' - bedding: N42W, 78NE (overturned) 32.0' - bedding: N50W, 80NE (overturned) 34.0' - joint set: N62W, 74SW; 2" spacing 34.0' - joint set: N39E, 72NW; 4" spacing	38	71					DS
175		GB										
170	40	GB			37.5' - shear: E-W, 71S; siliceous shale on footwall, phosphatic shale of hanging wall	22						
		MC	6-13		38.0' - shear (bedding parallel): N42W, 68NE; 2"-3" thick oxidized, weathered and sheared, offset by shear at 37.5' 38.5' - bedding: N40W, 78NE (overturned) 40.0' - bedding: N41W, 81NE (overturned) Laminated phosphatic shale with abundant small phosphate nodules - off-white to light gray, scattered gypsum-lined and tight fractures							
165												
160	50	MC	4-9			32	84					
155												
150	60				Groundwater and/or seepage not encountered. Boring backfilled with native materials. Bottom of borehole at 55.0 feet.							

BENGAL BH V2 - BENGAL V1.GDT - 1/13/19 19:47 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\7000Q V2.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

TEST PIT NUMBER TP 01

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 185 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY G. Masterman **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
185.0	0.0	GB 1			**Earth Fill (ef)** Silty Gravel (GP) - yellowish brown, very dense, slightly moist, medium to coarse-grained, with gravel to 1", pieces of plastic, asphalt and paper		16						SHEAR MAX
					some clay binder								
					dark brown to whitish brown; with numerous sandstone and shale fragments								
182.5	2.5				Silty Sand (SM) - dark brown, very dense, slightly moist, fine- to medium-grained sand, with whitish tan lenses. Switched to augers								
		MC 2					19	74					
180.0	5.0				**Terrace Deposits (Qtm)** Sand (SP) - light reddish tan, dense, slightly moist, fine-grained		3	110					
		MC 3											
177.5	7.5												

No water, no caving
Bottom of test pit at 7.5 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

TEST PIT NUMBER TP 02

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 186 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY G. Masterman **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silty Gravel (GM) - dark brown to reddish brown, medium dense, slightly moist, gravel to 1/2", organic rich in upper 0.5'.								
185.0		MC 1			**Terrace Deposits (Qtm)** Sand (SP) to Silty Sand (SM) - dark brown to reddish tan, dense, slightly moist, fine- to medium-grained, occasional 1" gravel		3	107					SHEAR
	2.5												
182.5		MC 2			tree roots to 1.5" dia., porous Switched to hand auger at 3' below grade		2	108					SHEAR
	5.0												
180.0		MC 3					4	107					
	7.5												
177.5					reddish brown								
	10.0	MC 4					3	103					

No water, no caving
Bottom of test pit at 10.5 feet.

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TEST PIT NUMBER TP 03

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 180 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY G. Masterman **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
180.0	0.0				**Terrace Deposits (Qtm)** Sand (SP) - reddish brown, dense, slightly moist, fine- to medium-grained		5	105					
177.5	2.5	MC 1											SHEAR
175.0	5.0	MC 2					1	101					

No water, no caving
Bottom of test pit at 6.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

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250 Big Sur Drive
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TEST PIT NUMBER TP 04

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/24/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Gravelly Silt (ML) - brown, slightly moist, medium dense, abundant roots, slighlty wavy and horizontal contact with underlying bedrock and terrace sands.								
	2.5				*Fault (presumably the Carpinteria Fault) places Monterey Formation bedrock (Tm) in contact with Terrace Sands (Qt). Fault: N62W/82S; 1/8" to 1/2" thick brown clay gouge w/ slickensided surface on Tm bedrock, fault places Tm in contact with sandy terrace deposits (Qt) bedding: N752W/60S								
	5.0												

Bottom of test pit at 5.0 feet.

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250 Big Sur Drive
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Telephone: (805) 685-6511

TEST PIT NUMBER TP 05

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 164 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY G. Masterman **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
164	0				**Earth Fill (ef)** Silty Gravel (GM) - dark brown to black, medium dense to dense, moist, numerous roots, angular gravels from 1/2" to 1"								
163	1				**Bedrock: Monterey Formation (Tm)** Siliceous Shale - dark gray to black, moderately hard, slabby, tightly fractured, slightly weathered, shear surface on south side of test pit								
162	2												
161	3	MC 1					27	67	54	48	6		ATT, SHEAR

Bottom of test pit at 3.0 feet.

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TEST PIT NUMBER TP 06

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/24/13 **COMPLETED** 4/24/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Earth Fill (ef)** Silt (ML) with some Sand and scattered rock fragments - light brown, slightly dense, slightly moist, abundant roots								
	1												
	2	MC 1			**Bedrock: Monterey Formation (Tm)** Siliceous Shale and Chert - dark gray to black, moderately hard, slabby, tightly fractured		14	73					

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 2.5 feet.

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TEST PIT NUMBER TP 07

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/24/13 **COMPLETED** 4/24/13
GROUND ELEVATION 140 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
140	0				**Slopewash (Qsw)** Sandy Silt / Silty Sand (SM) with scattered rock fragments - light brown, slightly dense, slightly moist, scattered roots								
139	1				**Bedrock: Santa Barbara Formation (Qsb)** Sand to Silty Sand with cemented zones and scattered concretions - light yellowish brown, very dense to moderately hard, moist, fossiliferous (broken shell hash)								
138	2	MC 1					11	98					
137	3												
		MC 2					13	99					SHEAR

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 3.5 feet.

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TEST PIT NUMBER TP 08

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/24/13 **COMPLETED** 4/24/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Slopewash (Qsw)** Sandy Silt (ML) with scattered rock fragments - light brown, slightly dense, slightly moist, scattered roots								
	1				**Fault Zone (Sheared bedrock)** Test pit excavated on supposed Carpinteria fault trace Complex zone of shearing/faulting which brings into contact Monterey (Tm) and Santa Barbara (Qsb) formations. Tm thrust up and over Qsb. Shear: N50W/16SW; base of 3" thick, brown sheared clay								
	2												
	3												

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 3.0 feet.

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TEST PIT NUMBER TP 09

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/24/13 **COMPLETED** 4/24/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0				**Slopewash (Qsw)** Sandy Silt (ML) with scattered rock fragements - light brown, soft to loose, slightly moist, scattered roots, downhill sloping contact.								
	1				**Bedrock: Monterey Formation (Tm)** Siliceous Shale and Diatmoceous Shale - gray to light brown, slightly to moderately hard, well-bedded, tightly fractured, slightly weathered								
	2	MC 1			bedding: N65W/Vert		14	99					

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 2.5 feet.

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TEST PIT NUMBER TP 10

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/24/13 **COMPLETED** 4/24/13
GROUND ELEVATION 117 ft **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
117	0				**Earth Fill (ef)** Sandy, Clayey Silt (ML) with scattered rock fragments - light brown, medium stiff, moist, mottled, few roots								
116	1				**Bedrock: Monterey Formation (Tm)** Siliceous Shale and Shale - gray to light brown, slightly to moderately hard, well-bedded, tightly fractured, moderately weathered and highly fractured to 2.5' below grade								
115	2												
114	3	GB 2 MC 1			bedding: N85W/82N (overturned)		16 16	80					SHEAR CHEM

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 3.5 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

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TEST PIT NUMBER TP 11

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/25/13 **COMPLETED** 4/25/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef) or Landslide Debris (Qls)** Silt with some Sand and trace cley with abundant rock fragments and cobbles - brown, stiff, dry to slightly moist, scattered roots, mottled.								
	2.5				@4' - Layer of mixed seaweed and large rock fragments								
	5.0				**Beach Sand (Qbs)** Fine- to medium-grainded Sand with scattered cobbles - light brown to tan, loose to slightly dense, dry, prone to caving								

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 6.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

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TEST PIT NUMBER TP 12

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/25/13 **COMPLETED** 4/25/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION --
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION --
NOTES
AFTER EXCAVATION --

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt with some Sand (ML) with scattered shale fragments, stiff, slightly moist, porous with scattered roots, few bits of trash								
		GB 1											
	2.5												
		MC 2					18	87					SHEAR
		MC 3					17	90					
	5.0				@4'-8" - Brown Clayey Silt (ML) with scattered small angular to rounded rock fragments, moist, occasional shell fragments (weakly developed soil ?) **Beach Sand (Qbs)** Fine- to medium-grainded Sand with scattered cobbles - light brown to tan, loose to slightly dense, dry, prone to caving								

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 6.0 feet.

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TEST PIT NUMBER TP 13

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/25/13 **COMPLETED** 4/25/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt with some Sand (ML) with abundant shale fragments - light brown, soft and loose, dry, prone to sloughing and caving								
	2.5												
	5.0				@7' begin to hand auger								
	7.5				**Beach Sand (Qbs)** Fine- to medium-grainded Sand with scattered cobbles - light brown to tan, loose to slightly dense, dry, prone to caving @~8' hand auger refusal on small rounded cobble. Probable contact with Qbs								

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 8.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

TEST PIT NUMBER TP 14

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/25/13 **COMPLETED** 4/25/13
GROUND ELEVATION **TEST PIT SIZE** 24 x 36 inches
EXCAVATION CONTRACTOR Mike's Excavating Service
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt with some Sand (ML) with scattered to abundant shale fragments, stiff, slightly moist, porous with scattered roots, few bits of trash								
	2.5	MC 1					14	83					SHEAR
	5.0				@ 6' - begin to hand auger								
	7.5				**Beach Sand (Qbs)** Fine- to medium-grainded Sand with scattered cobbles - light brown to tan, loose to slightly dense, dry, prone to caving Unable to advance auger due to cobble(s).								

Test pit backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of test pit at 8.8 feet

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360 South Hope Avenue, Suite C-110
Santa Barbara, CA 93105
Telephone: 805-563-0788

TEST PIT NUMBER TP 15

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry to slightly moist, slightly compact to locally loose, scattered roots and rootlets							
	2.5	MC				10	84					
		GB				4		NP	NP	NP		ATT
		MC			4.0' - 18" diameter, slightly corroded metal conduit on uphill (north) side of test pit	5	81					
	5.0				6.0' - test pit excavation halted due to caving Bottom of test pit at 6.0 feet.							
	7.5											
	10.0											

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TEST PIT NUMBER TP 16

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Fine-grained Silty Sand / Sandy Silt (ML) with abundant angular shale fragments - light brown, dry to slightly moist, slightly compact to locally loose, scattered roots and rootlets Refusal at 1.0' below grade.							
					Bottom of test pit at 1.0 feet.							
	2.5											
	5.0											
	7.5											
	10.0											

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TEST PIT NUMBER TP 17

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Slopewash (Qsw)** Sand with silt (SW/SM) - light brown, slightly moist, loose							
	2.5	MC			**Terrace Deposits (Qt)** Fine- to medium-grained Sand with occasional gravel - light yellow, slightly moist, very dense and locally slightly cemented; medium-bedded and laminated	15	98				72	
		MC				10	95					DS
					4.5' - test pit refusal on large cobbles Bottom of test pit at 4.5 feet.							
	5.0											
	7.5											
	10.0											

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TEST PIT NUMBER TP 18

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Terrace Deposits (Qt)** Fine- to medium-grained Sand to Gravelly Sand - light brown to light reddish brown, slightly moist, dense to very dense							
	2.5	MC				4	110					
					Bottom of test pit at 4.0 feet.							
	5.0											
	7.5											
	10.0											

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TEST PIT NUMBER TP 19

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt to Sandy Silt (ML) matrix with shale fragments - light brown to light brownish yellow, dry to slightly moist, slightly compact, scattered roots and rootlets, occasional asphalt concrete fragments							
	2.5				**Natural Soil (Qns) / Colluvium (Qc)** Fine-grained Sandy Silt (ML) to Clayey Silt with occasional small weathered rock fragment - medium brown, slightly moist, medium stiff, locally slightly porous, scattered rootlets, occasional caliche stringer							
	5.0				**Beach Sand (Qbs)** Fine- to medium-grained Sand with scattered cobbles - light brown to tan, loose to slightly dense, dry, prone to caving							
	7.5				Cobbles and small boulders along sub-horizontal contact with bedrock							
					Bedrock: Sisquoc Formation (Tsq) Siltstone - gray, moist, moderately hard, tight, slightly weathered							
					Bottom of test pit at 9.0 feet.							
	10.0											

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TEST PIT NUMBER TP 20

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Sandy Silt (ML) matrix with shale fragments - light brown, slightly moist, slightly compact, scattered roots; grades to dark brown Clayey Silt with rock fragments							
	2.5											
	5.0				**Beach Sand (Qbs)** Cobbly fine- to medium-grained Sand - light brown to tan, loose to slightly dense, dry, prone to caving							
	7.5				Bottom of test pit at 7.0 feet.							
	10.0											

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TEST PIT NUMBER TP 21

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt to Sandy Silt (ML) matrix with shale fragments - light brown to light brownish yellow, dry to slightly moist, slightly compact, scattered roots, occasional asphalt concrete fragment							
	2.5	MC				10	87	37	26	11		ATT
	5.0				**Landslide Debris (Qls)** 4.5' - 7.5' - Highly fractured and brecciated siltstone fragments with little to no matrix - light yellow brown, dry, scattered roots, massive 7.5' - Qls becomes matrix-supported (light to medium brown clayey silt with scattered small rock fragments)							
	7.5	MC				15	86	44	28	16		DS, ATT
	10.0				**Beach Sand (Qbs)** Cobbly fine- to medium-grained Sand - light brown to tan, loose to slightly dense, dry, prone to caving							

Bottom of test pit at 10.0 feet.

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TEST PIT NUMBER TP 22

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt to Sandy Silt (ML) matrix with shale fragments - light brown to light brownish yellow, dry to slightly moist, slightly compact, scattered roots and rootlets, occasional asphalt concrete fragments							
	2.5	GB				10						
		MC				9	66					
	5.0				Hand-auger from 5' below grade.							
	7.5				**Beach Sand (Qbs)** Fine- to medium-grained Sand grading to Cobbly Sand - light brown to tan, loose to slightly dense, dry, prone to caving							
		MC				0	103					DS
		GB				2					2	
		GB			**Bedrock: Monterey Formation (Tm)** Siltstone - gray, moist, moderately hard, hydrocarbon odor	13						
	10.0	MC				33	79					

Bottom of test pit at 10.5 feet.

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TEST PIT NUMBER TP 23

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Earth Fill (ef)** Silt to Sandy Silt (ML) matrix with shale fragments - light brown to light brownish yellow, dry to slightly moist, slightly compact, scattered roots and rootlets							
	2.5											
	5.0				Hand-augered from 5' below grade.							
					Beach Sand (Qbs) Fine- to medium-grained Sand grading to Cobbly Sand - light tan, dry, loose							
	7.5				**Colluvium (Qc)** Silty Sand to Sandy Silt (SM/ML) matrix with scattered to abundant shale fragments - light brown to light brownish yellow, dry to slightly moist, porous with caliche							
	10.0				**Beach Sand (Qbs)** Fine- to medium-grained Sand grading to Cobbly Sand - light tan, dry, loose							

Bottom of test pit at 10.0 feet.

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TEST PIT NUMBER TP 24

CLIENT City of Carpinteria, Parks and Recreation Dept.
PROJECT NAME Rincon Multi-Use Trail
PROJECT NUMBER
PROJECT LOCATION Carpinteria, Santa Barbara County, CA
DATE STARTED 3/13/18 **COMPLETED** 3/13/18
GROUND ELEVATION **TEST PIT SIZE** 24" x 36" inches
EXCAVATION CONTRACTOR Juan's Landscaping
GROUND WATER LEVELS:
EXCAVATION METHOD Hand-Dug Test Pit
AT TIME OF EXCAVATION ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF EXCAVATION ---
NOTES
AFTER EXCAVATION ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Landslide Debris/Colluvium (Qls/Qc) or Mudflow Deposits** Silt with fine-grained Sand to Clayey Silt (ML) matrix with scattered to abundant weathered shale and tabular shale fragments - light brown to light orange brown, slightly moist, medium stiff to stiff, matrix-supported, massive with no internal structure							
	2.5				*Test pit excavated below a 5'-7' high near vertical cut exposing Qls/Qc							
	5.0											
	7.5											
	10.0				**Beach Sand (Qbs)** Cobbly fine- to medium-grained Sand - light brown to tan, dry, loose to slightly dense, prone to caving							

Bottom of test pit at 10.0 feet.

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Telephone: (805) 685-6511

BORING NUMBER TT 01

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 67 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Slopewash (Qsw)** Sandy Silt (ML) to Silty Sand (SM) - light brown to brown, loose, moist, abundant roots and rootlets, 30°-40° downhill sloping contact								
65.0	2.5				**Terrace Deposit (Qt) ?** Silty Sand (SM) to Sand w/ Silt (SP) grading to cobble/boulder with sand matrix interval - pale yellow to brownish yellow, dense, moist, few scattered roots, boulders to 24" diameter								
62.5	5.0												

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 6.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

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BORING NUMBER TT 02

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 66 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
65.0	0.0				**Colluvium / Landslide Debris (Qcol/Qls)** Heterogenous mix of silt with some clay (matrix) and scattered to abundant rock fragments - light brown to brown, loose to slightly stiff, slightly moist, abundant AC fragments in upper 2'								
	2.5												
62.5		MC 1					17	79	46	29	17		ATT, SHEAR
	5.0												
60.0													
	7.5				@8' - diffuse and gradational downhill-sloping contact with weathered and highly fractured mudstone								
57.5		MC 2			**Bedrock: Sisquoc Formation (Tsq)** Mudstone - light brownish gray, slightly hard, weakly indurated, highly fractured and moderately weathered to 11' below grade, scattered roots, limonite weathering along fractures, massive		10	108					
	10.0	MC 3					11	107					SHEAR
55.0		GB 4					33						CHEM
	12.5												

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 13.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

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250 Big Sur Drive
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Telephone: (805) 685-6511

BORING NUMBER TT 03

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 67 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Colluvium / Landslide Debris (Qcol/Qls)** Clast-supported mix of light grayish brown mudstone fragments in brown silty matrix - contains zones of light brown silt/clayey silt infill, dry to slightly moist, abundant roots and rootlets								
65.0	2.5												
62.5	5.0												
60.0	7.5												
57.5	10.0				@11' - ~16° dip on sharp slide contact, 2"-3" thick zone of brown clayey silt (ML) matrix with scattered, small highly weathered mudstone fragments, moist, few roots								
55.0	12.5				**Bedrock: Sisquoc Formation (Tsq)** Mudstone - light brownish gray, slightly hard, limonite weathering along fractures, massive and weakly indurated								

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 13.5 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

BORING NUMBER TT 04

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 68 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING --
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING --
NOTES
AFTER DRILLING --

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Slopewash (Qsw)** Silty with minor clay and scattered rock fragments - light brown, loose, porous, abundant roots, contains few bits of trash								
67.5													
	2.5				@2.5' - steeply sloping and sharp contact with Tm bedrock								
65.0					**Bedrock: Monterey Formation (Tm)** Diatomaceous Shale - light brown, slightly to moderately hard, moist, thinly bedded, upper 2.5' highly weathered and fractured with abundant roots (better below)								
	5.0				bedding: N84W/60N (overturned)								
62.5		GB 1			bedding: N86W/64N (overturned)		15						CHEM

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 7.0 feet.

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Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

BORING NUMBER TT 05

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 70 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING --
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING --
NOTES
AFTER DRILLING --

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
70.0	0.0				**Slopewash (Qsw)** Abundant shale fragments in light brown silty matrix - dry, loose, scattered trash and debris, wedge thickens towards base of slope, abundant roots								
67.5	2.5				**Bedrock: Monterey Formation (Tm)** Shale and Diatomaceous Shale - brown to light brown, slightly to moderately hard, moist, thinly bedded bedding: E-W/74N (overturned)								
65.0	5.0												

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 7.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

BORING NUMBER TT 06

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 72 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING --
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING --

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Slopewash (Qsw)** Abundant shale fragments in light brown silty matrix - dry, loose, prone to caving, wedge thickens towards base of slope, abundant roots								
70.0	2.5												
67.5	5.0				**Bedrock: Monterey Formation (Tm)** Shale and Diatomaceous Shale - brown to light brown, slightly to moderately hard, moist, thinly bedded, highly fractured with abundant rootlets bedding: N85W/52N (overturned)								
65.0	7.5												

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 8.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
Goleta CA 93117
Telephone: (805) 685-6511

BORING NUMBER TT 07

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 74 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
	0.0				**Slopewash (Qsw)** Abundant shale fragments in light brown silty matrix - dry, loose, prone to caving, wedge thickens towards base of slope, abundant roots								
72.5	2.5												
70.0					**Bedrock: Monterey Formation (Tm)** Laminated siliceous siltstone and shale - dark gray to black, moderately hard, slabby, fractured and jointed, moderately to slightly weathered (rock weathers to light tan to cream colored) bedding: N85W/Vert joint set: N18E/62NW (~4" spacing)								
	5.0	GB 1					18						CHEM
67.5													

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 6.5 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
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BORING NUMBER TT 08

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 75 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
75.0	0.0				**Earth Fill (ef)** Silt to Clayey Silt (ML) with scattered to abundant rock fragments - light brown, stiff, moist, mottled, scattered roots								
72.5	2.5												
70.0	5.0				**Bedrock: Monterey Formation (Tm)** Laminated siliceous siltstone and shale - dark gray to black, moderately hard, slabby, fractured and jointed, slightly weathered bedding: N65W/53NE (overturned) bedding: N82W/71N (overturned)								

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 6.5 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Bengal Engineering
250 Big Sur Drive
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Telephone: (805) 685-6511

BORING NUMBER TT 09

CLIENT City of Carpinteria, Parks and Recreation Dept
PROJECT NAME Carp Rincon Trail Bikeway
PROJECT NUMBER
PROJECT LOCATION Carpinteria, SB County, CA
DATE STARTED 4/23/13 **COMPLETED** 4/23/13
GROUND ELEVATION 75 ft **HOLE SIZE** 30 x 96 inches
DRILLING CONTRACTOR Mac Brown Excavating
GROUND WATER LEVELS:
DRILLING METHOD Backhoe Test Pit
AT TIME OF DRILLING ---
LOGGED BY E. Pongracz **CHECKED BY**
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEV (ft)	DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	UNDRAINED SHR STRENGTH (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)	OTHER TESTS
75.0	0.0				**Earth Fill (ef)** Silt to Clayey Silt (ML) with scattered to abundant rock fragments - light brown, stiff, moist, mottled, scattered roots								
72.5	2.5												
70.0	5.0				**Natural Soil (Qns)** Clayey Silt with scattered rock fragments - brown, slightly moist to moist, scattered roots **Colluvium (Qcol)** Brecciated Tm in brown, clayey silt (ML) matrix - varies from clast- to maxtrix-supported								
67.5	7.5				@8' - irregular, gently S dipping contact with Tm **Bedrock: Monterey Formation (Tm)** Laminated siliceous siltstone and shale - dark gray to black, moderately hard, slabby, fractured and jointed, slightly weathered bedding: N77E/74NW (overturned) bedding: N78E/69NW (overturned)								
65.0	10.0												

Test trench backfilled with native materials. Groundwater and/or seepage was not encountered.
Bottom of borehole at 10.0 feet.

BENGAL GEOTECH BH V5 - BENGAL MOD GINT STD US LAB 2-10-10.GDT - 7/3/13 10:04 - C:\PROGRAM FILES (X86)\GINT\PROJECTS\CARP RINCON TRAIL BIKEWAY.GPJ

Exhibit 1

Attachment C: Recommended Conditions of Approval

Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022

PLANNING COMMISSION HEARING
PROJECT 19-2015-CUP/CDP
JANUARY 18, 2022

ATTACHMENT C: CONDITIONS OF APPROVAL RINCON TRAIL PROJECT

The Conditions set forth in this permit affect the title and possession of the real property that is the subject of this permit and shall run with the real property or any portion thereof. All the terms, covenants, conditions and restrictions herein imposed shall be binding upon and inure to the benefit of the owner (applicant, developer), his or her heirs, administrators, executors, successors and assigns. Upon any sale, division or lease of real property, all the conditions of this permit shall apply separately to each portion of the real property and the owner (applicant, developer) and/or possessor of any such portion shall succeed to and be bound by the obligations imposed on the owner (applicant, developer) by this permit.

PROJECT DESCRIPTION

1. This Conditional Use Permit and Coastal Development Permit is based upon and limited to compliance with the project description, the hearing exhibits (Exhibit 1, Attachment B to the staff report dated January 18, 2022) and conditions of approval set forth below. Any deviations from the project description, exhibits or conditions must be reviewed and approved by the City for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

   The project description is as follows:

   The City of Carpinteria Parks and Recreation Department is seeking approval of a Conditional Use Permit and Coastal Development Permit to construct a 850-foot segment of Class I multi-use path in the City and Caltrans rights-of-way at the eastern end of the City of Carpinteria to allow for a dedicated bike and pedestrian path connection between the City of Carpinteria and Rincon Beach County Park in unincorporated Santa Barbara County. The remainder of the approximately 2,800-foot long trail is located in the jurisdiction of the County of Santa Barbara. The trail is intended to support alternative transportation in the area and fill in a missing link in the 1,200 mile California Coastal Trail.

   The overall project limits would extend from near the Carpinteria Avenue/State Highway 150 intersection to the western terminus of the Rincon Beach County Park parking lot in unincorporated Santa Barbara County. Beginning in the unimproved shoulder just east of the Carpinteria Avenue/State Highway 150 intersection, the trail would trend east/northeast, roughly paralleling the southbound US Highway 101 on-ramp. The trail would be situated on a new bench cut into the existing

manufactured slope above the on-ramp and would gently descend in elevation toward the Union Pacific Railroad (UPRR) corridor where the trail would cross the UPRR corridor using a new pre-fabricated 160-foot long, 14-foot wide clear span bridge. South of the UPRR corridor, the trail would turn due east and gradually descend the face of the ocean-side bluff, terminating at the western terminus of the Rincon Beach County Park parking lot.

The portion of the trail under consideration by the City of Carpinteria Planning Commission extends from Carpinteria Avenue to the eastern City boundary, roughly coincident with the middle of the trail segment north of the UPRR corridor, and measures approximately 850 linear feet. The County of Santa Barbara has permit jurisdiction over the remainder of the trail (approximately 1,950 linear feet), continuing east from the city boundary (and including the new bridge crossing over the UPRR corridor) to the pathway's terminus at the Rincon Beach County Park parking lot.

The proposed concrete multi-use path would feature a five-foot travel lane in each direction, and a paved shoulder width of three feet on each side, for a total path width of 16 feet. A six-foot wide shallow concrete v-ditch would run along the inside of the trail length for the purposes of capturing and conveying stormwater to onsite drainage facilities. Protective fencing would be provided along the trail alignment to keep trail users on the improved path.

Total grading and earthwork quantities for the entirety of the project necessary to cut an Americans with Disability Act (ADA)-compliant trail bench, stabilize slopes, and control stormwater runoff through the project area are estimated at 96,040 cubic yards of cut. Approximately 10,519 cubic yards of the cut material would be used for fill onsite; the remaining 85,521 cubic yards of cut material would be exported offsite. Approximately 45% of the estimated earthwork (equivalent to ~43,200 cubic yards of cut) is expected to occur on the inland side of the UPRR alignment; and the remaining 55% (~52,800 cubic yards) on the ocean side of the UPRR alignment. A storm drain collection system is proposed for the trail alignment, which would utilize a combination of repaired existing and new piped storm drains on the bluff face and drain outlets to the ocean. The portion of the trail located in the jurisdiction of the City of Carpinteria would tie into and be served by existing Caltrans storm drain infrastructure for US Highway 101. A habitat restoration plan is included to restore areas disturbed during construction and to mitigate for permanent removal of vegetation to accommodate the new trail.

As part of the project, the City will obtain an easement from UPRR for the bridge crossing over, and trail improvements within, the UPRR alignment. The City is also anticipating the acquisition of right-of-way from the California Department of Transportation (Caltrans) to accommodate the trail alignment.

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval hereto. All plans (such as Landscape Plans) must be submitted for review and approval and shall be implemented as approved by the City.

MITIGATION MEASURES FROM THE CERTIFIED PROJECT ENVIRONMENTAL IMPACT REPORT (EIR)

2. **MM-AES-1 Board of Architectural Review.**
The Owner/Applicant shall obtain City Architectural Review Board ("ARB") and County South Board of Architectural Review ("SBAR") approval for project design. All project elements (e.g., design, scale, character, colors, materials, and landscaping) shall be compatible with vicinity development and shall conform in all respects to ARB/SBAR approval.
Plan Requirements and Timing: The Owner/Applicant shall submit architectural drawings of the project including photo renditions from the beach of the storm drains proposed along the bluff face for review and shall obtain final City ARB and County SBAR approval prior to issuance of the zoning clearance. Grading plans, if required, shall be submitted to the City's Planning Department concurrent with or prior to ARB/SBAR plan filing with the Carpinteria Community Development Department or County Planning and Development. ***Monitoring*:** The Owner/Applicant shall demonstrate to Community Development Department staff and Planning & Development Department compliance monitoring staff that the project has been built consistent with approved ARB/SBAR design and landscape plans prior to Final Building Inspection Clearance.

3. **MM-BIO-1 Workers Environmental Awareness Program (WEAP).**
The Owner/Applicant shall fund an approved biologist to prepare and implement a worker education and awareness program (WEAP) specific to the project. The program shall be presented to all individuals involved in the construction of the project. The program shall include information focused on sensitive vegetation communities, sensitive wildlife and plant species, and common wildlife species and their habitats and shall include, but not be limited to, the following:
    - Description of sensitive vegetation communities.
    - Workers shall be provided with photographs of sensitive biological resources including sensitive wildlife and plant species.
    - Workers shall be informed verbally and in writing of the various project tasks that require biological surveys and monitoring for resource protection.
    - Workers shall be provided with a photograph or description of the markers for active bird nests, trees, or other mitigation areas, so that they shall know these are not to be disturbed without a biological monitor present.

- Workers shall be informed not to litter. All trash and litter shall be picked up and removed from the construction sites at the end of each day.
- Workers shall be informed to obey a speed limit of 15 miles per hour while traveling on the project site to avoid collisions with wildlife.
- Workers shall avoid driving over or otherwise disturbing areas outside the designated construction areas.

Plan Requirements and Timing: The Owner/Applicant shall submit the WEAP to the City of Carpinteria ("City") and County of Santa Barbara ("County") for review and approval prior to zoning clearance approval. All workers, contractors, and visitors shall attend the WEAP prior to entering the project site and performing any work. The Owner/Applicant shall provide copies of the training attendance sheets to City and County staff as a record of compliance with this measure on a monthly basis. The WEAP shall be reviewed and approved by the City and County prior to Zoning Clearance approval. Implementation of the WEAP training shall occur prior to the start of construction and as new crew members are added to the project. ***Monitoring:*** The City and County permit compliance staff will ensure compliance with the WEAP throughout construction by review of attendance sheets and hardhats, inspection of the site, and interviewing workers, as appropriate.

4. **MM-BIO-2 Fencing.**
To prevent inadvertent impacts on adjacent sensitive vegetation communities including County ESH and City ESHA, native vegetation, special-status species, and common wildlife species and their habitats, construction limits will be fenced with highly visible fencing and staked. Wildlife safe highly visible construction fencing shall be installed to identify the limits of grading/disturbance, which would reduce potential human trampling outside of the construction limits and minimize the potential spread of non-native weeds or invasive plant species. Wildlife-safe construction fencing and flagging shall remain in place during construction and replaced as needed.
Plan Requirements and Timing: The detailed fencing plan, showing the location of required fencing shall be reviewed and approved by City and County staff prior to Zoning Clearance approval. This condition shall be printed on all project plans. The detailed fencing plan, showing the location of fencing shall be submitted to City and County staff for review and approval prior to Zoning Clearance approval. The fence shall be installed prior to the start of ground disturbing activities. ***Monitoring:*** The City of Carpinteria and County staff will inspect the project plans and site, to ensure compliance with this measure as appropriate.

5. **MM-BIO-3 Pre-construction California Legless Lizard Survey and Relocation.**
Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:
   i. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall include areas with loose, moist soils occurring in scrub habitat with high coverage of deerweed (*Lotus scoparius*) or

California goldenbush, in arroyo willow (*Salix lasiolepis*) thickets or in other suitable scrub or woodland habitat.

ii. Capture and relocation shall take place no more than five days prior to the initiation of construction.

iii. These surveys shall be performed by lightly raking loose soil, sand and leaf litter with a wooden rake for a sufficient period to determine that no legless lizards are present, or all legless lizards have been captured.

iv. Any lizards found shall be placed in a receptacle with sand and a wet towel and relocated to the previously designated receptor site.

***Plan Requirements and Timing*:** Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist. ***Monitoring*:** The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

6. **MM-BIO-4 Pre-construction Woodrat Survey and Relocation.**
Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:

i. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall be within similar habitat and an adequate distance away from any locations that might be subject to increased human disturbance, such as adjacent to a walking path.

ii. These pre-construction surveys shall be performed searching all coastal sage scrub or coastal bluff scrub within the disturbance area for middens or other sign of the species.

iii. Any middens and woodrats found shall be live-trapped and relocated to the pre-determined receptor site. The midden shall be dismantled and the materials placed at the relocation site.

***Plan Requirements and Timing*:** Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist. ***Monitoring*:** The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

7. **MM-BIO-5 Habitat Mitigation and Monitoring Plan.**
Prior to issuance of zoning clearance approval, the Owner/Applicant shall contract with a qualified biologist to develop a Habitat Mitigation and Monitoring Plan (Plan) to mitigate for impacts to County ESH/City ESHA vegetation communities. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities, and, therefore, preserve or provide wildlife habitat, in areas impacted by construction of the trail but outside the trail-related impervious surfaces and within similar habitats adjacent to the impacted biological resources. The Plan may focus on the following:

- In-kind, on-site restoration of areas where coastal sage scrub or coastal bluff scrub has been removed;
- Enhancement of impacted areas on site currently occupied by ornamental, disturbed or developed areas;
- Restoration of areas occupied by non-native habitats or native habitats with large components of non-native vegetation, within similar habitats adjacent to the impacted biological resources.

A total of 4.32 acres of impacts are proposed to County ESH/City ESHA native vegetation communities. Under the Plan, impacts to S3/County ESH/City ESHA native vegetation communities (California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association and lemonade berry scrub alliance, *Rhus integrifolia* association) that total 0.59 acres shall be restored in-kind at 4:1. Impacts to S4 and S5/County ESH/City ESHA native vegetation communities (quailbush scrub alliance, *Atriplex lentiformis* association, California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association, and coyote brush scrub alliance, *Baccharis pilularis* association) that total 3.73 acres shall be restored in-kind at 2:1. To the extent feasible, restoration should occur on site and, any additional mitigation required shall be carried out on areas within adjacent land controlled by the County or City, such as the Rincon Bluffs Preserve or Rincon Beach County Park.

A qualified biologist/botanist shall develop the Plan, which shall provide specific measures to restore or enhance habitat to replace the loss of coastal sage scrub and coastal bluff scrub communities. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with long term timing and monitoring requirements. The Plan shall:

i. Provide an up-to-date inventory of on-site native vegetation resources.

ii. Define attainable and measurable goals and objectives to achieve through implementation of the Plan. Goals and objectives shall focus on replacement of coastal sage scrub, coastal bluff scrub and rare plants removed during construction.

iii. Provide site selection and justification. Prior to identifying habitat restoration mitigation areas, both within the project area and adjacent lands, the habitat shall be surveyed for sensitive vegetation communities and special-status species, to ensure avoidance of impacts during habitat restoration implementation. Additionally, potential adjacent mitigation lands shall be assessed to ensure sites are suitable and appropriate for implementation of habitat restoration for the impacted native vegetation communities.

iv. Detail a restoration work plan including methodologies, restoration schedule, plant materials (seed and container plant) sourcing – locally genetic stock, and implementation strategies.

v. Provide a detailed maintenance plan to include removal of invasive non-native species.

vi. Define annual and final performance standards. Prior to grading, the project-related native coastal bluff scrub and coastal scrub vegetation communities shall be assessed by vegetation community type for percent cover (both

basal and vegetative), species diversity, density, and abundance. This project site native vegetation community data shall be used to define performance standards for native habitat restoration by vegetation layers (tree, shrub, grass, and forb) for each vegetation community type and for non-native plant species.

vii. Identify that the restoration areas shall be irrigation-free for at least 3 years and the performance standards have remained stable (no negative trend for richness/ diversity/ abundance/ cover of native species and no positive trend for invasive/non-native cover for each vegetation layer) for at least 3 years.

viii. Provide a monitoring plan to include methods and analysis of results. Also, include goals, success or failure criteria, and an adaptive management plan, contingency actions, and suggestions for failed restoration efforts.

Plan Requirements and Timing: Prior to issuance of zoning clearance approval, the Owner/Applicant shall contract with a qualified biologist to develop the Plan. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities in areas impacted by construction of the project. ***Monitoring:*** The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. Additionally, California Department of Fish and Wildlife shall approve the Plan prior to issuance of zoning clearance approval. City and County staff shall periodically conduct site inspections to ensure compliance on site. Restored areas shall be monitored for five years following planting. Annual reports and the final report shall be submitted to the City and County.

8. **MM-BIO-6 Weed Management Plan.**
Prior to issuance of zoning clearance approval, the Owner/Applicant shall contract with a qualified biologist to develop a Weed Management Plan to be implemented during construction and implementation of the Habitat Mitigation and Monitoring Plan. The Weed Management Plan shall include, but is not limited to, the following:

- Prior to ground disturbance, a City approved qualified biologist shall map invasive weeds within the limits of impacts plus a 100-foot buffer. Invasive weeds shall be defined as California Invasive Plant Inventory Database (Cal-IPC) moderate and high ratings. Invasive species subject to control measures shall be identified. Note that non-native grasses such as bromes and wild oats shall be mapped but are not subject to control measures. Prior to ground disturbance, areas with invasive weeds shall be treated according to control methods below and BMPs for invasive weeds.
- To prevent the spread of invasive weeds and inhibit germination, the following shall be implemented:
    - Maintain vehicle wash and conduct inspections to monitor the types of materials brought on site to minimize the potential for invasive weed introduction
    - Limit disturbance areas to the permitted disturbance area
    - Limit ingress and egress to defined routes
    - Use certified weed-free products

- Invasive weed control methods shall include legally permitted herbicide, manual, and mechanical methods approved for application. The application of herbicides shall be in compliance with state and federal laws and regulations under the prescription of a pest control advisor, with the City's concurrence, and shall be implemented by a licensed qualified applicator. All product labels shall be followed. Spot treatments shall be the method of application and broadcast applications shall be avoided. Herbicides shall not be applied during or within 72 hours of a forecasted measurable rain event or during high wind conditions. Invasive weed debris accumulated during manual and mechanical removal methods shall be disposed of at an appropriate location off-site. Maintenance shall be timed to remove invasive weeds prior to seed production. The maintenance crew shall coordinate with the City approved biologist to avoid and minimize impacts to plant species and wildlife species.
- A City approved qualified biologist shall perform annual monitoring within the limits of disturbance and a 100-foot buffer to map and document invasive weed species. At any time during implementation of the Weed Management Plan, monitoring frequency may increase as needed to provide guidance to maintenance crews.

Plan Requirements and Timing: Prior to issuance of zoning clearance approval, the Owner/Applicant contract with a qualified biologist to develop the Plan. The Plan shall outline efforts to implement a weed management plan to control invasive weeds. Pre-construction survey results shall be reported and ongoing invasive weed control efforts and annual survey results shall be submitted annually and for the five year duration of the Habitat Mitigation and Monitoring Plan. ***Monitoring:*** The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. City and County staff shall periodically conduct site inspections to ensure compliance on site and to ensure the Plan is fully implemented.

9. **MM-BIO-7 Pre-construction Nesting Bird Surveys.**
Within 30 days prior to any vegetation clearing or ground disturbance, or use of noise-generating equipment associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically mid-February through August in the project region, or as determined by a qualified biologist), the Owner/Applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of special-status bird species, or of any bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code, are present in the disturbance zone or within 300 feet (500 feet for raptors) of the area to be disturbed. The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground disturbance is delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. The Owner/Applicant or contractor shall provide the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort.

If active nests are found, including any nests for Cooper's hawk, clearing and use of noise-generating construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. The results of the surveys, including graphics showing the locations of any nests detected, and any avoidance measures recommended, shall be submitted to the City and County within 14 days of completion of the pre-construction surveys to document compliance with applicable state and federal laws pertaining to the protection of native birds.
***Plan Requirements and Timing*:** Pre-construction nesting bird surveys shall be completed within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading during the bird nesting season (typically mid-February to August). The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. ***Monitoring*:** The City of Carpinteria and County staff shall ensure the pre-construction nesting bird surveys and any avoidance requirements are completed prior to commencement of any earthmoving activities.

10. **MM-CR-1 Cultural Resource Treatment and Inadvertent Discovery Plan.** Potential impacts to cultural resources shall be minimized through development of protocols for practical adherence of mitigation measures CR-2 and CR-3 prior to and after ground disturbing construction activities associated with the proposed project. These protocols shall be outlined in a Cultural Resource Treatment Plan (CRTP). The CRTP shall be developed by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, prior to the implementation of ground disturbing activities and include wording of each mitigation measure CR-2-4, specific and detailed explanation for implementation of each mitigation measure and contact protocol. The CRTP shall be provided to all agency personnel, consulting tribes, contractors and archaeological personnel. The existence and necessity for adherence to the CRTP shall be noted on plans, handbooks, or the like associated with tasks that may incur ground disturbance either intentionally or inadvertently.
Plan Requirements and Timing: Prior to issuance of a grading permit, the Owner/Applicant shall contract with a County-qualified/City-approved archaeologist to develop the required CRTP in accordance with the above criteria. ***Monitoring:*** City of Carpinteria/County of Santa Barbara staff shall review and authorize the CRTP prior to the commencement of ground disturbance activities to ensure that the CRTP adheres to the criteria established in CR-1.

11. **MM-CR-2 Workers Environmental Awareness Program (WEAP) Training.** All personnel participating in tasks that may incur ground disturbance either intentionally or inadvertently shall be briefed regarding unanticipated discoveries prior to the start of said activities. A basic presentation shall be prepared by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional

Qualification Standards to inform all personnel working on the project about the archaeological sensitivity of proposed project areas. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during project activities and explain the importance of and legal basis for the protection of cultural resources. Each personnel shall also be instructed in the proper procedures to follow in the event that cultural resources or human remains are encountered. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor, qualified archaeologist and if human remains are encountered, the County coroner.
Plan Requirements and Timing: Prior to issuance of a grading permit, the Owner/Applicant shall contract with a County-qualified/City-approved archaeologist to develop and conduct the required WEAP Training in accordance with the above criteria. ***Monitoring:*** City of Carpinteria/County of Santa Barbara staff shall ensure the required WEAP training has been conducted by attending the WEAP Training and documenting attendance of required personnel by means of a sign in sheet completed by all attendees of the WEAP Training.

12. **MM-CR-3 Archaeological Monitor.**
Initial ground disturbing activities shall be monitored by a County-qualified/City-approved archaeologist in accordance with the following specifications:
Temporary Impact Areas (equipment staging and materials storage outside trail alignment) – a County-qualified/City-approved archaeologist shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site.
Permanent Impact Areas not including bridge piling installation (all areas of the trail alignment excepting the bridge approaches area on both sides of the UPRR alignment) – a County-qualified/City-approved archaeologist shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.
Bridge piling installation – a County-qualified/City-approved archaeologist shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.
The monitor shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitoring reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to both the City and County.

***Plan Requirements and Timing*:** Prior to issuance of a grading permit, the Owner/Applicant shall contract with a County-qualified/City-approved archaeologist to monitor initial ground disturbance activities in accordance with the above criteria.
***Monitoring*:** City of Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist provide monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources.

13. **MM-CR-4 Discovery of Cultural Resources.**
In the event cultural resources are encountered, construction shall be redirected to another area of the project while data/resource assessment and recovery is accomplished.
Grading/construction shall be immediately suspended in the immediate area (no less than 50 feet from the area of the discovery) where cultural resources are encountered and temporarily redirected to another portion of the project area to allow the archaeologist to assess the nature, extent and significance of any discoveries and develop appropriate management recommendations for archaeological resource treatment consistent with Santa Barbara County Guidelines for the Implementation of California Environmental Quality Act of 1970 (as amended May 25, 2010). It is anticipated that recovery of artifacts would occur where project elements (such as pilings) would conflict with in situ artifact locations, and such artifacts would be properly archived in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol.
Identified remedial action for the discovery shall be completed prior to allowing construction to recommence in the area, no less than 50 feet from the area of the discovery. The project sponsors shall be responsible for funding the assessment of archaeological resources encountered during construction, and for the proper archiving or preservation of such resources. A Phase 3 Archaeological Resources Assessment and Data Recovery Report shall be prepared to document any archaeological resources encountered during construction.
***Plan Requirements and Timing*:** Prior to issuance of a grading permit, the Owner/Applicant shall contract with a County-qualified/City-approved archaeologist to provide archaeological assessment and recovery of any archaeological resources encountered during project construction, in accordance with the above criteria.
***Monitoring*:** City of Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol.
The contracted archaeologist shall assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment.

14. **MM-GEO-1 Seismicity.**
The pedestrian bridge shall adhere to the recommendation identified in Appendix E to the Environmental Impact Report to withstand a peak ground acceleration (PGA) at the site of 0.8g generated by an earthquake of moment magnitude Mw=7.4. ***Plan Requirements and Timing:*** Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge design specification. ***Monitoring*:** City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect bridge construction to verify conformance with this specification.

15. **MM-GEO-2 Differential Settlement of Pedestrian Bridge Foundations.**
Bridge foundation construction shall adhere to the recommendation identified in Appendix E to the Environmental Impact Report, which specifies a deep foundation employing cast-in-drilled hole (CIDH) piles. Based on the anticipated loadings, Caltrans Standard Plan 24" CIDH Concrete Piles with 200 kips design capacity are recommended in the geotechnical report. Should hard cemented bedrock be encountered during the installation of the CIDH piles, coring may be necessary. ***Plan Requirements and Timing:*** Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge foundation specification. ***Monitoring*:** City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect foundation construction to verify conformance with this specification.

16. **MM-GEO-3 Soil Erosion/Slope Stability.**
Slope construction shall adhere to the recommendations in the geotechnical report, summarized below:
    i. All new fills placed along the trail alignment shall be placed as engineered geotextile-reinforced soils with subsurface/back drains.
    ii. Manufactured slope profiles shall be no steeper than as specified in the Bengal 2019 geotechnical report (Appendix E), or any updated version thereof which has been prepared to address final trail design.
    iii. Install adequate surface drainage facilities to collect and dispose of surface runoff properly, consistent with the drainage system designs included in 30% Project Plans for Rincon Multi- Use Trail (Appendix E), or as updated to address final trail design.
    iv. Hydro-seed the exposed newly cut and fill surfaces. Periodic watering and re-application of hydroseed shall occur as necessary until vegetation on slope surfaces has been successfully established.

    These measures, in conjunction with the slope flattening and load reduction resulting from the proposed slope cutbacks, should substantially reduce the hazards associated with both slope erosion and local/surficial slope instability under both static and seismic loading conditions.
    Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include the above specifications. ***Monitoring*:** City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect

slope and drainage system construction to verify conformance with these specifications.

17. **MM-HAZ-1 Aerially Deposited Lead (ADL).**
Surface soils within the trail alignment segment north of the UPRR corridor shall be tested for potential ADL presence to determine if such soils may be used as fill, or must be disposed in a properly licensed landfill. Using the risk based screening levels developed by California Office of Environmental Health Hazard Assessment (OEHHA), excavated soils with a lead concentration less than or equal to 80 mg/kg total lead (analyzed by USEPA Method 6010 or 6020) would be acceptable for reuse without restrictions, including as fill material within the Rincon Trail project. Excavated soils that are considered a California hazardous waste (total lead concentration greater than or equal to 1,000 mg/kg or a soluble lead concentration greater than or equal to 5 milligrams per liter [mg/L] as determined by the California Waste Extraction Test [CAWet]) or are a RCRA hazardous waste and must be disposed of in a Class I hazardous waste landfill. Excavated soils with lead concentrations below 1,000 mg/kg but above 80 mg/kg total lead may be eligible for reuse with specific restrictions to reduce or eliminate exposure, with prior written approval from DTSC, or may be disposed of at an appropriately permitted landfill. ***Plan Requirements***: ADL testing requirements and soil re-use restrictions according to identified ADL concentration shall be shown on grading and building plans. Since excess soil material would be generated through proposed grading activities, soils containing greater than 80 mg/kg total lead shall not be used as fill material for the project but shall be exported off site. Soil containing total lead greater than 1,000 mg/kg shall be disposed in a Class I hazardous waste landfill. ***Timing***: Condition shall be adhered to throughout all grading and construction activities. ***Monitoring***: City of Carpinteria and County of Santa Barbara staff shall ensure measures are on plans. City and County Grading Inspectors shall spot check and ensure compliance on site.

18. **MM-WAT-1 Obtain Coverage Under Construction General Permit.**
The project shall obtain coverage under a Construction General Permit via the State Water Resources Control Board (SWRCB) (Water Quality Order 99-08-DWQ). ***Plan Requirements***: The requirement to obtain coverage from the SWRCB under a Construction General Permit shall be indicated on grading plans. ***Timing***: Evidence of coverage under a Construction General Permit shall be provided to the City of Carpinteria Public Works Department and County of Santa Barbara Public Works Division prior to the initiation of grading. ***Monitoring***: City and County Public Works staff shall confirm evidence of the Construction General Permit issuance prior to issuance of grading permits.

19. **MM-WAT-2 Stormwater Pollution Prevention Plan.**
The construction contractor shall prepare a Stormwater Pollution Prevention Plan that includes Best Management Practices (BMPs) to be implemented and monitored prior to and during construction. The following BMPs shall be incorporated into the SWPPP to minimize potential construction-related water quality impacts:

i. Disturbed areas shall be stabilized or re-vegetated prior to the start of the rainy season. The work area shall be flagged to identify its limits. Vegetation shall not be removed or intentionally damaged beyond these limits.

ii. Construction materials shall be placed in designated areas where they could not enter water bodies or storm drains due to spillage or erosion.

iii. Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from watercourses and shall be disposed of regularly.

iv. During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. The concrete washout area shall be isolated from water bodies, and wash water and waste shall be removed from the project site. The location of the washout area shall be clearly noted at the construction site with signs.

v. All fueling of heavy equipment shall occur in a designated area removed from water bodies and other drainages, such that any spillage would not enter surface waters. The designated refueling area shall include a drain pan or drop cloth and absorbent materials to clean up spills. The location of the fueling area shall be clearly noted at the construction site with signs.

vi. Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant and shall be examined for leaks on a daily basis. All maintenance shall occur in a designated off-site area. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.

vii. Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned up immediately. Absorbent materials shall be maintained on the construction site for this purpose.

viii. Special considerations for work during the rainy season: stockpiled soils should be covered at the end of the work day, and concrete pouring shall be avoided within 15 days of a forecasted rain event to allow full curing, due to its toxic nature until it has fully cured.

***Plan Requirements*:** A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented prior to construction and shall include the above elements. The SWPPP shall be submitted to City and County Public Works for review and approval prior to the issuance of grading permits for the project. ***Timing*:** The stormwater features and BMPs shall be installed and operational prior to initiation of grading. ***Monitoring*:** City and County Public Works staff shall site inspect for installation and maintenance in accordance with the approved plan and periodically thereafter to ensure proper maintenance over the duration of construction activities.

20. **MM-WAT-3 Erosion and Sediment Control Plan.**
Best available erosion and sediment control measures shall be implemented and maintained during grading and construction. Best available erosion and sediment control measures may include, but are not limited to, use of sediment basins, gravel bags, silt fences, geo-bags or gravel and geotextile fabric berms, erosion control blankets, coir rolls, jute net and straw bales. Construction access points shall be stabilized using gravel beds, rumble plates or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.
***Plan Requirements and Timing*:** An erosion and sediment control plan shall be submitted to and approved by City and County Public Works prior to issuance of grading permits. The plan shall be designed and implemented to address erosion and sediment control during all phases of development of the site. ***Monitoring*:** City and County Public Works shall perform site inspections throughout construction.

21. **MM-WAT-4 Planting of Vegetation.**
As soon as practicable following the completion of trail construction, the contractor shall install native plantings for biological restoration and hydro-seed slope areas with an appropriate native plant seed mix, in order to provide long-term stabilization of soils disturbed during construction. Periodic watering and re-application of hydro-seed shall occur as necessary until vegetation on slope surfaces has been successfully established.
***Plan Requirements and Timing*:** Landscaping plans including biological restoration areas and hydro-seeding of manufactured slope areas submitted to City Community Development Department and County Planning & Development (CDD/P&D) for review prior to issuance of zoning clearance. ***Monitoring*:** CDD/P&D shall site inspect vegetation plantings and hydro-seed application before issuing final clearance and acceptance of the trail project.

22. **MM-WAT-5 Periodic Inspection and Maintenance of Storm Drain Components.**
Staff from City and County Parks/Public Works departments shall perform an annual inspection of stormwater components annually, prior to the on-set of the rainy season (November 1) to ensure all components are in good repair and are not blocked by debris or sediment. Any materials found to be obstructing flow in the drainage system shall be removed prior to November 1 each year. The exposed vertical portion of each of the corrugated metal pipe drains shall be examined annually for signs of corrosion, damage or openings in the drain pipe wall. Corrosion visible on the exterior pipe wall shall be treated and sealed promptly, any holes through the pipe wall shall be patched, or the damaged/affected segment shall be replaced or modified.
***Plan Requirements and Timing*:** The Applicant/Owner shall include these inspection and maintenance requirements in the final drainage system design plans. The plans shall be submitted to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review prior to

approval of a grading permit and issuance of zoning clearance. ***Monitoring*:** A memo with the annual inspection notes and corrective maintenance performed shall be prepared and submitted to the City and County Public Works Departments.

23. **MM-WAT-6 Storm Drain Filters.**
To minimize pollutants impacting the ocean, storm drain filters/inserts shall be installed in the project area storm drain inlets. The filters/inserts shall be maintained in working order.
Plan Requirements: Prior to approval of Grading Permits and issuance of zoning clearance, the Owner/Applicant shall submit plans identifying the type and location of filters/inserts to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review and approval. The location of such filters/inserts shall be noted on grading and building plans. ***Timing:*** Filters/inserts shall be installed prior to final clearance and shall be cleaned using approved methods at least twice a year, once immediately prior to November 1 (before the start of the rainy season) and once in January. ***Monitoring:*** CDD/P&D and City and County Public Works shall site inspect periodically throughout the construction phase to ensure proper installation. Records of maintenance shall be maintained by City/County and shall be submitted to CDD/P&D and City and County Public Works on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year, the records shall be maintained by the City/County. CDD/P&D and Public Works shall review the maintenance records and site inspect as needed following completion of construction to ensure periodic cleanout.

24. **MM-NOI-1 Construction Hours.**
Construction activity for site preparation and for future development shall be limited to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on state holidays (e.g., Thanksgiving, Labor Day) or weekends. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities are not subject to these restrictions. ***Plan Requirements*:** Two signs stating these restrictions shall be posted on site at each end of the proposed trail. ***Timing*:** Signs shall be in place prior to the beginning of and throughout all grading and construction activities. ***Monitoring*:** City and County Grading Inspectors shall spot check and respond to complaints.

25. **MM-NOI-2 Construction Equipment.**
All construction equipment with engines must have original manufacturer's approved muffling devices. All stationary equipment shall be physically buffered from nearby sensitive receptors.
***Plan Requirements*:** Plans shall indicate the requirement of original equipment manufacturer ("OEM") muffled equipment. ***Timing*:** This condition applies when any engine driven equipment is in use at the project site during construction. ***Monitoring*:** City of Carpinteria and County of Santa Barbara Grading Inspectors shall spot check and respond to complaints.

26. **MM-TCR-1 Native American Monitor/Observer.**
Initial ground disturbing activities shall be monitored by a Native American observer in accordance with the following specifications:
Temporary Impact Areas (equipment staging and materials storage outside trail alignment) – a Native American observer, ancestrally affiliated with the area, shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site.
Permanent Impact Areas not including bridge piling installation (all areas of the trail alignment excepting the bridge approach areas on both sides of the UPRR alignment) – a Native American observer, ancestrally affiliated with the area, shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.
Bridge piling installation – a Native American observer, ancestrally affiliated with the area, shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.
The monitor/observer shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitor reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to the City and County.
***Plan Requirements and Timing*:** Prior to issuance of a grading permit, the Owner/Applicant shall contract with a Native American observer, ancestrally affiliated with the area, to monitor initial ground disturbance activities in accordance with the above criteria. ***Monitoring*:** City of Carpinteria/County of Santa Barbara staff shall ensure the Native American observer, ancestrally affiliated with the area, provide monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources.

PROJECT SPECIFIC CONDITIONS

27. **Mitigation Compliance, Monitoring and Reporting Requirement.**
Owner/Applicant shall submit to the Community Development Department and County Planning & Development (CDD/P&D) a draft monitoring program for the mitigation measures identified in the Certified EIR, approved Project Description and Conditions of Approval for review and comment. A City-approved biologist and mitigation monitors responsible for permit compliance monitoring shall be

retained and paid for by the applicant. The mitigation monitoring program shall include, but not be limited to the following elements for the entirety of the project:

- Mitigation Measures. A list of the project's mitigation measures.
- Implementation of Mitigation. Timing and party responsible for implementation of each mitigation measure.
- Mitigation Monitoring. Timing and party responsible for monitoring of each mitigation measure and a list of mitigation monitors to be retained.
- Mitigation Reporting. Procedures, timing and responsible party for reporting to the City on project mitigation compliance and monitoring.

28. **Biologist.** A City-approved qualified biologist shall be designated by the Owner/Applicant. The biologist shall be responsible for ensuring compliance with the provisions of the Mitigation Monitoring and Reporting Program. The biologist shall have authority over all other environmental monitors provided by the Owner/Applicant. The Owner/Applicant shall submit the name, contact information and qualifications of the biologist and obtain approval from the Community Development Director prior to commencement of construction.

29. **Final Architectural Review.** The project shall return to the City of Carpinteria Architectural Review Board ("ARB") for final review and approval of construction plans. ***Plan Requirements:*** Plans submitted for final review by the ARB shall include construction plans and specifications all project elements, including but not limited to, fencing and railing, bridge design, signage, landscaping, and any proposed lighting. ***Timing:*** Final review by the ARB shall occur prior to zoning clearance and issuance of grading permits. ***Monitoring:*** CDD staff shall be responsible for ensuring the project receives final approval from the ARB prior to zoning clearance or issuance of grading permits. CDD staff shall ensure that the final plans approved for construction reflect any required revisions by the ARB.

30. **Traffic Management Plan.** Provide a detailed Traffic Management Plan for review by Public Works, Community Development, Carpinteria-Summerland Fire Protection District and the Santa Barbara County Sheriff's Office, and obtain approval from the Public Works Director in consultation with the Community Development Director. The plan shall identify:

- Construction Phases. Project construction stage exhibits including work descriptions.
- Staging and Parking Areas. Equipment staging, materials storage and construction worker parking areas.
- Truck Routes. Construction truck routes to minimize noise and traffic effects to residential neighborhoods.
- Ramp Closures and Detours. Any proposed closures of US 101 ramps and/or detours, by construction stage, if applicable.
- City Street Closures and Detours. Any proposed closures of City streets and/or detours, by construction stage.
- Signs and Traffic Control Measures. Signage and other planned temporary traffic control measures, by construction stage.

- Public Awareness. A program for public awareness and outreach to commuters, property owners, businesses, residents and agencies affected by project construction.
- Public Relations Committee. Applicant is required to form and support a Public Relations Committee consisting of Caltrans, SBCAG, a public relations consultant, business representatives, residents, transit and public safety agencies and City representatives. The Committee shall meet regularly prior to and during construction. Applicant shall review construction, construction phasing, mitigation measures, public relations efforts and permit conditions of approval with the committee. Applicant shall consider feedback and comments from the committee and the general public throughout project construction and make necessary adjustments in response to problems and/or concerns when possible.
- Maintenance of Access. Plans for providing access to businesses, coastal dependent uses and recreational uses during construction.
- Motorist Information Measures. Elements such as radio announcements and appropriate signage.
- Incident Response Measures. Strategies such as construction zone enhanced enforcement program ("COZEEP") and freeway service patrol.
- Coordination and Reporting. A program for ongoing reporting and coordination with the City and other affected agencies throughout construction.

31. **Trail Improvement Maintenance Agreement.** The City and County shall enter into a Trail Improvement Maintenance Agreement to define the maintenance responsibilities of the trail improvements. The Trail Improvement Maintenance Agreement must be signed and entered into prior to issuance of any Engineering Permits.

32. **Pre-Construction Conference.** Prior to commencement of construction, a preconstruction conference shall be held by the Resident Engineer to include construction processes and environmental mitigation and monitoring. The conference shall include representatives from Public Works, Community Development, County of Santa Barbara staff, Project Engineer, Landscape Architect, Contractor and Subcontractor(s), Biologist, and Mitigation Monitors.

33. **Temporary Construction Staging Areas.** The applicant shall submit to the Public Works Director for approval any areas intended for temporary staging of construction equipment and materials in the City of Carpinteria.

34. **Interpretive Signage.** Consistent with development standard CMC §14.45.030(8)(b), an educational or interpretive display shall be installed which describes the nearby harbor seal rookery. Plans and details depicting the proposed location, design, construction and content of the display shall be prepared and submitted to the Community Development Department for review and approval prior to issuance of any Engineering Permits for the project.

35. **Timing of Project Completion.** Pursuant to the requirements of the Transportation Corridor Wetland Overlay District (CMC §14.45), the Santa Claus Lane Multi-Use Path project shall be completed and open to the public no later than the completion of the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension construction.

CONDITIONAL USE PERMIT CONDITIONS

36. This Conditional Use Permit is not valid until an Engineering Permit for the development and/or use has been obtained. Failure to obtain said Engineering Permit shall render this Conditional Use Permit and Coastal Development Permit null and void. Prior to the approval of the Engineering Permit, all of the conditions listed in this Conditional Use Permit and Coastal Development Permit that are required to be satisfied prior to approval of an Engineering Permit must be satisfied. Upon issuance of the Engineering Permit, the Conditional Use Permit and Coastal Development Permit shall be valid. The effective date of this Permit shall be the date of action by the Planning Commission, or if appealed, the date of action by the Coastal Commission.

37. If the Planning Commission or City Council determines at a noticed public hearing that the permittee is not in compliance with any permit condition(s), the Planning Commission or City Council is empowered, in addition to revoking the permit pursuant to said section, to amend, alter, delete or add conditions to this permit.

38. Any use authorized by this Conditional Use Permit and Coastal Development Permit shall immediately cease upon expiration or revocation of this Conditional Use Permit and Coastal Development Permit. Any Engineering Permit issued pursuant to this Conditional Use Permit and Coastal Development Permit shall expire upon expiration or revocation of the Conditional Use Permit and Coastal Development Permit. Conditional Use Permit and Coastal Development Permit renewals must be applied for prior to expiration of the Conditional Use Permit and Coastal Development Permit.

39. The owner/applicant's acceptance of this permit and/or commencement of construction and/or operations under this permit shall be deemed acceptance of all conditions of this permit by the permittee.

40. Within two years after the effective date of this permit, construction shall commence. Construction cannot commence until an Engineering Permit has been issued. Failure to commence the construction pursuant to a valid Engineering Permit shall render the Conditional Use Permit and Coastal Development Permit null and void.

41. All time limits may be extended by the Planning Commission or City Council for good cause shown, provided a written request, including a statement of reasons for the time limit extension request is filed with Community Development prior to the expiration date.

42. If the owner/applicant requests a time extension for this permit, the permit may be revised to include updated language to standard conditions and/or mitigation measures and additional conditions and/or mitigation measures which reflect changed circumstances or additional identified project impacts. Mitigation fees shall be those in effect at the time of issuance of an Engineering Permit.

43. Before commencing any work pertaining to the erection, alteration, enlarging or rebuilding of any structure or improvement, the owner/applicant shall obtain an Engineering Permit. The permit is necessary to ensure implementation of the conditions required by the Planning Commission. Before any Permit will be issued by Community Development, the owner/applicant must obtain written clearance from all agencies having conditions; such clearance shall indicate that the applicant has satisfied all pre-construction conditions. A form for such clearance is available from Community Development.

44. If, at any time, the Planning Commission determines that there has been, or may be, a violation of the findings or conditions of this Conditional Use Permit and Coastal Development Permit, or of the Municipal Code regulations, a public hearing may be held before the Planning Commission to review this permit. At said hearing, the Planning Commission may add additional conditions, or recommend enforcement actions, or revoke the permit entirely, as necessary to ensure compliance with the Municipal Code, and to provide for the health, safety, and general welfare of the City.

45. City Manager and/or Community Development Director shall be informed of any minor changes to the project scope. Any minor changes may be approved by the City Manager and/or Community Development Director. Any major changes will require the filing of a revision application to be considered by the Planning Commission.

46. All requirements of the City of Carpinteria (including but not limited to public improvements as defined in the City of Carpinteria Municipal Code (CMC), Section 15.16.110) and any other applicable requirements of any law or agency of the State and/or any government entity or District shall be met.

47. The standards defined within the City's adopted model Building Codes (UBC; NEC; UMC; UFC; UPC; UHC) relative to the building and occupancy shall apply to this project.

48. Any and all damage or injury to public property resulting from this development, including without limitation, City streets and storm drain infrastructure, shall be corrected or result in being repaired and restored to its original or better condition.

49. No Engineering Permit shall be issued for this project prior to meeting all required terms and conditions listed herein. When not specified herein, all conditions shall be satisfied prior to issuance of an Engineering Permit or prior to commencement of construction when allowed by the Community Development Director.

50. To allow time for the utility companies to locate and mark their facilities for the contractor, the applicant shall telephone Underground Service Alert (USA) toll free at 1-800-227-2600 a minimum of 48 hours prior to the start of construction. For best response, provide as much notice as possible, up to 10 working days.

51. Compliance with the attached Departmental and District letters is required as follows. Where not specified otherwise, Conditions shall be met prior to the start of construction:
    a. Carpinteria Sanitary District letter dated October 31, 2019
    b. Santa Barbara County Air Pollution Control District letter dated November 12, 2019

52. All applicable final conditions of approval shall be printed in their entirety on applicable pages of grading/construction plans submitted to Community Development. These shall be graphically illustrated where feasible. The approved set of plans shall be retained at the construction site for review by the Public Works Director during the course of construction.

53. Owner/Applicant shall ensure that the project complies with all approved plans and all project conditions including those which must be monitored after the project is built and occupied. To accomplish this, owner/applicant agrees to contact Community Development at least two weeks prior to commencement of construction activities to schedule an onsite pre-construction meeting with agency personnel and key construction personnel.

54. Prior to issuance of an Engineering Permit, the owner/applicant shall provide a signed copy of the Conditions of Approval on a form acceptable to Community Development. Such form may be obtained from the Community Development Department. Written authorization to proceed and consent to conditions of approval by the applicant shall be provided to the City prior to commencement of any demolition or construction activity.

55. Written authorization to proceed and consent to conditions of approval by the applicant shall be provided to the City prior to grading permit issuance.

Approved by the Planning Commission on January 18, 2022

I HAVE READ AND UNDERSTOOD, AND I WILL COMPLY WITH ALL ABOVE STATED CONDITIONS OF THIS PERMIT

_____

Owner/Applicant Date

CARPINTERIA
Sanitary District

5300 Sixth Street
Carpinteria, CA 93013
Phone (805) 684-7214 • Fax (805) 684-7213

October 31, 2019

Nick Bobroff
Community Development Department
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, California 93013

Subject: Project No. 19-2015-CUP/CDP
Carpinteria Rincon Trail Project

Dear Mr. Bobroff;

Thank you for the opportunity to provide comments on the subject project. The project applicant proposes to construct a 2,800-foot long paved multi-use trail extending from the eastern terminus of Carpinteria Avenue in the City of Carpinteria to Rincon Beach Park in the County of Santa Barbara, near the Ventura County line. The proposed trail would be 16 feet in width (comprised of a 10-wide path with a 3-foot paved shoulder along each side of the trail). The trail project includes a new 160-foot long clear span pre-fabricated bridge crossing over the UPRR alignment. Grading and earthwork quantities necessary to cut the trail bench and stabilize slopes in the project area estimated at 104,000 cubic yards of cut, 10,300 cubic yards of which would be used for fill on-site. The remaining 94,000 cubic yards of cut material would be exported offsite. A storm drain collection system is proposed for the trail alignment, with new drain outlets to the ocean.

The Carpinteria Sanitary District (District) has the following initial comment:

- The District has a 4-inch diameter HDPE sewer force main that is located immediately north (5 feet to 30 feet) of the proposed trail alignment. At stations 21 through 23.5, the proposed trail is approximately five (5) horizontal feet from the force main. It also appears the proposed trail is 5 to 10 vertical feet from the force main. This force main is a high priority subsurface installation that provides sewer service to the Rincon Point community.

- Contractors excavating, boring, drilling, sinking fenceposts or other subsurface work must take extreme precaution to ensure the force main is protected during the construction of the trail. The District should be notified when excavation activities are occurring between stations 21 through 24. This should be noted on the construction drawings.

If you have any questions regarding the comments provided by the District, please contact me at (805) 684-7214, ext. 13.

Sincerely,
CARPINTERIA SANITARY DISTRICT

Lance Lawhon
Engineering Technician

C: Bengal Engineering

air pollution control district
SANTA BARBARA COUNTY

November 12, 2019

Nick Bobroff
City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: Air Pollution Control District Suggested Conditions on Rincon Trail Project, 19-2015-CUP/CDP

Dear Nick Bobroff:

The Air Pollution Control District (District) has reviewed the referenced project, which consists of the construction and operation of a 2,800-foot long, 16-foot wide concrete paved multi-use trail extending from the eastern terminus of Carpinteria Avenue in the City of Carpinteria to Rincon Beach Park in the County of Santa Barbara, near the Ventura County line. The trail will include a 160-foot long pre-fabricated bridge over the railroad tracks. Grading is estimated at 104,000 cubic yards (CY) of cut, 10,300 CY of fill, and 94,000 CY of export. The subject property, identified in the Assessor Parcel Map Book as APNs 001-220-032, 001-220-092, 001-220-100, and 001-220-101, is located at the eastern end of Carpinteria Avenue in the City of Carpinteria.

Air Pollution Control District staff offers the following suggested conditions:

1. Standard dust mitigations (**Attachment A**) are recommended for all construction and/or grading activities. The name and telephone number of an on-site contact person must be provided to the District prior to grading/building permit issuance.

2. District Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities* establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site. Please see www.ourair.org/wp-content/uploads/rule345.pdf.

3. The State of California considers particulate matter emitted by diesel engines carcinogenic. Therefore, during project grading, construction, and hauling, construction contracts must specify that contractors shall adhere to the requirements listed in **Attachment B** to reduce emissions of particulate matter (as well as of ozone precursors) from diesel equipment. Recommended measures should be implemented to the maximum extent feasible.

4. All portable diesel-fired construction engines rated at 50 bhp or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or District permits prior to grading/building permit issuance. Construction engines with PERP certificates are exempt from District permit, provided they will be on-site for less than 12 months.

RECEIVED
NOV 18 2019
CITY OF CARPINTERIA

Aeron Arlin Genet, Air Pollution Control Officer

5. At all times, idling of heavy-duty diesel trucks should be minimized; auxiliary power units should be used whenever possible. State law requires that:
   - Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
   - Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
   - See www.arb.ca.gov/noidle for more information.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8873 or via email at HoD@sbcapcd.org.

Sincerely,

Desmond Ho
Air Quality Specialist
Planning Division

Attachments: Fugitive Dust Control Measures
Diesel Particulate and NO_x Emission Measures

cc: Planning Chron File

air pollution control district
SANTA BARBARA COUNTY

ATTACHMENT A
FUGITIVE DUST CONTROL MEASURES

These measures are required for all projects involving earthmoving activities regardless of the project size or duration. Projects are expected to manage fugitive dust emissions such that emissions do not exceed APCD's visible emissions limit (APCD Rule 302), create a public nuisance (APCD Rule 303), and are in compliance with the APCD's requirements and standards for visible dust (APCD Rule 345).

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60 minute period. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required when sustained wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Onsite vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than one day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, OR using roll-compaction, OR revegetating, OR by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved should be completed as soon as possible.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by onsite operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to grading/building permit issuance and/or map clearance.

PLAN REQUIREMENTS: All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. **Timing:** Requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods.

MONITORING: The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

air pollution control district
SANTA BARBARA COUNTY

ATTACHMENT B
DIESEL PARTICULATE AND NO_x EMISSION REDUCTION MEASURES

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible.

The following measures are required by state law:

- All portable diesel-powered construction equipment greater than 50 brake horsepower (bhp) shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- Fleet owners of diesel-powered mobile construction equipment greater than 25 hp are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation (Title 13, California Code of Regulations (CCR), §2449), the purpose of which is to reduce oxides of nitrogen (NOx), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
- Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (Title 13, CCR, §2025), the purpose of which is to reduce DPM, NOx and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.
- All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than five minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes, unless the truck engine meets the optional low-NOx idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.

The following measures are recommended:

- Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines should be used to the maximum extent feasible.
- On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible. Electric auxiliary power units should be used to the maximum extent feasible.
- Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, should be used on-site where feasible.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.
- Construction truck trips should be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- Proposed truck routes should minimize to the extent feasible impacts to residential communities and sensitive receptors.
- Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.

PLAN REQUIREMENTS AND TIMING: Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans, and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles onsite and have it available for inspection.

MONITORING: The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

DRAFT

Carpinteria Rincon Trail Project Environmental Impact Report

Prepared for:

City of Carpinteria Community Development Department
5775 Carpinteria Avenue
Carpinteria, California 93013
Contact: Nick Bobroff, Principal Planner

Prepared by:

DUDEK
621 Chapala Street
Santa Barbara, California 93101
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MARCH 2021

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily trip
AFY	acre-feet per year
amsl	above mean sea level
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	Architectural Review Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measure
BAR	Board of Architectural Review
Basin Plan	Water Quality Control Plan for the Central Coast Basin
BMPs	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEEMOD	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalOES	Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAWet	California Waste Extraction Test
CBC	California Building Code
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CDB	coastal development permit
CDD/P&D	Community Development Department/Planning & Development
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	California Fire Code
CGS	California Geological Survey
CH4	methane
CHRIS	California Historical Resources Information System
CIDH	cast-in-drilled hole
City	City of Carpenteria

Acronym or Abbreviation	Definition
CGP	Construction General Permit
CLUP	Coastal Land Use Plan
CNCL	California Natural Community List
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Santa Barbara
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CRTP	Cultural Resource Treatment Plan
CSFPD	Carpinteria-Summerland Fire Protection District
CUP	conditional use permit
CUPAs	Certified Unified Program Agencies
CVWD	Carpenteria Valley Water District
CY	cubic yards
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DVP	development plan permit
ECAP	Energy and Climate Action Plan
EERP	Enforcement and Emergency Response Program
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESH	environmentally sensitive habitat
ESHA	environmentally sensitive habitat area
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FE	federally endangered
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FP	fully protected

Acronym or Abbreviation	Definition
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
FT	federally threatened
FTA	Federal Transit Administration
GHG	greenhouse gas
GWP	global warming potential
HCFCs	hydrochlorofluorocarbons
HERO	Human and Ecological Risk Office
HFC	hydrofluorocarbons
HHRA	Human Health Risk Assessment
Hz	Hertz
IEPR	Integrated Energy Policy Report
IPCC	Intergovernmental Panel on Climate Change
kBTU	thousand British thermal units
LCP	local coastal plan
L_{dn}	average A-weighted noise level
L_{eq}	equivalent noise level
L_{max}	maximum A-weighted sound level
L_{min}	minimum A-weighted sound level
LOS	Level of Service
LUDC	Land Use Development Code
LUST	leaking underground storage tank
MCV2	Manual of California Vegetation, 2nd edition
mg/kg	milligrams per kilogram
MLD	most likely descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric ton
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
O_3	ozone
OPR	Governor's Office of Planning and Research
PCRs	Post Construction Requirements
PFCs	perfluorocarbons
PGA	peak ground acceleration
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns

Acronym or Abbreviation	Definition
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Preserve	Carpinteria Bluffs Nature Preserve
PSR	Project Study Report
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROC	reactive organic compound
RPS	Renewables Portfolio Standard
RSLs	Residential Screening Levels
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAB	State Allocation Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SBCCO	Santa Barbara County Code of Ordinance
SCCAB	South Central Coast Air Basin
SBCOEM	Santa Barbara County Office of Emergency Management
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDL	state delisted
SE	state endangered
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SLPC	short-lived climate pollutants
SLRVA	Sea Level Rise Vulnerability Assessment
SLs	screening levels
SNA	state not applicable
SNR	state no rank
SO_2	sulfur dioxide
SO_x	sulfur oxides
SPCC	Spill Prevention, Control and Countermeasure
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
ST	state threatened
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCM	Transportation Control Measures
TCR	Tribal Cultural Resource
TDM	transportation demand management

Acronym or Abbreviation	Definition
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
VdB	vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Workers Environmental Awareness Program
WL	Watch List
WQO	water quality objectives
ZEV	zero emissions vehicle

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1 Executive Summary

This Environmental Impact Report (EIR) is an informational document intended for the use by the City of Carpinteria (City), other public agencies, and members of the general public in evaluating the potential environmental effects of the proposed Carpinteria Rincon Trail Project (project).

California Environmental Quality Act (CEQA) Section 21002 requires that an EIR identify the significant effects of a project on the environment and provide measures or alternatives that can mitigate or avoid these effects. This Draft EIR evaluates the environmental effects associated with development of the project and discusses the manner in which the project's significant effects can be reduced or avoided through the implementation of mitigation measures or feasible alternatives to the proposed project. In accordance with Section 15130 of the CEQA Guidelines, this EIR also includes an examination of the effects of cumulative development.

This summary provides a brief synopsis of (1) the proposed project, (2) results of the environmental analysis contained within this environmental document, (3) alternatives to the proposed project that were considered, and (4) major areas of controversy and issues to be resolved by decision makers. This summary does not contain the extensive background and analysis found throughout the individual chapters within the EIR. Therefore, the reader should review the entire document to fully understand the proposed project and its environmental consequences.

1.1 Project Location and Project Site

The project is located on lands within the jurisdiction of the City and the County of Santa Barbara (Figure 2-1, Project Location). Carpinteria is a quaint seaside town located about 12 miles east of Santa Barbara; the project site is near the intersection of Highway 150 and U.S. Highway 101, at the eastern end of Carpinteria and near the Ventura County line.

The proposed trail would provide a dedicated connection from Carpinteria Avenue to Rincon Beach County Park. The trail would begin near the eastern terminus of Carpinteria Avenue, and would proceed eastward along the existing benched slope adjacent to U.S. Highway 101. However, to achieve compliance with pathway surface slope limitations under the Americans with Disability Act (ADA), the existing benched slope would be regraded. The trail would then cross the Union Pacific Railroad (UPRR) alignment on a proposed new bridge. South of the UPRR alignment, the trail would be aligned along another existing benched slope/bluff face adjacent to the Pacific Ocean; again, to achieve compliance with ADA standards, the existing benched slope would be regraded. Figure 2-2 illustrates the overall alignment of the proposed Carpinteria Rincon Trail. The trail would terminate at the western terminus of the Rincon Beach County Park parking lot.

U.S. Highway 101 is located to the north of the proposed trail alignment, the Pacific Ocean is located to the south below the Carpinteria bluffs; the UPRR rail corridor bisects the central portion of the trail alignment. Currently undeveloped bluff open space designated for visitor-serving commercial use (City of Carpinteria 2003) is located adjacent to the western end of the trail on Carpinteria Avenue, with the Rincon Beach County Park and Rincon Point residential community located adjacent the eastern terminus of the trail. Surrounding land uses are shown in Figure 2-2. Figure 2-2 also illustrates jurisdictional boundaries for the City of Carpinteria, County of Santa Barbara, Ventura County, and Caltrans right-of-way relative to the trail alignment.

The majority of the proposed trail route is located on old terraced road and rail cuts. Most of the area's natural landforms have been mechanically manipulated over the years as a result of road, highway and railroad construction activities dating back to at least the late 1800s. A small unsanctioned trail exists in some areas of the proposed trail, including the portion of the proposed trail from the railroad crossing to the Rincon Beach County

Park parking lot. At both ends of the trail are pre-existing parking areas; Rincon Beach County Park has a paved lot and at Carpinteria Avenue there is an existing dirt lot, which would continue to provide informal parking for the proposed project. On-street parking near the eastern terminus of Carpinteria Avenue is also present and can serve the proposed project. The southerly shoulder of Carpinteria Avenue from SR 150 to the terminus is approximately 600 feet in length, which could accommodate approximately 24 passenger cars or light trucks.

1.2 Project Description

The proposed project consists of a 16-foot-wide (10-foot-wide path with a 3-foot-wide paved shoulder along both sides) and approximately 2,800-foot-long shared-use trail that would provide safe access for bicyclists and pedestrians traveling from Carpinteria Avenue in the City of Carpinteria to Rincon Beach County Park in Santa Barbara County at the Ventura County line. A bridge is also proposed over the UPRR alignment to accommodate the trail. Figure 2-4 illustrates the proposed trail alignment.

The initial approximately 850 feet of the trail alignment (starting from the eastern Carpinteria Avenue terminus and heading east) is within the City of Carpinteria jurisdiction. The remaining approximately 1,950 feet of the trail alignment, including the bridge crossing over the railroad corridor, is located within the County of Santa Barbara jurisdiction.

A safety fence would also be proposed to prevent users from encountering the slope below the trail. The proposed fencing would be approximately 3.5 feet in height, and consisting either of three-rail post and rail with a concrete base, chain link or other design of similar dimensions consistent with trail fencing in the community. A 6-foot-wide swale would also be provided along the path where cut slopes are present to capture and convey stormwater.

1.2.1 Project Objectives

The proposed trail was identified by the City to meet critical safety and public access needs. Objectives of the proposed project include:

- Improve pedestrian and bicyclist safety, as well as vehicular safety, by significantly reducing unsafe and/or illegal use of the railway corridor and the U.S. Highway 101 shoulder.
- Enhance regional mobility for cyclists and pedestrians, while enhancing support of regional initiatives to promote alternative transportation modes between Carpinteria, Santa Barbara County and Ventura County, by providing a continuous bike and pedestrian path connecting Santa Barbara County to Ventura County.
- Reduce air pollution from vehicle-related air quality emissions and traffic congestion on local and regional transportation systems by promoting pedestrian and bicycle access to coastal resources and recreation opportunities via a scenic multi-use trail, as an alternative to use of motorized vehicles to access and experience such coastal resources.
- Improve the local coastal bluff environment through improved water quality of surface water run-off through stabilization of bluff slope faces that are currently eroding into the Pacific Ocean, and enhancement of sensitive coastal bluff scrub habitats in the project area. Also, avoid deposits of petroleum fuels or lubricants associated with typical motor vehicle use for transportation in close proximity to the ocean, preventing such pollutants from stormwater run-off entering the adjacent marine environment.
- Complete a critical missing link in the California Coastal Trail consistent with the goals of Senate Bill 908, including provision of a continuous trail as close to the ocean as possible, with connections to the shoreline at appropriate intervals and sufficient access to encourage public use. The California Coastal Trail is intended to offer scenic coastal vistas, wildlife viewing areas, recreational or interpretive facilities, and

other points of interest, and is recognized in regions throughout the state as a key resource or opportunity for these coastal-oriented experiences.

- Provide a coastal-oriented pathway that supports the broadest use by the public through a design that complies with standards established via the Americans with Disabilities Act (ADA).
- Provide new scenic coastal access and coastal tourism opportunities in the City of Carpinteria, Santa Barbara County, and Ventura County.

1.2.2 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The proposed project would require consideration of the following discretionary actions by the City and by the County:

- City of Carpinteria: A conditional use permit (CUP) and coastal development permit (CDP) for the portion of the trail within the City of Carpinteria.
- County of Santa Barbara: A development plan permit (DVP), CUP and CDP for the portion of the trail within the County of Santa Barbara.

1.3 Areas of Controversy

Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated October 30, 2020, to begin a 30-day public scoping period, to interested agencies, organizations, and individual parties. The NOP was also sent to the State Clearinghouse at the California Office of Planning and Research. The State Clearinghouse assigned a state identification number (SCH No. 2020100582) to this EIR.

The NOP is intended to encourage interagency communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR. A public scoping meeting was held on November 17, 2020, to gather additional public input.

Comments received during the NOP public scoping period were considered during the preparation of this EIR. The NOP and comments are included in Appendix A to this EIR. In response to the NOP and public scoping meeting, 76 comment letters were received. Comments covered a variety of topics, including aesthetics, biology, cultural resources, geology, hydrology/water quality, land use/policy, noise, public services, recreation, and transportation.

1.4 Issues to Be Resolved by the City Planning Commission

The issues to be resolved by the decision-making body are whether to approve the proposed project and whether the potential significant impacts of the project with respect to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, and tribal cultural resources have been fully mitigated below a level of significance, or if additional measures are required. Lastly, the City would determine whether any alternative might meet the key objectives of the project while reducing its environmental impact.

1.5 Project Alternatives

Pursuant to the CEQA, Guidelines, EIRs are required to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (14 CCR 15126.6[a]). This EIR "must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (14 CCR 15126.6[a]). The consideration of alternatives is required even if the alternatives "would impede to some degree the attainment of the project objectives, or would be more costly" (14 CCR 15126.6[b]).

1.5.1 No Project/No Build Alternative (Alternative 1)

CEQA Guidelines Section 15126.6 requires the inclusion of a No Project/No Build Alternative (Alternative 1) to be analyzed. Under Alternative 1, no development would occur on the project site. Accordingly, the site characteristics of this alternative would be equivalent to the existing conditions for each category analyzed in Chapter 3, Environmental Analysis, of this EIR.

1.5.2 Maximize Existing Benchwork/Topography Alternative (Alternative 2)

The Maximize Existing Benchwork/Topography Alternative (Alternative 2) would involve development of the originally proposed trail, as described and analyzed in the 2015 Mitigated Negative Declaration (MND). Per the 2015 MND, development under Alternative 2 would consist of a 12-foot wide and approximately 4,000-foot-long pedestrian and bicycle shared use trail, that would also extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria (City), to the Rincon Beach County Park in Santa Barbara County (see Figure 6-1, Proposed Alternatives), but following a different alignment than the proposed project. The trail alignment under Alternative 2 was configured to largely follow existing topographic benches that were originally created (and since abandoned) for previous railroad and highway alignments within the project site. Using the existing benches for the alignment was assumed to minimize the need for topographic modification and earthwork volumes. Under Alternative 2, the northern portion of the trail, from the eastern terminus of Carpinteria Avenue to the Union Pacific Railroad (UPRR) corridor, which crosses the middle of the site, traverses an engineered slope, cut during construction of the U.S. Highway 101. The trail proposed under Alternative 2 would cross the UPRR tracks in an area that consists of engineered slopes cut during construction of the UPRR. On the southern side of the UPRR alignment, new grading not associated with an existing bench was proposed, accompanied by extensive retaining walls, to connect the trail to an existing informal trail on an existing cut bench extending westward from Rincon Beach County Park that was abandoned by the UPRR in the late 1960s. The Alternative 2 trail route would be relatively flat in this area.

1.5.3 Steeper Slopes/Reduced Earthwork Alternative (Alternative 3)

Under the proposed project, to achieve compliance with pathway surface slope limitations under the Americans with Disability Act (ADA), the existing benched slope would be regraded along the entire trail alignment. On some portions of the trail, the proposed project also includes creation of a second earthwork bench on the new slope above the trail to reduce erosion potential. The Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) would remove one of the earthwork benches that was originally proposed on the slope above the trail alignment, for a

portion of the trail length. The cross sections proposed under Alternative 3 are shown in Illustration 6-1, Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) Trail Cross Section. Alternative 3 would result in 15,000 less cubic yards of earthwork, compared to the proposed project. Under Alternative 3, the proposed alignment would be the same as the proposed project. Similar to the proposed project, a bridge would be provided to provide safe crossing for trail users over the UPRR. However, the cross section of the trail south of the UPRR crossing, on the eastern portion of the trail alignment, would be different. More specifically, Alternative 3 would not provide benches above the trail (to control drainage and rockfall).

1.5.4 Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)

Under the Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4), the proposed trail alignment would be the same as the proposed project in the area north of UPRR and within the UPRR crossing. However, south of the UPRR crossing, the proposed alignment would be shifted to the north to remain on the north side of the ridge, and adjacent to the U.S. Highway 101 corridor, compared to the proposed project which locates this segment on the slopes on the south side of the same ridge, and facing the Pacific Ocean. Further, the trail proposed under Alternative 4 would extend further to the southeast, past the Rincon Beach County Park, and terminate at Bates Road (see Figure 6-1). The proposed UPRR crossing would not change under Alternative 4 compared to the proposed project. Under Alternative 4, most of the storm water down drains proposed along the southern side of the UPRR trail crossing (see Illustration 2-6, Major Storm Drainage Components of the Project, in Chapter 2, Introduction & Project Description), would not be constructed.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	Potentially Significant	**MM-AES-1: Board of Architectural Review.** The Owner/Applicant shall obtain City Architectural Review Board (ARB) and County Board of Architectural Review (BAR) approval for project design. All project elements (e.g., design, scale, character, colors, materials, and landscaping shall be compatible with vicinity development and shall conform in all respects to ARB/BAR approval. ***Plan Requirements and Timing:*** The Owner/Applicant shall submit architectural drawings of the project including photo renditions from the beach of the storm drains proposed along the bluff face for review and shall obtain final City ARB and County BAR approval prior to issuance of the Development Plan, Conditional Use Permit and Coastal Development Permit. Grading plans, if required, shall be submitted to the City's Planning Department concurrent with or prior to ARB/BAR plan filing with the Carpinteria Community Development Department or County Planning and Development. ***Monitoring***: The Owner/Applicant shall demonstrate to Community Development Department staff and Planning & Development Department compliance monitoring staff that the project has been built consistent with approved ARB/BAR design and landscape plans prior to Final Building Inspection Clearance.	Less than Significant
Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant	**MM-AES-1** (see above)	Less than Significant
In non-urbanized areas, would the project substantially degrade the existing visual	Potentially Significant	**MM-AES-1** (see above)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on aesthetic resources?	Less than Significant	None required	Less than Significant
Agriculture and Forestry Resources			
Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact	None required	No Impact
Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact	None required	No Impact
Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact	None required	No Impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project result in the loss of forest land or conversion of forest land to non-forest use?	No Impact	None required	No Impact
Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact	None required	No Impact
Would the project have a cumulative effect on agriculture and forestry resources?	No Impact	None required	No Impact
Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	None required	Less than Significant
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	None required	Less than Significant
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than Significant	None required	Less than Significant
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on air quality resources?	Less than Significant	None required	Less than Significant
Biological Resources			
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or	Potentially Significant	**MM-BIO-1: Workers Environmental Awareness Program (WEAP).** The City shall fund an approved biologist to prepare and implement a worker education and awareness program (WEAP) specific	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		to the project. The program shall be presented to all individuals involved in the construction of the project. The program shall include information focused on sensitive vegetation communities, sensitive wildlife and plant species, and common wildlife species and their habitats and shall include, but not be limited to, the following: • Description of sensitive vegetation communities. • Workers shall be provided with photographs of sensitive biological resources including sensitive wildlife and plant species. • Workers shall be informed verbally and in writing of the various project tasks that require biological surveys and monitoring for resource protection. • Workers shall be provided with a photograph or description of the markers for active bird nests, trees, or other mitigation areas, so that they shall know these are not to be disturbed without a biological monitor present. • Workers shall be informed not to litter. All trash and litter shall be picked up and removed from the construction sites at the end of each day. • Workers shall be informed to obey a speed limit of 15 miles per hour while traveling on the project site to avoid collisions with wildlife. • Workers shall avoid driving over or otherwise disturbing areas outside the designated construction areas. ***Plan Requirements and Timing:*** The applicant shall submit the WEAP to the City of Carpinteria (City) and County of Santa Barbara (County) for review and approval prior to implementation. All workers, contractors, and visitors shall attend the WEAP prior	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		to entering the project site and performing any work. The applicant shall provide copies of the training attendance sheets to City of Carpinteria and County staff as a record of compliance with this measure on a monthly basis. The WEAP shall be reviewed and approved by the City of Carpinteria and County prior to Zoning Clearance approval. Implementation of the WEAP training shall occur prior to the start of construction and as new crew members are added to the project. ***Monitoring:*** The City of Carpinteria and County permit compliance staff will ensure compliance with the WEAP throughout construction by review of attendance sheets and hardhats, inspection of the site, and interviewing workers, as appropriate. **MM-BIO-2: Fencing.** To prevent inadvertent impacts on adjacent sensitive vegetation communities including County ESH and City ESHA, native vegetation, special-status species, and common wildlife species and their habitats, construction limits will be fenced with highly visible fencing and staked. Wildlife-safe highly visible construction fencing shall be installed to identify the limits of grading/disturbance, which would reduce potential human trampling outside of the construction limits and minimize the potential spread of non-native weeds or invasive plant species. Wildlife-safe construction fencing and flagging shall remain in place during construction and replaced as needed. ***Plan Requirements and Timing:*** The detailed fencing plan, showing the location of required fencing shall be reviewed and approved by City of Carpinteria and County staff prior to Zoning Clearance approval. This	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		condition shall be printed on all project plans. The detailed fencing plan, showing the location of fencing shall be submitted to City of Carpinteria and County staff for review and approval prior to Zoning Clearance approval. The fence shall be installed prior to the start of ground disturbing activities. ***Monitoring:*** The City of Carpinteria and County staff will inspect the project plans and site, to ensure compliance with this measure as appropriate. **MM-BIO-3: Pre-construction California Legless Lizard Survey and Relocation**. Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps: 1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall include areas with loose, moist soils occurring in scrub habitat with high coverage of deerweed (*Lotus scoparius*) or California goldenbush, in arroyo willow (*Salix lasiolepis*) thickets or in other suitable scrub or woodland habitat. 2. Capture and relocation shall take place no more than five days prior to the initiation of construction. 3. These surveys shall be performed by lightly raking loose soil, sand and leaf litter with a wooden rake for a sufficient period to determine that no legless lizards are present, or all legless lizards have been captured.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		4. Any lizards found shall be placed in a receptacle with sand and a wet towel and relocated to the previously designated receptor site. ***Plan Requirements and Timing***: Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist. ***Monitoring***: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities. **MM-BIO-4: Pre-construction Woodrat Survey and Relocation**. Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps: 1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall be within similar habitat and an adequate distance away from any locations that might be subject to increased human disturbance, such as adjacent to a walking path. 2. These pre-construction surveys shall be performed searching all coastal sage scrub or coastal bluff scrub within the disturbance area for middens or other sign of the species. 3. Any middens and woodrats found shall be live-trapped and relocated to the pre-determined receptor site. The midden shall be dismantled and the materials placed at the relocation site.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Plan Requirements and Timing: Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist. ***Monitoring***: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.	
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant	**MM-BIO-1** through **MM-BIO-3** (see above) **MM-BIO-5: Habitat Mitigation and Monitoring Plan.** Prior to approval of a coastal development permit, the City shall contract with a qualified biologist to develop a Habitat Mitigation and Monitoring Reporting Plan (Plan) to mitigate for impacts to County ESH/City ESHA vegetation communities. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities, and, therefore, preserve or provide wildlife habitat, in areas temporarily impacted by construction of the trail and within similar habitats adjacent to the impacted biological resources. The Plan may focus on the following: • In-kind, on-site restoration of areas where coastal sage scrub or coastal bluff scrub has been removed; • Enhancement of temporarily impacted areas on site currently occupied by ornamental, disturbed or developed areas; • Restoration of areas occupied by non-native habitats or native habitats with large components of non-native vegetation, within similar habitats adjacent to the impacted biological resources.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Under the Plan, a total of 3.55 acres of County ESH/City ESHA native vegetation communities temporarily impacted by vegetation clearance shall be restored on site in kind at 1:1. A total of 0.76 acres of County ESH/City ESHA native vegetation communities permanently impacted shall be mitigated on site in kind at 3:1. As mitigation potential within the project area may be insufficient for mitigating 0.76 acres of permanent impacts to County ESH/City ESHA native vegetation communities at 3:1, any additional mitigation required shall be carried out on areas within adjacent land controlled by the City or County,. Off-site mitigation for permanent impacts shall be implemented in-kind at 3:1. A qualified biologist/botanist shall develop the Plan, which shall provide specific measures to restore or enhance habitat to replace the loss of coastal sage scrub and coastal bluff scrub communities. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with long-term timing and monitoring requirements. The Plan shall: 1. Provide an up-to-date inventory of on-site native vegetation resources. 2. Define attainable and measurable goals and objectives to achieve through implementation of the Plan. Goals and objections shall focus on replacement of coastal sage scrub, coastal bluff scrub and rare plants removed during construction. 3. Provide site selection and justification.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		4. Detail a restoration work plan including methodologies, restoration schedule, plant materials (seed and container plant) sourcing – locally genetic stock, and implementation strategies. 5. Provide a detailed maintenance plan to include removal of invasive non-native species. 6. Define performance standards. 7. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure criteria, and an adaptive management plan and suggestions for failed restoration efforts. ***Plan Requirements and Timing:*** Prior to issuance of a grading permit, the City of Carpinteria shall contract with a qualified biologist to develop a Plan. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities in areas temporarily and permanently impacted by construction of the project. ***Monitoring***: The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. City and County staff shall periodically conduct site inspections to ensure compliance on site. Restored areas shall be monitored for five years following planting. Annual reports and the final report shall be submitted to the City and County.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	None required	No Impact
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant	**MM-BIO-1,** and **MM-BIO-2** (see above) **MM-BIO-6: Pre-construction Nesting Bird Surveys.** Within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically mid-February through August in the project region, or as determined by a qualified biologist), the City shall have weekly surveys conducted by a qualified biologist to determine if active nests of special-status bird species, or of any bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code, are present in the disturbance zone or within 300 feet (500 feet for raptors) of the area to be disturbed. The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground disturbance is delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. The City or contractor shall provide the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		If active nests are found, including any nests for Cooper's hawk, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. The results of the surveys, including graphics showing the locations of any nests detected, and any avoidance measures recommended, shall be submitted to the City and County within 14 days of completion of the pre-construction surveys to document compliance with applicable state and federal laws pertaining to the protection of native birds. ***Plan Requirements and Timing***: Pre-construction nesting bird surveys shall be completed within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading during the bird nesting season (typically mid-February to August). The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. ***Monitoring***: The City of Carpinteria and County staff shall ensure the pre-construction nesting bird surveys and any avoidance requirements are completed prior to commencement of any earth-moving activities.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant	**MM-BIO-1, MM-BIO-2** and **MM-BIO-5** (see above)	Less than Significant
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	None required	No Impact
Would the project have a cumulative effect on biological resources?	Potentially Significant	**MM-BIO-1** through **MM-BIO-6** (see above)	Less than Significant
Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Less than Significant	None required	Less than Significant
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant	**MM-CR-1: Cultural Resource Treatment and Inadvertent Discovery Plan.** Potential impacts to cultural resources shall be minimized through development of protocols for practical adherence of mitigation measures CR-2 and CR-3 prior to and after ground disturbing construction activities associated with the proposed project. These protocols shall be outlined in a Cultural Resource Treatment Plan (CRTP). The CRTP shall be developed by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification standards, prior to the implementation of ground disturbing activities and include wording of each mitigation measure CR-2-4, specific and detailed explanation for implementation of each mitigation measure and contact protocol. The CRTP shall be provided to all agency personnel, consulting tribes,	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		contractors and archaeological personnel. The existence and necessity for adherence to the CRTP shall be noted on plans, handbooks, or the like associated with tasks that may incur ground disturbance either intentionally or inadvertently. **Plan Requirements and Timing**: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to develop the required CRTP in accordance with the above criteria. **Monitoring:** City of Carpinteria/County of Santa Barbara staff shall review and authorize the CRTP prior to the commencement of ground disturbance activities to ensure that the CRTP adheres to the criteria established in CR-1. **MM-CR-2: Workers Environmental Awareness Program (WEAP) Training**. All personnel participating in tasks that may incur ground disturbance either intentionally or inadvertently shall be briefed regarding unanticipated discoveries prior to the start of said activities. A basic presentation shall be prepared by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards to inform all personnel working on the project about the archaeological sensitivity of proposed project areas. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during project activities and explain the importance of and legal basis for the protection of cultural resources. Each personnel shall also be instructed on the proper procedures to follow in the event that cultural resources or human remains are	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		encountered. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor, qualified archaeologist and if human remains are encountered, the County coroner. **Plan Requirements and Timing**: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to develop and conduct the required WEAP Training in accordance with the above criteria. **Monitoring:** City of Carpinteria/County of Santa Barbara staff shall ensure the required WEAP training has been conducted by attending the WEAP Training and documenting attendance of required personnel by means of a sign in sheet completed by all attendees of the WEAP Training. **MM-CR-3: Initial ground disturbing activities shall be monitored by a County-qualified/City-approved archaeologist in accordance with the following specifications:** <u>Temporary Impact Areas</u> (equipment staging and materials storage outside trail alignment) - a County-qualified/City-approved archaeologist shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site. <u>Permanent Impact Areas not including bridge piling installation</u> (all areas of the trail alignment excepting the bridge approach areas on both sides of the	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		UPRR alignment) – a County-qualified /City-approved archaeologist shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area. Bridge piling installation – a County-qualified/City-approved archaeologist shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area. The monitor shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitoring reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to both the City and County. ***Plan Requirements and Timing***: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to monitor initial ground disturbance activities in accordance with the above criteria. ***Monitoring***: City of	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist provides monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources. **MM-CR-4: In the event cultural resources are encountered, construction shall be redirected to another area of the project while data/resource assessment and recovery is accomplished.** Grading/construction shall be immediately suspended in the immediate area (no less than 50 feet from the area of the discovery) where cultural resources are encountered and temporarily redirected to another portion of the project area to allow the archaeologist to assess the nature, extent and significance of any discoveries and develop appropriate management recommendations for archaeological resource treatment consistent with Santa Barbara County Guidelines for the Implementation of California Environmental Quality Act of 1970 (as amended May 25, 2010). It is anticipated that recovery of artifacts would occur where project elements (such as pilings) would conflict with in situ artifact locations, and such artifacts would be properly archived in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol. Identified remedial action for the discovery shall be completed prior to allowing construction to re-	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		commence in the area, no less than 50 feet from the area of the discovery. The project sponsors shall be responsible for funding the assessment of archaeological resources encountered during construction, and for the proper archiving or preservation of such resources. A Phase 3 Archaeological Resources Assessment and Data Recovery Report shall be prepared to document any archaeological resources encountered during construction. ***Plan Requirements and Timing***: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to provide archaeological assessment and recovery of any archaeological resources encountered during project construction, in accordance with the above criteria. ***Monitoring***: City of Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol.. The contracted archaeologist shall assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on cultural resources?	Potentially Significant	**MM-CR-1** through **MM-CR-4**	Less than Significant
Energy			
Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	None required	Less than Significant
Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on energy resources?	Less than Significant	None required	Less than Significant
Geology and Soils			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? b. Strong seismic ground shaking?	Potentially Significant	**MM-GEO-1: Seismicity.** The pedestrian bridge shall adhere to the recommendation identified in Appendix E to this Environmental Impact Report to withstand a peak ground acceleration (PGA) at the site of 0.8g generated by an earthquake of moment magnitude Mw=7.4. ***Plan Requirements and Timing:*** Prior to issuance of a grading or building permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge design specification. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect bridge construction to verify conformance with this specification.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
c. Seismic related ground failure including liquefaction? d. Landslides?		**MM-GEO-2: Differential Settlement of Pedestrian Bridge Foundations.** Bridge foundation construction shall adhere to the recommendation identified in Appendix E to this Environmental Impact Report, which specifies a deep foundation employing cast-in-drilled hole (CIDH) piles. Based on the anticipated loadings, Caltrans Standard Plan 24" CIDH Concrete Piles with 200 kips design capacity are recommended in the geotechnical report. Should hard cemented bedrock be encountered during the installation of the CIDH piles, coring may be necessary. ***Plan Requirements and Timing:*** Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge foundation specification. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect foundation construction to verify conformance with this specification. **MM-GEO-3: Soil Erosion/Slope Stability.** Slope construction shall adhere to the recommendations in the geotechnical report, summarized below. 1. All new fills placed along the trail alignment shall be placed as engineered geotextile-reinforced soils with subsurface/back drains. Manufactured slope profiles shall be no steeper than as specified in the Bengal 2019 geotechnical report (Appendix E), or any updated version thereof which has been prepared to address final trail design. 2. Install adequate surface drainage facilities to collect and dispose of surface runoff properly, consistent with the drainage system designs included in 30%	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Project Plans for Rincon Multi-Use Trail (Appendix E), or as updated to address final trail design. 3. Hydro-seed the exposed newly cut and fill surfaces. Periodic watering and re-application of hydro-seed shall occur as necessary until vegetation on slope surfaces has been successfully established. These measures, in conjunction with the slope flattening and load reduction resulting from the proposed slope cutbacks, should substantially reduce the hazards associated with both slope erosion and local/surficial slope instability under both static and seismic loading conditions. ***Plan Requirements and Timing:*** Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include the above specifications. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect slope and drainage system construction to verify conformance with these specifications.	
Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant	**MM-GEO-3** (see above)	
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant	**MM-GEO-3** (see above)	
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant	None required	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No impact	None required	No impact
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on geology and soils resources?	Potentially Significant	**MM-GEO-1 to MM-GEO-3** (see above)	Less than Significant
Greenhouse Gas Emissions			
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	None required. However, **MM-BIO-3** (see above) would further reduce emissions related to sequestrated carbon.	Less than Significant
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	None required. However, **MM-BIO-3** (see above) would further reduce emissions related to sequestrated carbon.	Less than Significant
Would the project have a cumulative effect on greenhouse gas emissions?	Less than Significant	None required	Less than Significant
Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact	None required	No Impact
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant	**MM-WAT-2** (see Hydrology and Water Quality, below)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	None required	No Impact
Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially Significant	**MM-HAZ-1: Aerially Deposited Lead (ADL).** Surface soils within the trail alignment segment north of the UPRR corridor shall be tested for potential ADL presence to determine if such soils may be used as fill, or must be disposed in a properly licensed landfill. Using the risk based screening levels developed by California Office of Environmental Health Hazard Assessment (OEHHA), excavated soils with a lead concentration less than or equal to 80 mg/kg total lead (analyzed by USEPA Method 6010 or 6020) would be acceptable for reuse without restrictions, including as fill material within the Rincon Trail project. Excavated soils that are considered a California hazardous waste (total lead concentration greater than or equal to 1,000 mg/kg or a soluble lead concentration greater than or equal to 5 milligrams per liter [mg/L] as determined by the California Waste Extraction Test [CAWet]) or are a RCRA hazardous waste and must be disposed of in a Class I hazardous waste landfill. Excavated soils with lead concentrations below 1,000 mg/kg but above 80 mg/kg total lead may be eligible for reuse with specific restrictions to reduce or eliminate exposure, with prior written approval from DTSC, or may be disposed of at an appropriately permitted landfill. ***Plan Requirements***: ADL testing requirements and soil re-use restrictions according to identified ADL concentration shall be shown on grading and	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		building plans. Since excess soil material would be generated through proposed grading activities, soils containing greater than 80 mg/kg total lead shall not be used as fill material for the project but shall be exported off site. Soil containing total lead greater than 1,000 mg/kg shall be disposed in a Class I hazardous waste landfill. ***Timing***: Condition shall be adhered to throughout all grading and construction activities. ***Monitoring***: City of Carpinteria and County staff shall ensure measures are on plans. City and County Grading Inspectors shall spot check and ensure compliance on site.	
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact	None required	No Impact
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact	None required	No Impact
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	No Impact	None required	No Impact
Would the project have a cumulative effect on hazards or hazardous materials?	Potentially Significant	**MM-HAZ-1** and **MM-WAT-1**	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Hydrology and Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Potentially Significant	**MM-WAT-1 : Obtain Coverage Under Construction General Permit.** The project shall obtain coverage under a Construction General Permit via the State Water Resources Control Board (SWRCB) (Water Quality Order 99-08-DWQ). ***Plan Requirements***: The requirement to obtain coverage from the SWRCB under a Construction General Permit shall be indicated on grading plans. ***Timing***: Evidence of coverage under a Construction General Permit shall be provided to the City of Carpinteria Public Works Department and County of Santa Barbara Public Works Division prior to the initiation of grading. ***Monitoring***: City and County Public Works staff shall confirm evidence of the Construction General Permit issuance prior to issuance of grading permits. **MM-WAT-2: Stormwater Pollution Prevention Plan.** The construction contractor shall prepare a Stormwater Pollution Prevention Plan that includes Best Management Practices (BMPs) to be implemented and monitored prior to and during construction. The following BMPs shall be incorporated into the SWPPP to minimize potential construction-related water quality impacts: 1. Disturbed areas shall be stabilized or re-vegetated prior to the start of the rainy season. The work area shall be flagged to identify its limits. Vegetation shall not be removed or intentionally damaged beyond these limits. 2. Construction materials shall be placed in designated areas where they could not enter	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		water bodies or storm drains due to spillage or erosion. 3. Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from watercourses and shall be disposed of regularly. 4. During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. The concrete washout area shall be isolated from water bodies, and wash water and waste shall be removed from the project site. The location of the washout area shall be clearly noted at the construction site with signs. 5. All fueling of heavy equipment shall occur in a designated area removed from water bodies and other drainages, such that any spillage would not enter surface waters. The designated refueling area shall include a drain pan or drop cloth and absorbent materials to clean up spills. The location of the fueling area shall be clearly noted at the construction site with signs. 6. Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant and shall be examined for leaks on a daily basis. All maintenance shall occur in a designated off-site area. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		7. Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned up immediately. Absorbent materials shall be maintained on the construction site for this purpose. 8. Special considerations for work during the rainy season: stockpiled soils should be covered at the end of the work day, and concrete pouring shall be avoided within 15 days of a forecasted rain event to allow full curing, due to its toxic nature until it has fully cured. ***Plan Requirements***: A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented prior to construction and shall include the above elements. The SWPPP shall be submitted to City and County Public Works for review and approval prior to the issuance of grading permits for the project. ***Timing***: The stormwater features and BMPs shall be installed and operational prior to initiation of grading. ***Monitoring***: City and County Public Works staff shall site inspect for installation and maintenance in accordance with the approved plan and periodically thereafter to ensure proper maintenance over the duration of construction activities. **MM-WAT-3: Erosion and Sediment Control Plan.** Best available erosion and sediment control measures shall be implemented and maintained during grading and construction. Best available erosion and sediment control measures may include, but are not limited to use of sediment basins, gravel bags, silt fences, geo-bags or gravel and geotextile fabric berms, erosion control blankets, coir rolls, jute net	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		and straw bales. Construction access points shall be stabilized using gravel beds, rumble plates or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. ***Plan Requirements and Timing***: An erosion and sediment control plan shall be submitted to and approved by City and County Public Works prior to issuance of a grading permit. The plan shall be designed and implemented to address erosion and sediment control during all phases of development of the site. ***Monitoring***: City and County Public Works shall perform site inspections throughout construction. **MM-WAT-4: Planting of Vegetation.** As soon as practicable following the completion of trail construction, the contractor shall install native plantings for biological restoration and hydro-seed slope areas with an appropriate native plant seed mix, in order to provide long-term stabilization of soils disturbed during construction . Periodic watering and re-application of hydro-seed shall occur as necessary until vegetation on slope surfaces has been successfully established. ***Plan Requirements and Timing***: Landscaping plans including biological restoration areas and hydro-seeding of manufactured slope areas submitted to Community Development Department/Planning & Development (CDD/P&D) for review prior to approval of a coastal development permit. ***Monitoring***: CDD/P&D shall site inspect vegetation plantings and	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		hydro-seed application before issuing final clearance and acceptance of the trail project. **MM-WAT-5: Periodic Inspection and Maintenance of Storm Drain Components.** Staff from City and County Parks/Public Works departments shall perform an annual inspection of stormwater components annually, prior to the on-set of the rainy season (November 1) to ensure all components are in good repair and are not blocked by debris or sediment. Any materials found to be obstructing flow in the drainage system shall be removed prior to November 1 each year. The exposed vertical portion of each of the corrugated metal pipe drains shall be examined annually for signs of corrosion, damage or openings in the drain pipe wall. Corrosion visible on the exterior pipe wall shall be treated and sealed promptly, any holes through the pipe wall shall be patched, or the damaged/affected segment shall be replaced or modified. ***Plan Requirements and Timing***: The applicant shall include these inspection and maintenance requirements in the final drainage system design plans. The plans shall be submitted to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review prior to approval of a grading permit. ***Monitoring***: A memo with the annual inspection notes and corrective maintenance performed shall be prepared and submitted to the City and County Public Works Departments. **MM-WAT-6:** To minimize pollutants impacting the ocean, storm drain filters/inserts shall be installed	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		in the project area storm drain inlets. The filters/inserts shall be maintained in working order. **Plan Requirements:** Prior to approval of Grading or Building Permits, the applicant shall submit plans identifying the type and location of filters/inserts to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review and approval. The location of such filters/inserts shall be noted on grading and building plans Filters/inserts shall be installed prior to final clearance and shall be cleaned using approved methods at least twice a year, once immediately prior to November 1 (before the start of the rainy season) and once in January. **Monitoring:** CDD/P&D and City and County Public Works shall site inspect periodically throughout the construction phase to ensure proper installation. Records of maintenance shall be maintained by City/County and shall be submitted to CDD/P&D and City and County Public Works on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year, the records shall be maintained by the City/County. CDD/P&D and Public Works shall review the maintenance records and site inspect as needed following completion of construction to ensure periodic cleanout	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than Significant	None required	Less than Significant
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. result in substantial erosion or siltation on or off site; b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; c. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or d. impede or redirect flood flows?	Less than Significant	**MM-WAT-1** (see above) **MM-WAT-2** (see above) **MM-WAT-3** (see above) **MM-WAT-5** (see above)	Less than Significant
In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	No Impact	None required	No Impact
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact	None required	No Impact
Would the project have a cumulative effect on hydrology or water quality resources?	Potentially Significant	**MM-WAT-1** through **MM-WAT-5** (see above)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Land Use and Planning			
Would the project physically divide an established community?	No Impact	None required	No Impact
Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant	**MM-AES-1; MM-BIO-1** through **MM-BIO-6** ; **MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** (see above)	Less than Significant
Would the project have a cumulative effect on land use resources?	Potentially Significant	**MM-AES-1; MM-BIO-1** through **MM-BIO-6** ; **MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** (see above)	Less than Significant
Mineral Resources			
Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact	None required	No Impact
Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact	None required	No Impact
Would the project have a cumulative effect on mineral resources?	No Impact	None required	No Impact
Noise			
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise	Potentially Significant	**MM-NOI-1: Construction Hours.** Construction activity for site preparation and for future development shall be limited to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor Day) or weekends. Construction equipment	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
ordinance, or applicable standards of other agencies?		maintenance shall be limited to the same hours. Non-noise generating construction activities are not subject to these restrictions. ***Plan Requirements*:** Two signs stating these restrictions shall be posted on-site at each end of the proposed trail. ***Timing***: Signs shall be in place prior to the beginning of and throughout all grading and construction activities. ***Monitoring***: City and County Grading Inspectors shall spot check and respond to complaints. **MM-NOI-2: Construction Equipment**. All construction equipment with engines must have original manufacturer's approved muffling devices. All stationary equipment shall be physically buffered from nearby sensitive receptors. ***Plan Requirements***: Plans shall indicate the requirement of OEM muffled equipment. ***Timing***: This condition applies when any engine driven equipment is in use at the project site during construction. ***Monitoring***: City and County Grading Inspectors shall spot check and respond to complaints**.**	
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant	None required	Less than Significant
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact	None required	No Impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have a cumulative effect on noise resources?	No Impact	None required	No Impact
Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact	None required	No Impact
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	None required	No Impact
Would the project have a cumulative effect on housing and/or population resources?	No Impact	None required	No Impact
Public Services			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			
Fire protection?	Less than Significant	None required	Less than Significant
Police protection?	Less than Significant	None required	Less than Significant
Schools?	No Impact	None required	No Impact
Parks?	Less than Significant	None required	Less than Significant
Other public facilities?	No Impact	None required	No Impact
Would the project have a cumulative effect on public services resources?	No Impact	None required	No Impact

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Recreation			
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant	None required	Less than Significant
Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on recreation resources?	Less than Significant	None required	Less than Significant
Transportation			
Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than Significant	None required	Less than Significant
Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant	None required	Less than Significant
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant	None required	Less than Significant
Would the project result in inadequate emergency access?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on transportation resources?	Less than Significant	None required	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Tribal Cultural Resources			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially Significant	**MM-CR-1** through **MM-CR-4** (see above) **MM-TCR-1: Initial ground disturbing activities shall be monitored by a Native American observer in accordance with the following specifications:** Temporary Impact Areas (equipment staging and materials storage outside trail alignment) - a Native American observer, ancestrally affiliated with the area, shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site. Permanent Impact Areas not including bridge piling installation (all areas of the trail alignment excepting the bridge approach areas on both sides of the UPRR alignment) – a Native American observer, ancestrally affiliated with the area, shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area. Bridge piling installation – a Native American observer, ancestrally affiliated with the area, shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		resources are located on the proposed project improvement area. The monitor/observer shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitor reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to the City and County. ***Plan Requirements and Timing***: Prior to issuance of a grading permit, the City of Carpinteria shall contract with a Native American observer, ancestrally affiliated with the area, to monitor initial ground disturbance activities in accordance with the above criteria. ***Monitoring***: City of Carpinteria/County of Santa Barbara staff shall ensure the Native American observer, ancestrally affiliated with the area, provide monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources.	
Would the project have a cumulative effect on tribal cultural resources?	Potentially Significant	**MM-CUL-1** through **MM-CUL-4** (see above) **MM-TCR-1** (see above)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Utilities and Service Systems			
Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Potentially Significant	**MM-WAT-1, MM-WAT-2, MM-WAT-3,** and **MM-WAT-4** (see above)	Less than Significant
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant	None required	Less than Significant
Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	None required	Less than Significant
Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	None required	Less than Significant
Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	None required	Less than Significant
Would the project have a cumulative effect on utilities and/or service systems resources?	Potentially Significant	**MM-WAT-1, MM-WAT-2, MM-WAT-3,** and **MM-WAT-4** (see above)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Wildfire			
Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact	None required	No Impact
Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact	None required	No Impact
Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact	None required	No Impact
Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact	None required	No Impact
Would the project have a cumulative effect on wildfire?	No Impact	None required	No Impact

2 Introduction and Project Description

This chapter of the Environmental Impact Report (EIR) describes the purpose, scope and legislative authority of the EIR, the intent of the California Environmental Quality Act (CEQA) and other pertinent environmental rules and regulations, and the environmental review process. The section also includes the structure, required contents, and relationship of the EIR to other potential responsible or trustee agencies. The section closes with the detailed project description, including purpose and objectives of the proposed Carpinteria Rincon Trail Project (project).

2.1 Environmental Procedures

2.1.1 California Environmental Quality Act Compliance

The California Public Resources Code (Section 21000 et seq.) requires the preparation and certification of an EIR for any project that a lead agency determines may have a significant effect on the environment. This EIR has been prepared in compliance with all criteria, standards, and procedures of the CEQA Guidelines (14 CCR Section 15000 et seq.).

2.1.2 Notice of Preparation and Scoping

CEQA establishes mechanisms whereby the public and decision makers can be informed about the nature of a proposed project, and the extent and types of impacts that the project and its alternatives would have on the environment, should the project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated October 30, 2020 to begin a 30-day public scoping period, to interested agencies, organizations, and parties. The NOP was also sent to the State Clearinghouse at the California Office of Planning and Research. The State Clearinghouse assigned a state identification number (SCH No. 2020100582) to this EIR.

The NOP is intended to encourage interagency communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR. A public scoping meeting was held on November 17, 2020, to gather additional public input.

Comments received during the NOP public scoping period were considered during the preparation of this EIR. The NOP and comments are included in Appendix A to this EIR. In response to the NOP and public scoping meeting, 76 comment letters were received. Comments covered a variety of topics, including aesthetics, biology, cultural resources, geology, hydrology/water quality, land use/policy, noise, public services, recreation, and transportation.

Based on the scope of the proposed project as described in the NOP, the following issues were determined to be potentially significant and are addressed in Chapter 3, Environmental Analysis, of this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Emissions
- Hydrology and Water Quality

- Land Use and Planning
- Noise
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

In addition, the following issues were determined to be not significant and are addressed in Chapter 4, Effects Found Not to be Significant, of this EIR:

- Agricultural and Forestry Resources
- Energy
- Mineral Resources
- Population and Housing
- Public Services
- Wildfire

2.1.3 Overview of the EIR Process

This EIR will be made available to members of the public, public agencies, and interested parties for a 45-day public comment period in accordance with Section 15105 of the CEQA Guidelines. Public comment of the EIR is intended to focus "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). The Notice of Completion of the EIR will be filed with the State Clearinghouse as required by Section 15085 of the CEQA Guidelines. In addition, the Notice of Availability of the EIR will be distributed pursuant to Section 15087 of the CEQA Guidelines. Interested parties may provide comments on the EIR in written form. This EIR and all related technical appendices are available for review upon request during the 45-day public comment period. Due to COVID 19 shelter-in-place restrictions, all documents are available online at the City's website (https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/).

Once the 45-day public comment period has concluded, the City will review all public comments on the EIR, provide written responses to comments, and authorize revisions to the EIR text, if necessary. The final Mitigation Monitoring and Reporting Program (MMRP) will be incorporated into the Final EIR. Mitigation measures contained in the EIR consider future monitoring requirements and are written in sufficient detail to address impacts of the proposed project, referencing the appropriate implementing permits and plans. If one or more significant environmental impacts are determined, written findings for each of those significant effects, accompanied by an overriding justification and rationale for each finding in the form of a statement of overriding considerations will also be included in the Final EIR, if necessary. The Final EIR includes all comment letters received, final written response to comments, a Final EIR preface, if applicable, edits made to the EIR as a result of public review/comment, and findings of fact and statement of overriding considerations, if necessary.

2.2 Intended Uses of the EIR

According to Section 21002.1(a) of the Public Resources Code (CEQA), "[t]he purpose of an environmental impact report is to identify the significant effects of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." This EIR provides relevant information concerning the potential environmental effects associated with construction and operation of the proposed project and identifies and evaluates potentially significant effects that may result from implementation of the proposed project. It is intended for use by decision makers and the public.

As the designated lead agency, the City has assumed responsibility for preparing this EIR. When deciding whether to approve the proposed project, the City will use the information provided in this EIR to consider potential impacts to the physical environment associated with the proposed project. The City will consider all written comments received on the EIR during the 45-day public comment period in making its decision to certify the EIR as complete and in compliance with CEQA and in making its determination whether to approve or deny the project. In the final review of the document, environmental considerations, and economic and social factors will be weighed to determine the most appropriate course of action.

After certification of the Final EIR, agencies with permitting authority over all or portions of the project, such as the County of Santa Barbara, will use the Final EIR as the basis for their evaluation of environmental effects related to the project and approval or denial of other applicable permits or authorizations.

2.3 Organization and Content of the EIR

This EIR is organized to provide a tiered project-level analysis of the potentially significant environmental impacts, mitigation measures, and alternatives for the proposed project. To describe the direct, indirect, and cumulative impacts, mitigation measures, and alternatives for the proposed project, this EIR is organized as follows:

- Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and a summary of the project as compared to the alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in this EIR along with the associated mitigation measures proposed to reduce or avoid each impact.
- Chapter 2, Introduction & Project Description, serves as a foreword to this EIR, introducing the project background and objectives, applicable environmental review procedures, and format of the EIR; describes the project location and physical environmental setting; and provides a thorough description of the proposed project and required discretionary approvals.
- Chapter 3, Environmental Analysis, provides an analysis of the potentially significant environmental impacts identified, and proposed mitigation measures to reduce or avoid any potentially significant impacts.
- Chapter 4, Effects Found Not to be Significant, address impacts that were determined to not be significant during the scoping process.
- Chapter 5, Other CEQA Considerations, discusses the project's potential Growth-Inducing Impacts, Significant and Irreversible Impacts, and Significant and Unavoidable Impacts.
- Chapter 6, Alternatives, analyzes a range of reasonable alternatives to the proposed project that would lessen or avoid significant environmental effects of the proposed project.
- Chapter 7, List of Preparers, provides a list of persons that contributed to the preparation of this EIR.
- Chapter 8, References, provides a compiled list of references cited in each section of the EIR.

2.3.1 Mitigation Monitoring and Reporting Program

The City will prepare a MMRP prior to project approval. The MMRP will include all mitigation measures outlined in the EIR, the responsible entity for implementation, implementation timing (prior to construction, during construction, post-construction), and any follow-up reporting requirements (such as submittal of materials to regulatory agencies). The City, as the designated lead agency, is responsible for enforcing and verifying that each mitigation measure is implemented as required.

2.4 Project Background and Purpose

2.4.1 Background

The City of Carpinteria is situated along the California coast where the Santa Ynez Mountains meet the Pacific Ocean. California State Highway 150 (Highway 150), U.S. Highway 101, and the coastal railroad all intersect in the southeastern entrance to the Carpinteria Valley. The transportation infrastructure improvements at this location have not included planning for or installation of a needed Class I bicycle route or pedestrian trail linking the urban area of the City of Carpinteria with the coastal resources of the County and State Beach Parks at Rincon Point as well as a connection to the newly opened bike path to Mussel Shoals. The proposed Carpinteria Rincon Trail will provide an important and desirable connection in this area and also serve as a link in the larger California Coastal Trail.

A Mitigated Negative Declaration (MND) was prepared for a proposed Carpinteria Rincon Trail in 2015. The 2015 MND analyzed a multi-use (shared-use) trail extending from the eastern terminus of Carpinteria Avenue to Rincon Beach County Park, 12–feet in width and approximately 4,000 feet in length. The design of the proposed trail analyzed in the 2015 MND would have necessitated approximately 1,000 feet of retaining wall, with a maximum height of 14 feet. Several look-out points, a stormwater cistern, and pathway lighting at sharp horizontal grade changes and within the parking areas for the trail were also proposed. Further investigation into the original design revealed that its constructability as originally designed was questionable due to unstable geologic conditions and critical US Highway 101 storm drain infrastructure in the vicinity of the original trail alignment's long switchback turn within the UPRR alignment. Further study also suggested that the entire trail alignment could not be designed to achieve an Americans with Disabilities Act of 1990 (ADA) compliant slope. Therefore, a Subsequent MND was prepared in 2019, which analyzed a simplification of the originally proposed design, including elimination of the long switch-back section within the alignment for the UPRR railway, elimination of parking lot improvements at the western trail terminus at Carpinteria Avenue, and elimination of the storm water cistern and any trail lighting. The Draft Subsequent MND was circulated for public comment, and a hearing was held by the Carpinteria Planning Commission to consider certification of the document. The Planning Commission voted to certify the Subsequent MND, and that decision was appealed to the City Council. Although the appeal of the Planning Commission's certification of the Subsequent MND was never heard by the City Council, the City Council decided to move forward with the preparation of this Focused EIR as the appropriate CEQA environmental review document in order to allow for a more in-depth analysis of key issue areas identified during consideration of the Subsequent MND.

Access between the City of Carpinteria and Rincon Beach County Park has primarily been provided by U.S. Highway 101, though the distance between the two destinations is less than one mile. The use of U.S. Highway 101 requires a bicyclist or pedestrian to travel along the highway shoulder. Many bicyclists and pedestrians use the railroad corridor as an alternative route, as evidenced by the unsanctioned trails that are present along the bluff face and along the railroad tracks connecting the City of Carpinteria with Rincon Beach County Park. Use of the unsanctioned trails in and along the railroad corridor, however, presents a public access and safety concern.

The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria, to Rincon Beach County Park, in unincorporated Santa Barbara County. The new, shared-use trail would provide a strategic addition to Carpinteria's Coastal Vista Trail that upon completion, will connect Padaro Lane to the west and Rincon Beach County Park to the east. In addition to providing critical improvements in public safety, the completion of this trail segment would provide improved public coastal access and recreational opportunities, and enhancement of non-vehicular travel alternatives to the region's significant coastal resources. Completion of

the trail will also fill in a long-standing gap in the statewide California Coastal Trail. The trail further is a requirement of the Conditional Use Permit and Coastal Development Permit No. 09-1522-CUP/CDP granted to the California Department of Transportation (Caltrans) to construct the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension Project in order to promote regional alternative transportation objectives and to enhance recreation opportunities within the coastal zone and access to coastal resources. Regional vicinity and project site location are presented in Figures 2-1 and 2-2.

2.4.2 Purpose and Need

2.4.2.1 Purpose Statement

The fundamental purpose of the Carpinteria Rincon Trail is to establish a scenic, coastal trail offering a non-motorized ADA accessible recreational and alternative transportation trail option between the Carpinteria Bluffs and Rincon Beach County Park, consistent with the intent of the California Coastal Trail and as required by the California Department of Transportation's conditions of approval for the Linden Avenue and Casitas Pass Road Interchanges project (Conditional Use Permit and Coastal Development Permit No. 09-1522-CUP/CDP). In addition, the Carpinteria Rincon Trail shall be designed to achieve the purposes and objectives described further below.

2.4.2.2 Public Safety

Due to the lack of a direct, non-vehicular access corridor, the most traveled route to hike or bike to Rincon Beach County Park from the City of Carpinteria is along the railroad corridor, which presents a known safety risk. The railroad corridor in the City of Carpinteria is a major north-south rail route with freight and passenger trains running frequently each day. The continuous rail tracks that the Union Pacific Railroad (UPRR) recently installed are quieter than previous segmented rail track; thereby increasing safety hazards as rapidly approaching trains may not be audible. The geography of the area also constrains visual line of sight along the rail corridor such that it can be difficult to see oncoming trains far in advance. Despite these safety concerns, it is common to see individuals and groups walking and biking along the tracks from the City to Rincon Beach County Park or points in between. Many trail users are carrying surfboards and day packs, making them vulnerable to the speed of oncoming trains. Soaring recreationalists (such as parasailers and paragliders) also fly over and sometimes land on, or utilize the rail corridor to return to the launch point located on the bluff promontory above the railroad corridor. From 2015 to 2019, the Federal Railroad Administration Office of Safety records indicate that there were 25 rail incidents in Santa Barbara County, including 18 deaths and 7 injuries (FRA 2020). According to a grand jury report on rail incidents within Santa Barbara County, one railway fatality occurred within Carpinteria in the period from 2015 through 2018 (Santa Barbara County Grand Jury 2019).

2.4.2.3 Local Environmental Enhancement

Bicycling and walking are cost effective, energy efficient and provide an alternative means of travel to the use of motorized vehicles. The City of Carpinteria's mild Mediterranean climate coupled with its scenic coastal bluffs provide a favorable environment for bicycling and walking year-round. Bicycles also provide easy mobility for residents and tourists, and the proposed trail would offer a new direct, safe and efficient access route to Rincon Beach County Park, as well as a connection between Ventura and Santa Barbara counties.

Near the east end of the Coastal Vista Trail is the Carpinteria Bluffs Nature Preserve, which provides visitors with a unique overlook along one of the last remaining undeveloped coastal regions along the South Coast. In addition,

the 21 acre parcel adjacent to the eastern terminus of Carpinteria Avenue (formerly known as Carpinteria Bluffs Area III) has recently been purchased by the Land Trust for Santa Barbara County and subsequently deeded to the City of Carpinteria to be preserved in perpetuity as a public open space preserve (Rincon Bluffs Preserve) that will provide additional passive recreation and scenic enjoyment opportunities. Commonly seen from the bluffs are white-tailed kites, turkey vultures, red-tailed hawks, American kestrels, brush bunnies, bottlenose and common dolphins, California sea lions, Pacific harbor seals, California brown pelicans, western gulls, and migrating gray whales (City of Carpinteria 2009). Views of the Northern Channel Islands and Channel Islands National Marine Sanctuary are also afforded. The proposed trail provides an extension to the Carpinteria Bluffs trail system, allowing hikers and bicyclists to continue along the coastal bluffs into neighboring coastal resource areas of interest.

2.4.2.4 Recreational Opportunities

The City of Carpinteria is a popular year-round tourist attraction, with close to two million visitors a year (City of Carpinteria 2009). The City's beach is recognized as one of the safest and cleanest beaches in Santa Barbara County. Northeast of the City beach is the Carpinteria Salt Marsh Nature Park, which is one of the few remaining healthy coastal wetland systems in California, and a well-used hiking area. East of the City beach is Carpinteria State Beach Park, one of California's most popular camping and recreation areas.

Within the State Beach Park, Carpinteria Creek flows out to the ocean. This creek is currently the focus of a successful steelhead restoration effort. East of the State Beach, the coastal bluffs begin where the Casitas Pier is located. Part of the coastal bluff is also located within the Carpinteria Bluffs Nature Preserve and the newly created Rincon Bluffs Preserve. Located just east of the Casitas Pier is the Pacific harbor seal sanctuary, a natural haul out and pupping rookery where over 500 of these pinnipeds have been observed on shore at once (City of Carpinteria 2009).

Just east of the City of Carpinteria, Rincon Beach County Park exists and offers picnic areas, beach access, and parking areas for beach-goers and cyclists using the regional coastal bike path that connects to the City of Ventura. Rincon Beach County Park is operated by the County of Santa Barbara. Visitors to the City of Carpinteria, including campers at the State Beach, often travel to the Rincon Beach County Park for recreational activities and to view the world-famous Rincon surf break. The ocean bluffs along the eastern portion of the City and extending into the Rincon Beach County Park area also produce updrafts from ocean related winds, which create soaring opportunities generally above the top of the ocean bluffs alignment for paragliders and other soaring recreationalists. Offshore, the Channel Islands National Marine Sanctuary and Channel Islands National Park provide additional recreation opportunities. The City aims to complete the Carpinteria Coastal Vista Trail for the recreational use of the surrounding communities and to provide public access and connections to these natural places.

The proposed Carpinteria Rincon Trail would close a gap in the California Coastal Trail at a critical location. The function of the Carpinteria Rincon Trail as the local segment of the California Coastal Trail means the proposal must also align with the goals established for the California Coastal Trail. Some of the introductory information in the Senate Bill 908 Report (Completing the California Coastal Trail) is informative, and includes the stated goals for the trail, importantly the following:

1. Provide a continuous trail as close to the ocean as possible, with connections to the shoreline at appropriate intervals and sufficient transportation access to encourage public use.
5. Design the CA Coastal Trail to provide a valuable experience for the user by protecting the natural environmental and cultural resources while providing public access to beaches, scenic vistas, wildlife viewing areas, recreational or interpretive facilities, and other points of interest.

6. Create linkages to other trail systems and to units of the State Park system, and use the Coastal Trail system to increase accessibility to coastal resources from urban population centers.

   (Source: http://californiacoastaltrail.info/cms/pages/trail/done.html)

The proposed Carpinteria Rincon Trail would link the Carpinteria Bluffs and Rincon Beach County Park, and would also extend the Pacific Coast Bikeway, thereby improving recreation opportunities along the South Coast. Eventually, upon completion of other segments, the Carpinteria Coastal Vista Trail will connect to Carpinteria State Beach Park and the Carpinteria Salt Marsh Preserve and on to Padaro Lane, west of the City. The Pacific Coast Bikeway currently extends east to Seaside and eventually to Ventura's Seaside Wilderness Park and Emma Wood State Park. From Emma Wood State Park, cyclists and pedestrians can join the California Coastal Trail to the Ventura County Fairgrounds and the City of Ventura waterfront. Figure 2-3, Existing Trail Network, presents the proposed Carpinteria Rincon Trail segment in the context of the Carpinteria Coastal Vista Trail.

2.4.3 Objectives

The proposed trail was identified by the City to meet critical safety and public access needs. Objectives of the proposed project include:

- Improve pedestrian and bicyclist safety, as well as vehicular safety, by significantly reducing unsafe and/or illegal use of the railway corridor and the U.S. Highway 101 shoulder.
- Enhance regional mobility for cyclists and pedestrians, while enhancing support of regional initiatives to promote alternative transportation modes between Carpinteria, Santa Barbara County and Ventura County, by providing a continuous bike and pedestrian path connecting Santa Barbara County to Ventura County.
- Reduce air pollution from vehicle-related air quality emissions and traffic congestion on local and regional transportation systems by promoting pedestrian and bicycle access to coastal resources and recreation opportunities via a scenic multi-use trail, as an alternative to use of motorized vehicles to access and experience such coastal resources.
- Improve the local coastal bluff environment through improved water quality of surface water runoff through stabilization of bluff slope faces that are currently eroding into the Pacific Ocean, and enhancement of sensitive coastal bluff scrub habitats in the project area. Also, avoid deposits of petroleum fuels or lubricants associated with typical motor vehicle use for transportation in close proximity to the ocean, preventing such pollutants from stormwater runoff entering the adjacent marine environment.
- Complete a critical missing link in the California Coastal Trail consistent with the goals of Senate Bill 908, including provision of a continuous trail as close to the ocean as possible, with connections to the shoreline at appropriate intervals and sufficient access to encourage public use. The California Coastal Trail is intended to offer scenic coastal vistas, wildlife viewing areas, recreational or interpretive facilities, and other points of interest, and is recognized in regions throughout the state as a key resource or opportunity for these coastal-oriented experiences.
- Provide a coastal-oriented pathway that supports the broadest use by the public through a design that complies with standards established via the Americans with Disabilities Act (ADA).
- Provide new scenic coastal access and coastal tourism opportunities in the City of Carpinteria, Santa Barbara County, and Ventura County.

2.5 Location

The project is located on lands within the jurisdiction of the City of Carpinteria and the County of Santa Barbara (Figure 2-1). Carpinteria is a quaint seaside town located about 12 miles east of Santa Barbara near the intersection of Highway 150 and U.S. Highway 101, near the Ventura County line.

The proposed trail would provide a dedicated connection from Carpinteria Avenue to the Ventura County line through Rincon Beach County Park. The trail would begin near the eastern terminus of Carpinteria Avenue, and would proceed eastward along the existing benched slope adjacent to U.S. Highway 101. However, to achieve compliance with pathway surface slope limitations under the Americans with Disability Act (ADA), the existing benched slope would be regraded.

The proposed trail design includes a clear-span bridge over the UPRR alignment. The bridge would be approximately 160-feet-long, with a width of between 14-feet and 16-feet (clear width, measured inside the bridge rails).

At the south end of the UPRR bridge, the trail would continue eastward along a benched slope on the ocean-facing side of the bluff. The benched slope would be graded to be in compliance with ADA pathway slope requirements, and to provide long-term stability for the trail in accordance with engineering safety standards. Figure 2-2 illustrates the overall alignment of the proposed Carpinteria Rincon Trail. The proposed route is grade and horizontally separated from the U.S. Highway 101 freeway and the railroad corridor.

2.6 Surrounding Land Uses and Environmental Setting

Carpinteria and its surrounding area contain important natural resources, including outstanding beaches, the Carpinteria Salt Marsh Preserve, Carpinteria Reef, a Pacific harbor seal sanctuary, and coastal bluff, foothill and creek habitats supporting numerous plant communities and wildlife species.

U.S. Highway 101 is located to the north of the proposed trail alignment, the Pacific Ocean is located to the south below the Carpinteria bluffs; the UPRR rail corridor bisects the central portion of the trail alignment. Currently undeveloped bluff open space designated for visitor-serving commercial use (City of Carpinteria 2003) is located adjacent to the western end of the trail on Carpinteria Avenue, with the Rincon Beach County Park and Rincon Point residential community located adjacent the eastern terminus of the trail. Surrounding land uses are shown in Figure 2-2. Figure 2-2 also illustrates jurisdictional boundaries for the City of Carpinteria, County of Santa Barbara, Ventura County, and Caltrans right-of-way relative to the trail alignment.

The majority of the proposed trail route is located along and above U.S. Highway 101, and the alignment is completely within terrain that has been previously modified for transportation projects, which are now represented by old terraced road and rail cuts. Most of the area's natural landforms have been mechanically manipulated over the years as a result of road, highway and railroad construction activities dating back to at least the late 1800s. A small unsanctioned trail exists in some areas of the proposed trail, including the portion of the proposed trail from the railroad crossing to the Rincon Beach County Park parking lot. At both ends of the trail are pre-existing parking areas; Rincon Beach County Park has a paved lot and at Carpinteria Avenue there is an existing dirt lot, which would continue to provide informal parking for the proposed project.

The first portion of the trail, from the eastern terminus of Carpinteria Avenue to the UPRR corridor, traverses an engineered slope, cut during construction of U.S. Highway 101. The trail would cross the UPRR tracks in an area that

consists of engineered slopes cut during construction of the current railroad corridor. The second portion of the trail, from the UPRR crossing to the westernmost end of Rincon Beach County Park, is currently occupied by an existing informal trail on an existing cut bench that was abandoned by the railroad in the late 1960's. This informal trail is mostly flat in this area and its surface is mostly dirt; however, some original asphalt paving associated with the previous rail use remains in some areas. The top of the bluff formation in this area was also used for the previous alignment of State Route 2 (precursor to the current U.S. Highway 101 alignment) and abandoned in the 1960s. Remnants of the abandoned road alignment are still visible along the top of the bluff formation and overhang the existing informal trail. A few abandoned and current underground utilities and infrastructure exist in or nearby the proposed route, including but not limited to fiber optic lines, a sewer main, and storm drain infrastructure.

2.7 Project Description

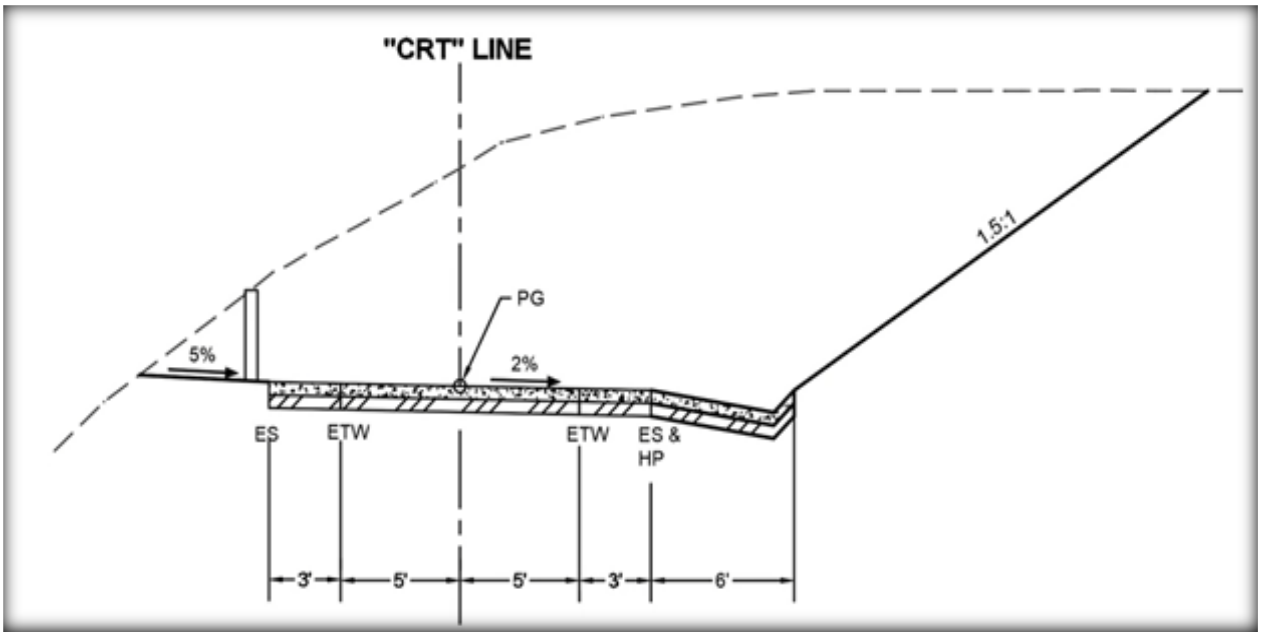
The proposed project consists of a 16-foot wide (10-foot wide path with a 3-foot wide paved shoulder along both sides) and approximately 2,800-foot long shared-use trail that would provide safe access for bicyclists and pedestrians traveling from Carpinteria Avenue in the City of Carpinteria to Rincon Beach County Park in Santa Barbara County at the Ventura County line. Figure 2-4, Site Plan, illustrates the proposed trail alignment.

The initial approximately 850 feet of the trail alignment (starting from the eastern Carpinteria Avenue terminus and heading east) is within the City of Carpinteria jurisdiction. The remaining approximately 1,950 feet of the trail alignment, including the bridge crossing over the railroad corridor, is located within the County of Santa Barbara.

The Rincon Trail is planned to function as the local section of the California Coastal Trail, connecting on the south end to the recently completed bicycle and pedestrian path constructed with the Caltrans HOV project from Carpinteria to the Mobil Pier in Ventura County. On the north, the Rincon Trail would currently connect with Carpinteria Avenue, which provides continuous bicycle and pedestrian travel from the eastern to western end of Carpinteria City limits. From Carpinteria Avenue an alternate route exists for cyclists and pedestrians south along Linden Avenue to 4th Street eastward through Carpinteria State Beach, and connecting with the Carpinteria Bluffs Trail, which is nearly continuous to the location of the Rincon Trail western trail head. The City is in the process of acquiring an easement over two parcels that would complete the Carpinteria Bluffs Trail from the Carpinteria State Beach to the Rincon Trail. In the near term, the City will also be completing additional trail and public parking improvements in conjunction with the recent acquisition of the Rincon Bluffs Preserve property, which is located immediately adjacent to the western terminus of the proposed Rincon Trail. The Rincon Bluffs Preserve improvements will serve to further enhance public recreational and alternative transit options in the area.

A cross-section illustrating the proposed trail configuration is provided below (following page). Note that the "travel" area of the path is intended to be 10 feet in width, but a paved 3-foot shoulder is provided along both sides (which allows additional space for pedestrians or cyclists to pass other trail users or navigate when opposite direction travelers are present). The paved 3-foot shoulder also improves access for emergency service and maintenance vehicles.

A safety fence is also illustrated (on the left) to prevent users from encountering the slope below the trail. The proposed fencing would be approximately 3.5 feet in height and consisting either of three-rail post and rail with a concrete base, chain link or other design of similar dimensions consistent with trail fencing in the community. A 6-foot wide swale would also be provided along the path where cut slopes are present to capture and convey stormwater, as shown in Illustration 2-1.



SOURCE: Bengal Engineering

Illustration 2-1 Rincon Trail Cross Section - Widths of Components

Legend for Illustration 2-1:

CRT Center of Route Travel
ETW Edge of Travel Way
ES Edge of Shoulder
HP High Point (of drain swale adjacent to path)
PG Path Guide

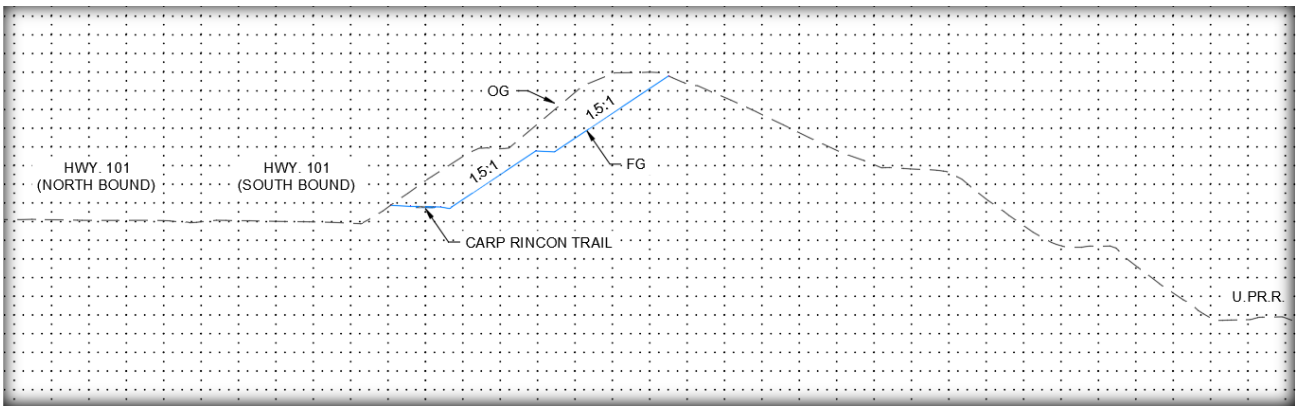
2.7.1 Earthwork

The trail design has been engineered to incorporate pathway travel slopes that are consistent with ADA standards. The design also avoids an area with deep landslides, south and west of the crossing point over the UPRR alignment, which were identified in geotechnical testing. The majority of project earthwork will occur on existing engineered slopes that were constructed as part of past road, highway and railroad projects; these manufactured slope faces in many instances are steeper than natural conditions, leading to increased erosion potential, which the project intends to correct though re-contouring to reduce slope angles. Construction of the proposed path design would involve a total of 107,386 cubic yards of cut, a total of 14,860 cubic yards of fill, and the export of a total of 92,526 cubic yards of earth material. The re-contouring of existing engineered topography along the path alignment to achieve more stable conditions is described in more detail below.

2.7.1.1 Pathway Slope Profiles Adjacent to U.S. Highway 101 (North of UPRR Alignment)

Cut slopes above the trail would have a slope ratio of 1.25:1, fill slopes (which would be present only adjacent to the bridge over the UPRR corridor) are proposed to have slope ratios between 2:1 and 4:1. The earthwork would alter the elevation of the bench on which the trail would be aligned, but would not alter the top elevation of the

existing hill/ridge as it remains from previous earthwork modification in this section of the alignment. Illustration 2-2 presents the existing versus proposed slope profile for earthwork modifications above and below the trail.



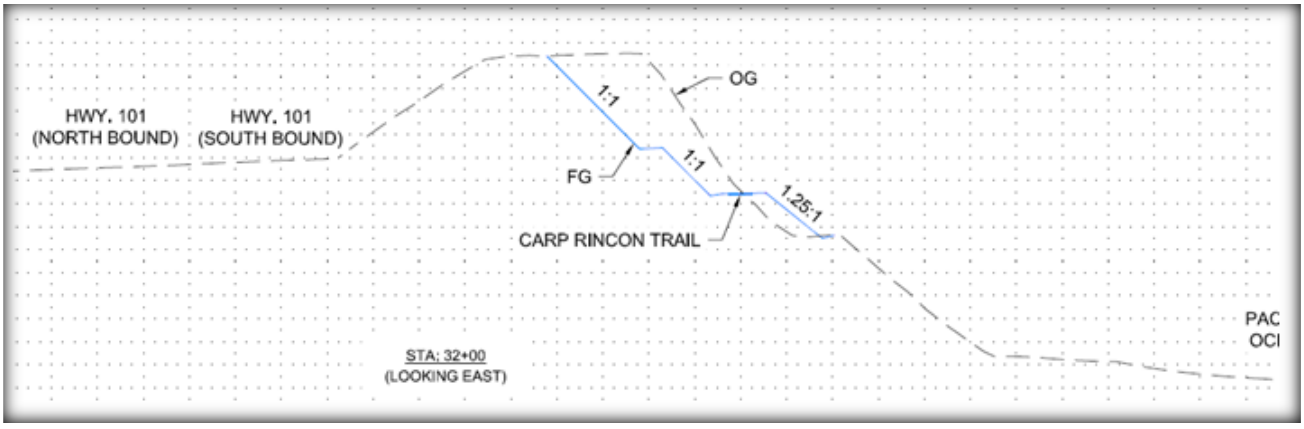
SOURCE: Bengal Engineering

Illustration 2-2 Pathway Grading Profile Adjacent to U.S. Highway 101

Note in Illustration 2-2 that the proposed cut-slopes are similar in profile to those created during the U.S. Highway 101 construction. Some portions of the trail along the north side of the UPRR alignment would not have the upper bench shown above, where Carpinteria Avenue is in close proximity to U.S. Highway 101.

2.7.1.2 Pathway Slope Profiles South of UPRR Alignment

For the portion of the path on the ocean side of the UPRR alignment, the regraded slopes for the trail "bench" would employ cut slopes with a ratio of 1:1 above the trail, while a ratio of 1.25:1 would be employed for the "reinforced" fill slopes below the trail. The earthwork would alter the elevation of the bench on which the trail would be aligned, but would not alter the top elevation of the hill/ridge. Illustration 2-3 presents an example of the existing versus proposed slope profile for earthwork modifications above and below the trail.



SOURCE: Bengal Engineering

Illustration 2-3 Pathway Grading Profile South of UPRR Alignment

Note in Illustration 2-3 that the proposed cut-slopes are less-steep than those constructed for the railroad alignment in this area (illustrated as "OG" above) in order to provide an adequate margin of safety for the long-term stability of the slopes. Note there is also a proposed bench above the trail that would intercept rainwater and also prevent rock fall on the path below. The bench would also provide maintenance access for the manufactured slopes and path.

2.7.2 Bridge Detail

The bridge design includes a clear-span bridge over the UPRR alignment. The bridge would be approximately 160-feet-long, with a width of between 14-feet and 16-feet (clear width, measured inside the bridge rails). The bridge would be supported on foundations using deep piles. The bridge would be a factory-built steel structure, painted to protect it from corrosion because of the proximity to the ocean. The bridge would be delivered substantially complete, likely in 2 sections. After the two "halves" of the bridge are bolted together this unit would be lifted into place, likely using two cranes, one situated on either side of the UPRR tracks. Once the "factory made" portion of the bridge is in place, a concrete bridge deck would be cast-in-place, and the wing walls and abutment back walls would be completed. Illustration 2-4 provides an example of a similar scale pre-fabricated steel bike path bridge. Note the bridge for the Carpinteria Rincon Trail will have some similar characteristics, except that UPRR requires high "safety fences" for the full length of the bridge to protect the trains from potential objects thrown from the bridge platform.



SOURCE: Bengal Engineering

Illustration 2-4 Representative Steel Framed Bike Path Bridge

The approximate location of the Carpinteria Rincon Trail bridge over the UPRR alignment (the magenta colored line) is shown in Illustration 2-5. The relative elevation of the bridge can be compared to the U.S. Highway 101 bridge over the UPRR corridor (just above the elevation of the pictured train).

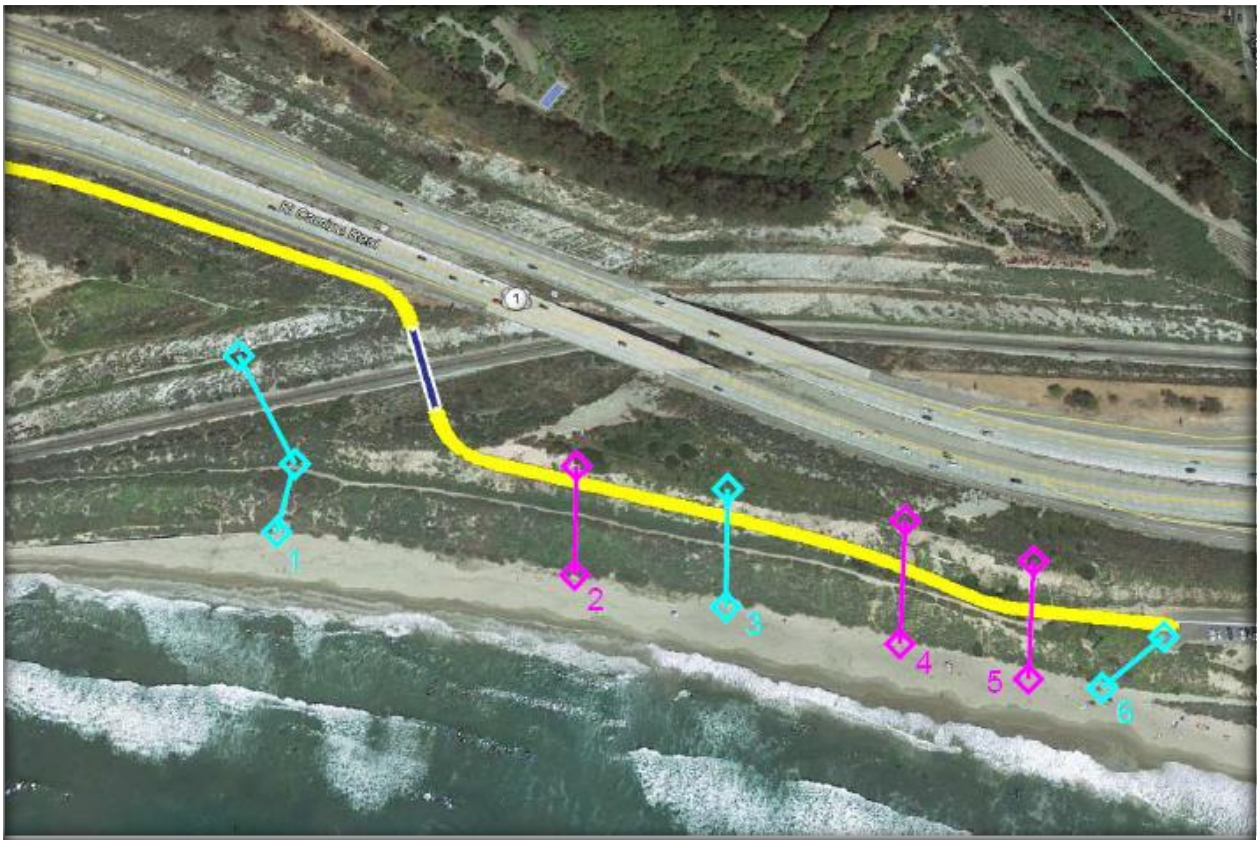


SOURCE: Bengal Engineering

Illustration 2-5 Approximate Profile and Location for Rincon Trail Bridge

2.7.3 Drainage

The proposed trail project includes an integrated storm drainage system to ensure stormwater runoff from the recontoured bluff face and the trail surface is conveyed to the ocean efficiently, avoiding potential erosion of slopes along the trail alignment. Along the portion of the trail north of the UPRR alignment, a concrete swale (v-ditch) would convey water along the trail edge, where it would be released into an existing surface drainage swale now serving U.S. Highway 101. This swale connects to an existing storm drain that crosses underneath the UPRR alignment, and then descends to the beach level. This storm drain is labelled as "1" in Illustration 2-6. No improvements are proposed to storm drain 1, and the trail storm drain volumes contributed to this storm drain would be negligible compared to existing flows already contributed from portions of U.S. Highway 101.



SOURCE: Bengal Engineering

Illustration 2-6 Major Storm Drainage Components of the Project

On the south side of the UPRR alignment, a concrete drainage swale would also carry surface runoff from the recontoured bluff face and trail, conveying such drainage along the side of the trail until it reaches one of the storm drain inlets lower in elevation. A total of 5 vertical storm drains would convey this stormwater from the trail to the beach elevation, for the trail segment south of the UPRR alignment (refer to Illustration 2-6). Drains No. 3 and No. 6 (shown in light blue in Illustration 2-6) are existing and would be re-used, including rehabilitation of existing piping; drains No. 2, No. 4, and No. 5 (shown in magenta in Illustration 2-6) would be newly developed for the project.

The new vertical storm drains would be installed during earth work for the trail and adjacent slopes, and would be buried to cross beneath the trail and then descend on the slope face to outlet at the beach elevation. Buried portions of the storm drain would be constructed of high-density plastic, transitioning to galvanized steel for the aboveground portions.

The majority of the length of the proposed trail is outside of the City of Carpinteria's and Santa Barbara County's respective 2013 Statewide Phase II Small Municipal Separate Storm Sewer (MS4) General Permit (2013 General Permit) boundaries, and thus the majority of the project is exempt from the Post Construction Requirements (PCRs) of the 2013 General Permit. Because the project is not regulated by the 2013 General Permit and PCRs therein, the project may not fully avoid potential water quality impacts unless it achieves compliance with active construction and post-construction requirements of the Statewide Construction General Permit (CGP). The proposed Rincon Trail drainage facilities are focused on the efficient collection and delivery of stormwater runoff from the trail surface to the ocean, no stormwater treatment components are included.

2.7.4 Trail/Path Features

The trail would be constructed of concrete to ensure longevity and low maintenance, including a concrete surface on the proposed bridge structure over the UPRR alignment. The trail width would be wide enough for bicyclists and hikers to easily ride and walk side-by-side, and pass others headed in the opposite direction. The 16-foot trail would also accommodate emergency and maintenance vehicle access to the project area. The bridge over the UPRR alignment would provide safe crossing for trail users over the railway and reduce the risk of accidents or fatalities associated with unsanctioned rail crossings. Additionally, the project would feature native plantings designed to transition to natural communities and restored native plant areas along the trail alignment. Vegetation and landscaping would consist of native trees and low-lying, native shrubs and groundcover. Native vegetation that would be removed along the immediate side of the trail for grading and improvements would be restored, and additional plantings to offset permanent removal of native vegetation beneath the trail alignment would be accomplished. Existing plant species in the project area that would have the potential to be restored include quail bush (*Atriplex lentiformis*), California sagebrush (*Artemisia californica*), California bush sunflower (*Encelia californica*) and lemonade berry (*Rhus integrifolia*).

Security fencing and/or railings would be provided along portions of the trail for safety and route guidance, and would also inhibit users from deviating off the designated path to ensure protection of adjacent native restoration plantings. The proposed fencing would be either three-rail post and rail with a concrete base, chain link or other design of similar dimensions consistent with trail fencing in the community, approximately 42 inches in height. A fence may be required along one or both sides of the trail depending on the characteristics of that segment's location, such as adjacency to bluff or slope features. As mentioned above, the bridge crossing would include chain link fence and a safety rail along both sides of the trail that lead up to the bridge.

Vehicle parking at the trailhead on the western end would be provided via an existing dirt lot adjacent to the Carpinteria Avenue terminus; no improvements to the informal dirt parking lot are proposed. The southern shoulder of Carpinteria Avenue, from SR 150 to the existing cul-de-sac terminus, provides parking for approximately 24 vehicles, and would be a short walk from the proposed western trail head. Signage would be installed to delineate parking and direct users toward the trail. Visitors traveling both northbound and southbound on U.S. Highway 101 would access Carpinteria Avenue from exit 84 for Highway 150 towards Ojai/Lake Casitas. Carpinteria Avenue is paved for approximately one-tenth of a mile past the existing dirt parking lot. The Rincon Beach County Park parking lot is also accessible from U.S. Highway 101 to the east. Exit 83 for Bates Road off of Highway 101 provides access to Rincon Point Road. Parking facilities and other park amenities are currently provided at Rincon Beach County Park; as such, no additional amenities are proposed in that location. A public parking lot within the eastern portion of the newly acquired Rincon Bluffs Preserve (a separate, future project in the same vicinity) would also serve both the open space preserve and the Rincon Trail once completed.

A sign providing a map of the trail and trail rules (including on-leash requirements for dogs) would be placed near the existing dirt parking lot at the western end of the trail. Additional wayfinding signs would be provided along the trail and up to four interpretive nature signs to illustrate surrounding biology, local geography and history of the area would also be provided.

Fire hydrants are currently provided at Rincon Beach County Park; no additional fire hydrants would be provided along the proposed trail. In the event of a wildfire, Carpinteria-Summerland Fire Protection District crews could access the trail from the west via Carpinteria Avenue or from the east via Rincon Beach County Park parking lot. Restrooms are also available at Rincon Beach County Park, which would serve users of the proposed trail as no additional restrooms would be provided along the trail. Restrooms are also contemplated as part of the future improvements to the Rincon Bluffs Preserve.

2.7.5 Construction

The shared-use trail would be 16 feet in paved width, including 10-feet for the travel lanes and a three-foot paved shoulder along each side (which would be available as additional travel way for navigating around pedestrians or cyclists that are within the main travel lanes). During construction of the trail, an additional one to four feet of area may be potentially impacted during grading for a total impact width of up to 20 feet depending on the trail location. However, virtually the entire trail length would be located on abandoned road or railway cuts or existing terraces that have been disturbed previously rather than on natural landforms and slopes.

To prepare the site for trail construction, the trail bench and slopes above and below the trail alignment would be rough graded to meet the proposed finished grade surface. The first stage would involve separate crews performing earthwork on the north side and south side of the UPRR alignment; the northern crew would use the Carpinteria Avenue extension for access, while the southern crew would access the earthwork areas from the Rincon Beach County Park parking area. Storm drain construction would be integrated with the rough grading activities. The second stage would involve bridge construction. Construction would begin with the bridge foundations, using deep piles. The bridge would be a factory-built steel structure. The bridge would be delivered substantially complete but in two sections. After the two "halves" of the bridge are bolted together this unit would be lifted into place using two cranes, one situated on either side of the UPRR tracks. Once this "factory made" portion of the bridge is in place, the concrete bridge deck will be cast-in-place, and the wing walls and abutment back walls will be completed. After the bridge is in place, finish grading of the path will occur. Next, the path surfacing, consisting of aggregate base under concrete paving would be completed. The final major stage would include the landscaping installation, habitat restoration activities, and erosion protection. Other final touches would include fencing, signing, and the path striping

Cut material on site would be utilized for the necessary fill material, as feasible. Excess cut volume would be exported from the site by haul trucks and transferred to the closest available receiver site. The quality of the excess graded material is anticipated to be suitable for fill material, which could be utilized by local on-going and future construction projects; several landowners in close proximity to the project site have also expressed interest in receiving soil. However, if at the time of project construction there are no local receiver sites for fill material, the project graded material would be transported to the closest transfer station or transported directly to the regional landfill.

It is anticipated that construction of the proposed project would commence in March 2022 and reach completion by March 2024, for a total construction window of approximately two years. The trail would be constructed using common earthwork equipment such as a dozer, excavator, dump truck, and roller. Removal of vegetation located within or adjacent to the proposed trail route would be conducted using a crawler tractor or similar small loader or backhoe. A haul truck would transport removed vegetation to the Marborg Construction and Demolition Recycling Center, located at 119 N. Quarantina Street in Santa Barbara, California or other green waste collection facility; construction waste would also be delivered to Marborg or another similar recycling facility in Ventura County.

Temporary fencing would be installed where necessary and would be removed after construction activity in the area is complete. Permanent safety rails and fencing would consist of wood and cement for the post and rail fences and steel for the chain link fences and would be installed using small tractors, such as a skid steer, and other hand tools. A small excavator would also be used to construct the proposed concrete v-trench that would guide runoff water to the proposed storm drain system. Paving of the proposed trail would take approximately one to three weeks and would require use of medium-sized tractors and trucks.

The proposed bridge structure would be fabricated off site. The bridge would be delivered by truck and installed using cranes, also delivered by truck. Additional smaller pieces of equipment, including welders and concrete saws, may also be utilized to link the bridge to the trail ramps. Construction of the overhead bridge would not interfere with railroad use in accordance with UPRR requirements, and may occur at night if required by UPRR to avoid daily train operations.

Signs would be installed after completion of the trail and bridge. Signs would be installed using a jackhammer and hand tools. Landscaping along the proposed trail would also occur after completion of trail construction. Revegetation of native plants and planting of the new slope faces would be achieved by hydroseeding using hydroseed trucks. Container plants would also be incorporated in the landscape palette. To ensure successful establishment of plantings, the planted vegetation would be watered weekly or bi-monthly depending on the season during the first two years of project operation through use of a water truck.

2.7.6 Operation

The proposed trail would accommodate multiple users including bicyclists and pedestrians. With the exception of "power-driven mobility devices" for persons with disabilities and maintenance or emergency vehicles, motorized vehicles would be prohibited on the proposed trail.

As with the majority of public trails in the City, access to the trail would be provided 24 hours a day, seven days a week. Trail closure would occur, however, during unsafe or emergency conditions, such as the unlikely event of a landslide or for some maintenance operations. No additional staffing for maintenance would be needed; instead, any trail maintenance needs would be accommodated by existing City of Carpinteria or County of Santa Barbara work crews on their respective portions of the trail.

Trash and recycling cans would be provided in the existing dirt parking lot at the western trail terminus. Waste collection services would be provided by E. J. Harrison and Sons or other local service provider and would occur weekly. As on-leash dogs would be allowed on the proposed trail, a dog waste bag dispenser and waste receptacle would be provided at the western end of the trail near the proposed parking lot. The dispenser would be similar to those currently provided by the City of Carpinteria's dog waste disposal bag program. Trash and recycling cans, and dog waste bag dispensers are currently available in Rincon Beach County Park and would serve trail users.

2.7.7 Acquisition of Right-of-Ways

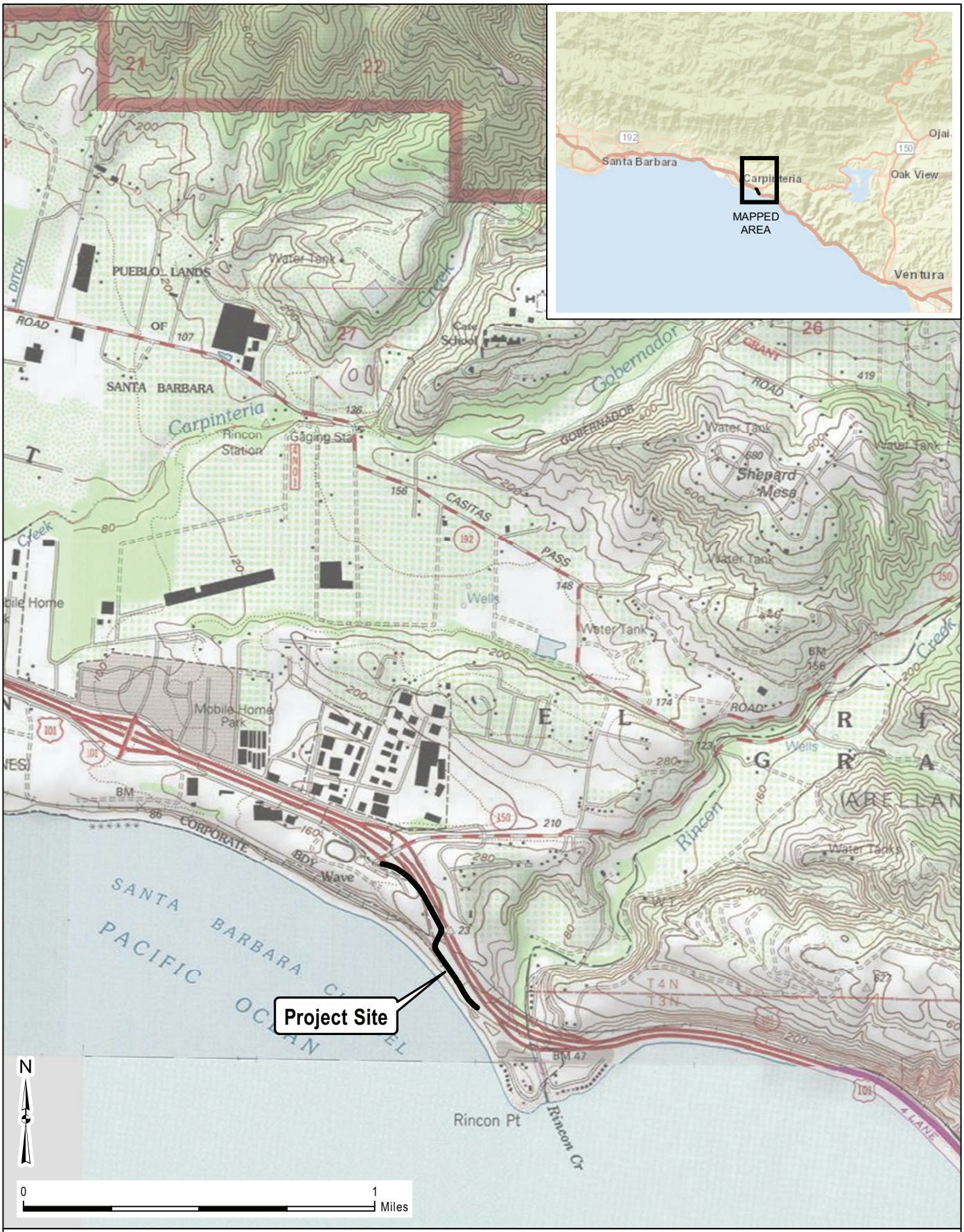
The proposed trail route crosses several parcels of land owned by public agencies. The trail parking lot location on Carpinteria Avenue is owned by the City of Carpinteria; trail implementation would require no easements for this portion. Heading east, the next portion of the trail, which courses down a hill parallel to the highway, is owned by the State of California as part of the U.S. Highway 101 right-of-way. For this portion of the route Caltrans will transfer in fee title these two parcels to accommodate placement of the trail and bridge structure on this property.[1] From there, the proposed trail route crosses two parcels of land owned by UPRR (APN 001-010-032 and APN 001-220-092); an encroachment permit and approval from the California Public Utilities Commission (CPUC) are in process for construction and maintenance of the bridge structure within the UPRR parcels. The trail then connects to a parcel of land owned by the County of Santa Barbara as part of Rincon Beach County Park; trail implementation would also require no easements for this portion.

[1] The process for transferring ownership interest in real property from Caltrans to another public entity typically entails several months, and is subject to approval by the California Transportation Commission. Transfer of the two parcels would be completed prior to any construction commencing on the trail and in compliance with CEQA.

2.8 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The proposed project would require consideration of the following discretionary actions by the City and by the County:

- City of Carpinteria: A conditional use permit (CUP) and coastal development permit (CDP) for the portion of the trail within the City of Carpinteria.
- County of Santa Barbara: A development plan permit (DVP), CUP and CDP for the portion of the trail within the County of Santa Barbara.



SOURCE: USGS 1:24,000 Topological Survey

FIGURE 2-1

Regional Location

Carpinteria Rincon Trail EIR

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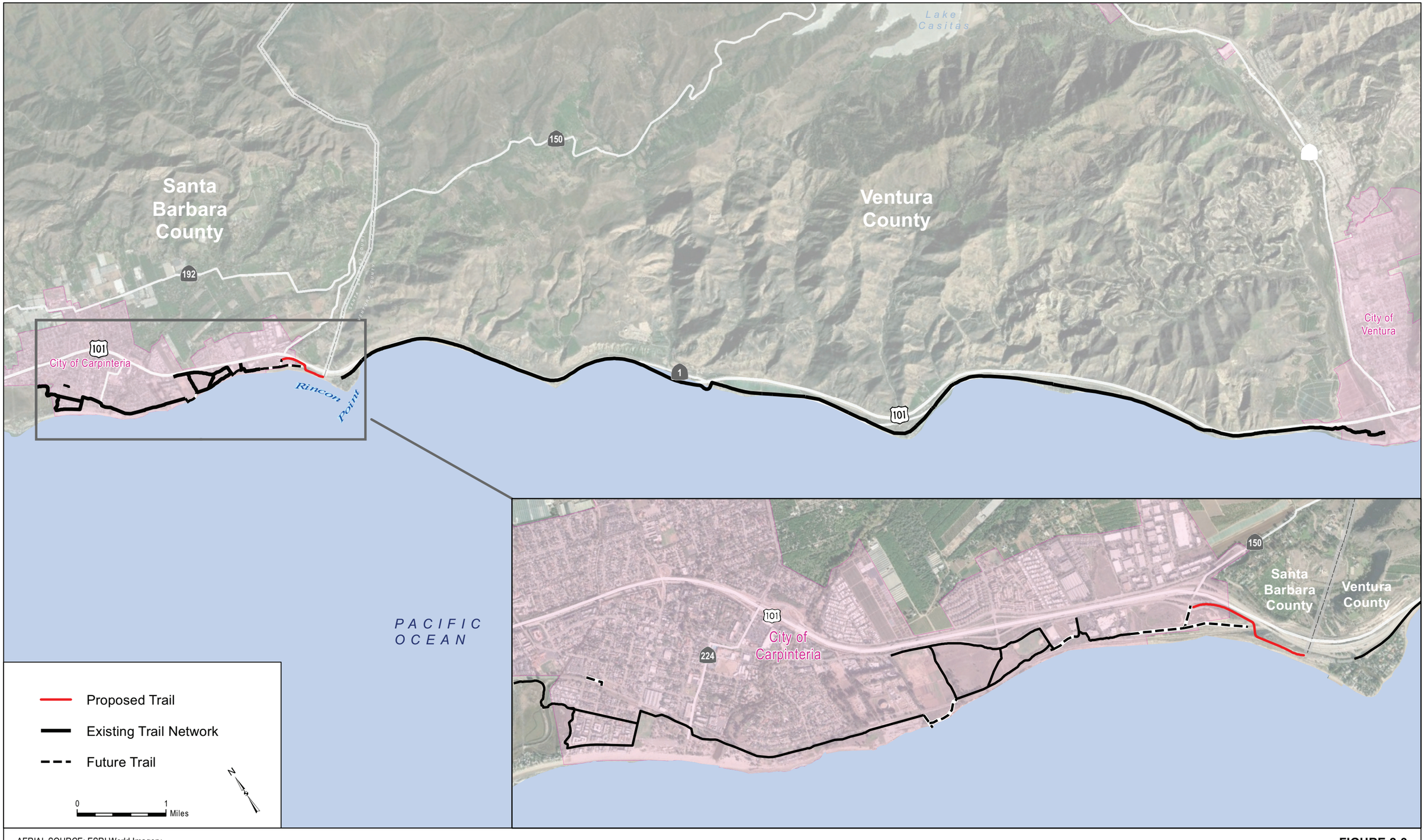
AERIAL SOURCE: CIRGIS 2017

FIGURE 2-2

Project Vicinity

Carpinteria Rincon Trail EIR

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AERIAL SOURCE: ESRI World Imagery

FIGURE 2-3

Existing Trail Network

Carpinteria Rincon Trail EIR

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AERIAL SOURCE: CIRGIS 2017
ENGINEERING SOURCE: Dudek 2010

FIGURE 2-4
Site Plan

Carpinteria Rincon Trail EIR

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3 Environmental Analysis

The following sections analyze the potential environmental impacts that may occur as a result of implementation of the proposed Carpinteria Rincon Trail Project (project). Each issue analysis section includes a description of existing conditions, the criteria for the determination of impact significance, evaluation of potential project impacts including mitigation measures (if applicable), and a conclusion of significance after mitigation for impacts identified as requiring mitigation (if applicable).

The environmental issues addressed in this chapter include the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

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3.1 Aesthetics

This section describes the existing visual conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.1.1 Existing Conditions

3.1.1.1 Existing On-Site Conditions

The project site is currently mostly undeveloped and includes seven vegetation communities and areas that are developed or otherwise unvegetated. Five of the seven vegetation communities found are native scrub communities that qualify as coastal sage scrub or coastal bluff scrub. Long stretches of the proposed shared-use trail are dominated by native scrub vegetation. Between Rincon Beach County Park, located directly to the southeast of the project alignment site, and the Union Pacific Railroad (UPRR) pedestrian bridge crossing, which traverses the middle of the project alignment, native quail bush (*Atriplex lentiformis*) dominates much of the project alignment. Additional native vegetation borders the parking lot in the Rincon Beach County Park and occupies portions of the proposed trail alignment. Between the eastern terminus of Carpinteria Avenue, located to the northwest of the proposed alignment, and the UPRR crossing, California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*) and quail bush are the dominant plants.

3.1.1.2 Surrounding Land Uses

The project site is located within the City of Carpinteria (City), and within the County of Santa Barbara (County). The City's coastal location affords visual and recreational opportunities not readily available to inland communities. In addition, the City and surrounding area are situated against the Santa Ynez Mountain range that further contributes to the aesthetic appeal of the community. The creeks that are formed out of the hills, as well as the wetlands that they feed are valuable as visual resources, as well as functioning as recreational and open space areas. Carpinteria's streams, beaches, open spaces, foothills, agricultural lands, urbanized areas, landscapes and landforms all contribute to scenic views.

The City's bluffs provide visitors with a unique overlook along one of the few remaining undeveloped coastal bluffs of the South Coast of Santa Barbara County. Commonly seen from the bluffs are white-tailed kites, turkey vultures, red-tailed hawks, American kestrels, brush bunnies, bottlenose and common dolphins, California sea lions, Pacific harbor seals, California brown pelicans, western gulls, and migrating gray whales (City of Carpinteria 2009). Views of the Channel Islands National Marine Sanctuary and the Northern Channel Islands are also afforded from the proposed trail alignment.

The majority of the proposed trail alignment is located along abandoned roadways, or old terraced road and railroad cuts, and most of the area has been mechanically manipulated over the years. The informal existing trail extending north from Rincon Beach County Park has been graded flat and is currently mostly dirt, with original asphalt associated with the previous rail use remaining in some areas. Figure 3.1-1 provides photographs of the entire trail alignment illustrating existing visual conditions within and adjacent to the alignment.

3.1.1.3 Scenic Vistas and Resources

The City's General Plan and Local Coastal Plan designates the Carpinteria Bluffs as both scenic vistas and resources, for providing outstanding views of the Pacific Ocean and Channel Islands (City of Carpinteria 2003). In addition, the proposed project alignment, is located within a Scenic Corridor Overlay Designation for the County (County of Santa Barbara 2009), which is intended to give additional protection to areas where there are views from a major coastal road to the Pacific Ocean.

3.1.1.4 Scenic Highways

Currently there are no officially designated scenic highways in the City or within the project area located within the County (Caltrans 2020a). Designation of "Official Scenic Highways" is governed by Article 2.5 of the California Streets and Highways Code and pertains to State Highway Routes. Section 263.1 and 263.6 of the California Streets and Highways Code identifies Highway 150, which extends east from the northernmost portion of the proposed trail alignment, and US Highway 101, located directly to the east of the site, as eligible for designation as state scenic highways (Caltrans 2020a; City of Carpinteria 2003; County of Santa Barbara 2009). Lastly, as discussed under Section 3.1.1.3, Scenic Vistas and Resources, US Highway 101 adjacent to the project is located within the Scenic Corridor Overlay Designation for the County (County of Santa Barbara 2009), which is intended to provide development restrictions to avoid the blockage of important scenic views afforded from a highway or major roadway corridor.

3.1.2 Relevant Plans, Policies, and Ordinances

3.1.2.1 Federal

There are no federal regulations related to aesthetics relevant to the proposed project.

3.1.2.2 State

California Coastal Act

Facilities proposed within the state's coastal zone are subject to the visual resources policies of the Coastal Act, as described in the Public Resources Code (PRC) Division 20, California Coastal Act, Article 6, Development (2018) and summarized below. Each municipality within the jurisdiction of the California Coastal Commission is required to have a certified local coastal plan (LCP) in place that guides development in coastal zones to ensure compliance with Sections 30251.

Section 30251 Scenic and Visual Qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

California State Scenic Highway Program

The California Scenic Highway Program was created in 1963 with the intent "to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment." The state laws that govern the Scenic Highway Program are Sections 260 through 263 of the Streets and Highways Code. A highway may be designated scenic based on the natural landscape visible by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the views of the highway. The Scenic Highway Program includes both officially designated scenic highways and highways that are eligible for designation. It is the responsibility of local jurisdictions to apply for scenic highway approval, which requires the adoption of a Corridor Protection Program (Caltrans 2020b). In addition, once a scenic highway is designated, the local jurisdiction is responsible for regulating development within the scenic highway corridor. As discussed under Section 3.1.1.4, Scenic Highways, there are no officially designated scenic highways in the City or within the project area located within the County (Caltrans 2020a). However, Highway 150, which extends east from the northernmost portion of the alignment, and US Highway 101, located directly to the east of the site, are eligible for designation as state scenic highways (Caltrans 2020a; City of Carpinteria 2003).

3.1.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

City objectives and policies related to visual resources and aesthetics are provided in the Open Space, Recreation & Conservation Element, and Community Design Element of the City's General Plan/Local Coastal Land Use Plan. Applicable objectives and policies are as follows:

Objective OSC-13 Preserve Carpinteria's visual resources.

Policy OSC-13a Preserve broad, unobstructed views from the nearest public street to the ocean, including but not limited to Linden Avenue, Bailard Avenue, Carpinteria Avenue, and U.S. Highway 101. In addition, design and site new development on or adjacent to bluffs, beaches, streams, or the Salt Mash to prevent adverse impacts on these visual resources. New development shall be subject to the following measures:

Height and siting restrictions to avoid obstruction of existing views of visual resources from the nearest public areas.

In additional to the bluff setback required for safety, additional bluff setbacks may be required for oceanfront structures to minimize or avoid impacts on public views from the beach. Blufftop structures shall be set back from the bluff edge sufficiently far to ensure that the structure does not infringe on views from the beach except in areas where existing structures already impact public views from the beach.

Special landscaping requirements to mitigate visual impacts.

Policy OSC-13c Other than permitted development, discourage activities which could damage or destroy open space areas, including off-road vehicle use and unauthorized collecting of natural objects.

Policy OSC-13e Promote the safety of the community through the use of open space lands.

Policy OSC-13f Where appropriate, use open space lands as buffers for noise and visual nuisances and as transitions between incompatible uses.

Policy OSC-13g Require new development to protect scenic resources by utilizing natural landforms and native vegetation for screening structures, access roads, building foundations, and cut and fill slopes in project design which otherwise complies with visual resources protection policies.

Policy OSC-13h Plans for development shall minimize cut and sill operations. Plans that do not minimize cut and fill shall be denied.

Policy OSC-13i Design all new development to fit the site topography, soils, geology, hydrology, and other existing conditions and be oriented so that grading and other site preparations is kept to an absolute minimum. Preserve all-natural landforms, natural drainage systems, and native vegetation. Require all areas on the site not suited to development, as evidenced by competent soils, geology and hydrology investigations and reports remain as open space.

Policy OSC-13j Establish a "night-sky" ordinance that provides standards for the reduction of direct and ambient light in the night sky.

Objective CD-13 Ensure that lighting of new development is sensitive to the character and natural resources of the City and minimizes photo pollution to the maximum extent feasible.

Policy CD-13b Lighting shall be low intensity and located and designed so as to minimize direct view of light sources and diffusers and to minimize halo and spillover effects.

Additionally, the northern portion of the proposed project site falls within Bluffs Area 3 of Subarea 6, also known as the Bluffs, of the City's Community Design Subareas. The following objectives and policies for Subarea 6 are relevant to the proposed project and its potential aesthetic impacts:

Objective CDS6-1 Maintain the Carpinteria Bluffs Access, Recreation & Open Space Master Program as the coordinated plan for the Carpinteria Bluffs area that will allow development of uses identified in the Land Use Plan herein, so as to complement one another and preserve and enhance the site's coastal environment. The plan should be maintained so as to include information adequate to define the environmental resources and hazards within the Carpinteria Bluffs, and to delineate precise and appropriate policies for their management.

Policy CDS6-a Provide a clear direction for the future development of the Carpinteria Bluffs that:

1. Protects unique and sensitive environmental resources within the Bluffs.
2. Is compatible with the small-town character of Carpinteria, enhances the community's image, and contributes to a pleasant visual experience for travelers entering Carpinteria on U.S. 101 from the south.
3. Provides appropriate development opportunities for landowners within the Carpinteria Bluffs.

Objective CDS6-2 Ensure that development is controlled to avoid impacts to significant viewsheds, vistas, and view corridors.

Policy CDS6-b Development on the Bluffs shall not obstruct existing view corridors of the ocean and bluff top edge. In addition, views of the ocean and mountains for

users of the Carpinteria Bluffs Nature Park and coastal trail(s), for bluffs area property owners and visitors, and for passing motorists, shall be maintained.

Implementation Policy 59 Development that is located on or adjacent to bluffs, beaches, or streams shall be designed and sited to prevent adverse impacts on the visual quality of these resources.

Implementation Policy 60 New development shall maintain existing topographic variations of the Carpinteria Bluffs, such as the ridgeline in Bluffs I and the terracing of Bluffs III. Development of Bluffs I should be designed to respect the viewshed from the bluff trail looking north toward the mountains and from the Bluffs Nature Park looking west. Location and design of buildings shall respect the topography and follow topographic forms whenever possible, visible variations in the ground plane are to be retained, avoiding a flat, mass graded appearance. These variations in the ground plane are also to be reflected in variations in the roof lines of individual buildings.

Policy 65 As a part of development project plan submittals for the bluffs, tools such as physical or computer models, perspectives, or photographs, shall be included in order to demonstrate compliance with these measures and more generally the protection of Bluffs visual resources.

County of Santa Barbara Coastal Land Use Plan

The County of Santa Barbara's Coastal Land Use Plan guides planning and development in the coastal areas of the county, and is intended to protect coastal resources while still allowing for development. Where there is conflict between the Coastal Land Use Plan and the Comprehensive Plan, the Coastal Land Use Plan takes precedence. Applicable policies of the Coastal Land Use Plan include:

Policy 4-1 Areas within the coastal zone which are now required to obtain approval from the County Board of Architectural Review, because of the requirements of the "D"- Design Supervision Combining Regulations or because they are within the boundaries of Ordinance #453, shall continue to be subject to design review. In addition, developments in all areas designated on the land use plan maps as Commercial, Industrial, or Planned Development and residential structures on bluff top lots shall be required to obtain plan approval from the County Board of Architectural Review.

Policy 4-3: In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

3.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to aesthetics would occur if the project would:

a) Have a substantial adverse effect on a scenic vista.
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
e) Result in cumulatively considerable impacts with regard to aesthetic and visual considerations.

3.1.4 Impact Analysis

a) Would the project have a substantial adverse effect on a scenic vista?

As discussed under Section 3.1.1.4, the City's General Plan and Local Coastal Plan designates the Carpinteria Bluffs as scenic vistas, for providing outstanding views of the Pacific Ocean and Channel Islands (City of Carpinteria 2003). In addition, the proposed trail alignment, is located within a Scenic Corridor Overlay Designation for the County, which is intended to give additional protection to areas where there are views from a major coastal road to the ocean (County of Santa Barbara 2009). However, the proposed trail is designed to take advantage of the area's scenic views and is set into the existing major ridge element present in this vicinity. The project would provide pedestrians and bicyclists traveling along the trail expansive views of the Santa Ynez mountain range backdrop (from trail sections north of the UPRR alignment), and of the Pacific Ocean, the local coastline and the Northern Channel Islands in the Santa Barbara Channel (from trail segments south of the UPRR alignment). Fencing along the trail would be only the maximum height necessary to provide safety (anticipated to be no more than three feet six inches), would be visually permeable (anticipated to be composed of a post and three rail fence with vinyl-clad chain link backing, that has often been used in local recreation areas to restrict access as necessary), and would use materials and colors that would blend with the natural environment. In addition, the proposed trail would be required to comply with County Policy, which requires that all development in these areas shall be reviewed by the County Board of Architectural Review. Nonetheless, due to the project's location within a scenic vista, impacts to a scenic vista would be potentially significant. In order to ensure compliance with this policy requirement for all segments of the trail, implementation of **Mitigation Measure (MM) AES-1** would be required (see Section 3.1.5, Mitigation, for details), and would reduce potentially significant impacts to **less than significant with mitigation.**

b) Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed in Section 3.1.1.4, currently there are no officially designated scenic highways in the City of Carpinteria or within the project area located within the County (Caltrans 2020a). However, both Highway 150, which extends east from the northernmost portion of the alignment, and US Highway 101, located directly to the

east of the site, are eligible for designation as state scenic highways (Caltrans 2020a; City of Carpinteria 2003; County of Santa Barbara 2009). In addition, the trail alignment and adjacent US Highway 101 are located within a Scenic Corridor Overlay Designation for the County. The Scenic Corridor Overlay designation is a special tool, which is intended to give additional protection to areas where there are views from a highway or major road to important visual resources, including mountains, ocean, and unspoiled open spaces. US Highway 101, which parallels the ocean throughout much of the South Coast, affords many thousands of traveler's scenic mountain and ocean vistas. Lastly, there are no historic buildings within the project area and the proposed project would not remove trees that contribute to the overall aesthetic character of the project area.

Motorists traveling along US Highway 101 northbound have brief (a few seconds) glimpses of blue water views of the Pacific Ocean between the terraced and vegetated hillsides flanking the UPRR corridor. The ocean bluffs dominate this view toward the south, while mountains are visible in the distance to the north. Travelers headed southbound would need to glance over their shoulder to capture the same brief glimpses of the ocean between the hillsides along the UPRR Corridor. The proposed shared use trail would be visible to travelers in both directions as it would initially traverse the highway side of the terraced hill above the US Highway 101 southbound shoulder before turning northwest along the existing cut to connect with the proposed pedestrian bridge.

With implementation of the proposed project this southward view from US Highway 101, which currently contains steeper vegetated slopes and minimal visible development (namely a chain link fence, and highway lights and signage), would contain human-scale activity, including pedestrians and bicyclists as well as brief views of the concrete pathway and safety fencing, as well as the more notable pedestrian bridge spanning the UPRR corridor as indicated in the conceptual visual simulation presented in Figure 3.1-2. More specifically, Photos 2, 3, and 4, shown on Figure 3.1-2, illustrate the UPRR bridge feature, including perspectives looking toward the ocean and toward US Highway 101. Although the deck of the bridge would be at the same height as the US Highway 101 bridge over the UPRR corridor, the open metal truss structure would span the middle-ground view. However, these views are considered short duration and as shown in Figure 3.1-2, the new trail and bridge would not substantially modify or block any significant vistas or blue water ocean views. In addition, to the extent feasible, fencing and other man-made elements along the trail would be composed of materials and/or painted colors that would blend with the natural environment. The trail has been designed to be subordinate to the natural context and environment surrounding it and to enhance the scenic views and resources available in the area. Nonetheless, because the proposed project would result in alterations of a highly scenic resource, impacts to scenic resources would be potentially significant**.** County Policy requires that all development in View Corridor Overlay designation areas shall be reviewed by the County Board of Architectural Review. In order to ensure compliance with this policy requirement for all segments of the trail, **MM-AES-1** would be required and would reduce impacts to **less than significant with mitigation**.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The CEQA Guidelines define "urbanized area" as an incorporated city that meets either of the following criteria:

(1) Has a population of at least 100,000 persons.

(2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

The City has a population of 13,385 (U.S. Census Bureau 2020) and is surrounded by unincorporated Santa Barbara and Ventura County areas. Therefore, the project site is considered non-urbanized for CEQA purposes and this section analyzes whether or not the project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

As discussed above, the proposed trail would be visible from public areas such as US Highway 101 and would be partially visible from the public beach located directly west of the proposed trail. Although the proposed trail would be designed to be subordinate to the natural context and environment surrounding it, the view southward from US Highway 101, which currently contains steeper vegetated slopes and minimal visible development (namely a chain link fence, and highway lights and signage), would be transformed to contain human-scale activity, including pedestrians and bicyclists as well as brief views of the concrete pathway and safety fencing, as well as the more notable pedestrian bridge spanning the UPRR corridor as indicated in the conceptual visual simulation presented in Figure 3.1-2. In addition, under the proposed project, approximately 0.75 acres of the vegetation communities located within the proposed trail alignment would be permanently removed, while an additional 9.01 acres would be temporarily disturbed during construction. Additional plants occurring within the proposed trail alignment could also be accidentally destroyed during construction or damaged from runoff and erosion caused by construction.

In general, it should be noted the proposed trail alignment is situated on slopes that were previously graded to accommodate the construction of either US Highway 101 or the Union Pacific Railroad. Figure 3.1-2 provides low altitude aerial photograph exhibits of the entire trail alignment. As illustrated in the Figure 3.1-2, the existing slopes along the trail alignment have the common characteristic appearance of a manufactured slope, where the slope face is relatively planar and at a uniform slope angle, rather than a more undulating form normally present in natural slopes. With regard to the proposed trail design, the western portion of the trail (beginning at the eastern terminus of Carpinteria Avenue and extending to the UPRR alignment), would involve creation of an 18-foot wide bench for the trail, and re-grading of the existing slope above the trail to produce a shallower (more stable) slope. A second bench above the trail elevation would also be created on the eastern portion of this segment, to reduce erosion over the slope face of this segment with higher relative slope elevation (i.e., longer vertical face). Refer to Appendix G for earthwork cross-sections/profiles illustrating the slope re-working. The top elevation of this ridge would not be affected by the re-grading, and the overall area would continue to have the same general appearance as the existing condition (i.e., a manufactured slope along a road cut).

Under the proposed trail alignment, the location for the railroad crossing bridge would be located in close proximity to US Highway 101, consolidating bridge structures in one area, thereby lowering the noticeability of this new structure. Refer to Figures 3.1-2 for renderings of the bridge crossing shown from several different perspectives.

The eastern portion of the proposed trail would involve regrading of the slope above the former UPRR track alignment, to include a fill slope below the new trail bench, and a cut slope with mid-elevation bench above the trail bench (Refer to Appendix G for earthwork cross-sections/profiles illustrating the slope re-working). Again, the top elevation of the ridge within this segment of the trail alignment would not be modified and the overall area would continue to have the same general appearance as the existing condition (i.e., a manufactured slope along the original cut made for the railroad alignment).

The project also involves the construction of new vertical storm drains. As discussed in Section 2.7.3, the proposed storm drains would be installed during earth work for the trail and adjacent slopes, and would be buried to cross beneath the trail and then descend on the slope face to outlet at the beach elevation. Buried portions of the storm drain would be constructed of high-density plastic, transitioning to galvanized steel for the aboveground portions.

Due to the size of the proposed above ground components, the visibility of the above ground storm drain system would be minimal and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Temporary adverse effects during construction due to the loss of mature vegetation would occur over a limited time period, given new landscaping and restoration of native plants are proposed as part of the project. The project would enhance area aesthetics via native landscape installations along the perimeter of the trail and ongoing landscape maintenance. Where feasible, the project would remove the invasive weeds along the proposed trail alignment that could suppress native plants. Native plants, once established, would live without need for supplemental water, helping to ensure their ongoing success. The reduction of slope angle (making the slope gentler) would slow water runoff, improve soil water retention, and support more extensive vegetation cover on the sloped areas, compared to existing conditions. Nonetheless, the project would have a potentially significant adverse impact on visual character or quality of the site and its surroundings because of the removal of mature vegetation and addition of new human-scale development. Therefore, impacts would be potentially significant. **MM-AES-1**, which requires County Board of Architectural Review, and **MM-BIO-5**, which requires restoration or enhancement of coastal sage scrub and coastal bluff scrub communities in areas temporarily impacted by construction of the trail or adjacent area, would be required. Impacts would be **less than significant with mitigation incorporated.**

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Materials used in the construction of the proposed trail, including metal railings for the bridge structure, would be finished in non-reflective coatings. No lighting is incorporated in the proposed trail design. Therefore, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be **less than significant.**

e) Would the project result in cumulatively considerable impacts with regard to aesthetic and visual considerations?

Future development throughout the Carpinteria Valley has the potential to convert open space and natural landforms into built environment including structures, parking areas, roadways, etc., thereby adversely impacting the visual quality of scenic resources in the City of Carpinteria and County of Santa Barbara. With respect to the visual quality within the US Highway 101 corridor in the Carpinteria Valley, Caltrans concluded that proposed improvements under the South Coast 101 High Occupancy Vehicle project would result in substantial visual changes throughout much of the highway corridor due to loss of vegetation, increased paving and potential soundwalls, and because of the inherent alteration of scale, increase of hard surface, and loss of vegetative character, visual impacts would be significant and unavoidable (Caltrans 2014).The proposed project would not result in the blockage of available views to the ocean from US Highway 101, would incrementally change the character of the manufactured slopes upon which it would be placed, and is subject to architectural review and required restoration of existing vegetation. As such, limited visual impacts of the proposed project would be mitigated to less than significant levels, and the project would not have a considerable contribution to identified cumulatively significant visual impacts in the project region.

3.1.5 Mitigation

The project would require the implementation of **MM-AES-1** to reduce impacts to scenic vistas, scenic resources, and visual character or quality of public views of the site and its surroundings.

MM-AES-1 **Board of Architectural Review.** The Owner/Applicant shall obtain City Architectural Review Board (ARB) and County Board of Architectural Review (BAR) approval for project design. All project elements (e.g., design, scale, character, colors, materials, and landscaping shall be compatible with vicinity development and shall conform in all respects to ARB/BAR approval. ***Plan Requirements and Timing:*** The Owner/Applicant shall submit architectural drawings of the project including photo renditions from the beach of the storm drains proposed along the bluff face for review and shall obtain final City ARB and County BAR approval prior to issuance of the Development Plan, Conditional Use Permit and Coastal Development Permit. Grading plans, if required, shall be submitted to the City's Planning Department concurrent with or prior to ARB/BAR plan filing with the Carpinteria Community Development Department or County Planning and Development. ***Monitoring***: The Owner/Applicant shall demonstrate to Community Development Department staff and Planning & Development Department compliance monitoring staff that the project has been built consistent with approved ARB/BAR design and landscape plans prior to Final Building Inspection Clearance.

The project would require the implementation of **MM-BIO-5** to reduce impacts to visual character or quality of public views of the site and its surroundings.

MM-BIO-3 See Section 3.3.5.

3.1.6 Level of Significance After Mitigation

After implementation of **MM-AES-1** and **MM-BIO-3** impacts to aesthetics would be less than significant.

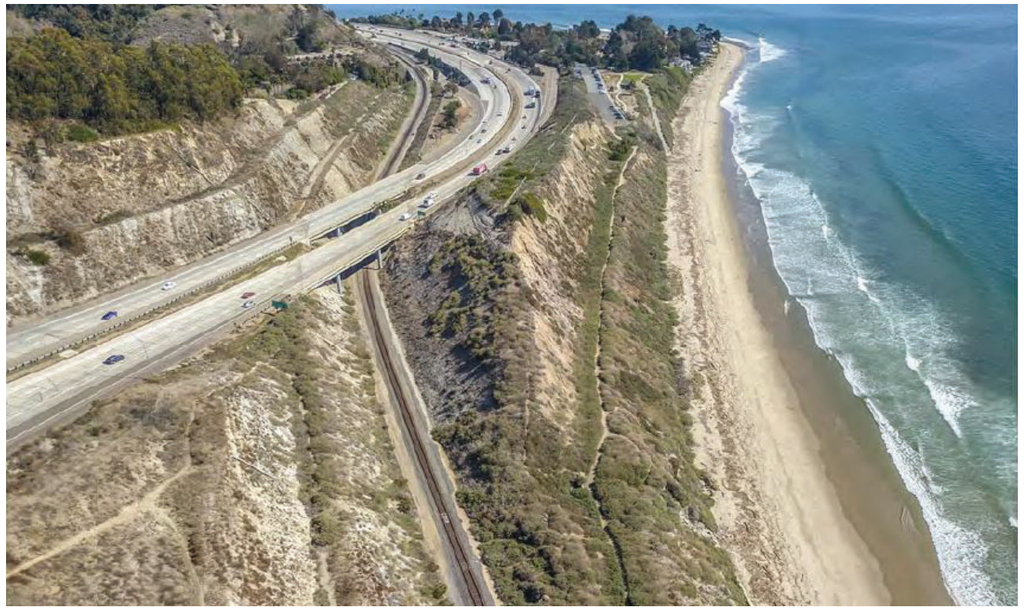


Photo 1: Existing Conditions from the Middle of the Proposed Alignment Looking Southeast



Photo 2: Existing Conditions Looking Southeast



Photo 3: Existing Conditions Looking Southeast Towards the Proposed Alignment



Photo 4: Existing Conditions Looking Southeast from the Middle of the Proposed Alignment

SOURCE: Carpinteria Rincon Trail MND Appendix A

FIGURE 3.1-1

Existing Conditions of Proposed Trail Alignment

Carpinteria Rincon Trail EIR

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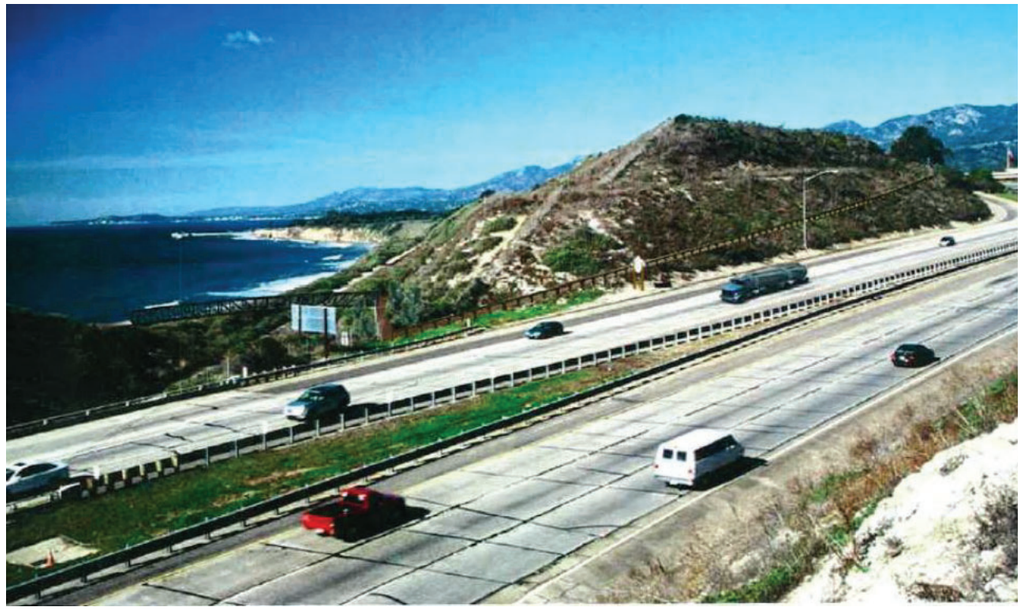


Photo 1: Proposed Trail As Seen from Across the U.S. 101 Looking Northwest



Photo 2: Proposed Trail Looking Towards the Pacific Ocean Across the UPRR Bridge



Photo 3: Proposed Trail Looking Towards the U.S. 101 Across the UPRR Bridge



Photo 4: Proposed Trail Looking Southeast from the North

SOURCE: Carpinteria Rincon Trail MND

DUDEK

FIGURE 3.1-2
Visual Simulations
Carpinteria Rincon Trail EIR

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3.2 Air Quality

This section describes the existing air quality conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

3.2.1 Existing Conditions

3.2.1.1 Climate and Topography

The weather of the Santa Barbara region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges (in degrees Fahrenheit) from the mid-40s to the mid-70s. Most of the region's precipitation falls from November to April, with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; the amount increases with elevation as moist air is lifted over the mountains (WRCC 2020).

The topography in the Santa Barbara region varies greatly, from beaches on the south to mountains and valleys in the north; along with local meteorology, it influences the dispersal and movement of pollutants in the basin. The mountains to the north prohibit dispersal of pollutants in that direction and help trap them in inversion layers.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds. Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

3.2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards (criteria) for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following paragraphs.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists

[1] The descriptions of each of the criteria air pollutants and associated health effects are based on the EPA's (2016a) Criteria Air Pollutants and the CARB (2016a) Glossary of Air Pollutant Terms.

in the upper atmosphere O_3 layer (stratospheric ozone) and at the Earth's surface in the troposphere (ozone).[2] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is, thus, considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013). These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Nitrogen Dioxide and Oxides of Nitrogen. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections (EPA 2016b).

NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources of NO_x are transportation and stationary fuel combustion sources, such as electric utility and industrial boilers.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

[2] The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about five miles at the poles and about 10 miles at the equator.

SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO_2 can injure lung tissue and reduce visibility and the level of sunlight. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter (about 1/7 the thickness of a human hair). Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter (roughly 1/28 the diameter of a human hair). $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$ (EPA 2009).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power

plants are the primary sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment and reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor that has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in the air can cause nervous system effects such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$, described above.

3.2.1.3 Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than one micrometer in diameter (about 1/70th the diameter of a human hair) and, thus, is a subset of $PM_{2.5}$ (CARB 2016a). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2016a). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines, including on-road diesel engines from trucks, buses, and cars; and off-road diesel engines from locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2016b). Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and, overall, is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Valley Fever. Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California's San Joaquin Valley, particularly in Kern County. Kern County is considered a highly endemic county (i.e., more than 20 cases annually of Valley Fever per 100,000 people) based on the incidence rates reported through 2019 (California Department of Public Health 2019). The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

Santa Barbara County is not considered a highly endemic region for Valley Fever as the latest report from the California Department of Public Health listed Santa Barbara County as having 16.5 cases per 100,000 people (California Department of Public Health 2019). Furthermore, according to a Santa Barbara County Department of Public Health study, most of Valley Fever patients lived in North (85%) or Central (9%) Santa Barbara County with only 7% living in South County (Santa Barbara County Public Health Department 2018). Of the cases living in South County, half of them had traveled to areas outside of South County where cases of Valley Fever more commonly occur.

3.2.1.4 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The Santa Barbara County Air Pollution Control District (SBCAPCD) defines a sensitive receptor as a school, daycare facility, hospital, residence, or care facility (SBCAPCD 2020). The closest sensitive receptors to the project site are residences of the Rincon Point community. The closest residence to the proposed trail is located approximately 180 feet away (55 meters) at the eastern end of the trail.

3.2.1.5 Regional and Local Air Quality Conditions

South Central Coast Air Basin (SCCAB) Attainment Designation

Pursuant to the 1990 federal Clean Air Act Amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. As previously discussed, these standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS.

The criteria pollutants of primary concern that are considered in this analysis are O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x, they are important as precursors to O_3.The SCCAB is currently designated nonattainment for PM_{10} under the CAAQS. It is designated attainment for the CAAQS for O_3, CO, PM_{10}, NO_2, SO_2, lead, and sulfates. The SCCAB is designated attainment for all NAAQS.

Table 3.2-1 summarizes the SCCAB's federal and state attainment designations for each of the criteria pollutants.

Table 3.2-1. SCCAB Attainment Classification

Pollutant	Federal Designation[a,b]	State Designation[c]
O_3 (1-hour)	Attainment[d]	Attainment
O_3 (8-hour)	Unclassifiable/Attainment	Attainment
CO	Attainment (Maintenance)	Attainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Unclassifiable/Attainment	Unclassified
NO_2	Unclassifiable/Attainment	Attainment

Table 3.2-1. SCCAB Attainment Classification

Pollutant	Federal Designation[a,b]	State Designation[c]
SO_2	Unclassified	Attainment
Lead[e]	Unclassifiable/Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfide	(no federal standard)	Attainment
Visibility-Reducing Particles	(no federal standard)	Unclassified
Vinyl chloride[e]	No federal standard	No designation

Notes:

[a] EPA 2016c.

[b] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

[c] CARB 2016b.

[d] The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in SIPs.

[e] CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The Santa Barbara County Air Pollution Control District (SBCAPCD) monitors local ambient air quality at the project site. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2017 to 2019 are presented in Table 3.2-2. The Carpinteria monitoring station, located at Gobernador Canyon Rd., is the nearest air quality monitoring station to the project site, located approximately 2.1 miles northeast from the project site. The data collected at this station are considered representative of the air quality experienced in the project vicinity. Air quality data for O_3 and NO_2 from the Carpinteria monitoring station are provided in Table 3.2-2. Because CO, SO_2, PM_{10}, and $PM_{2.5}$ are not monitored at the Carpinteria monitoring station, CO measurements were taken from the Las Flores Canyon monitoring station located in El Capitan, California, approximately 33.5 miles west of the project site; SO_2 measurements were taken from the Isla Vista monitoring station located at the University of California, Santa Barbara, approximately 23.4 miles west of the project site; and PM_{10} and $PM_{2.5}$ measurements were taken from the Santa Barbara monitoring station located at 700 East Canon Perdido, Santa Barbara, approximately 12.8 miles north-west of the project site. The number of days exceeding the ambient air quality standards are also shown in Table 3.2-2.

Table 3.2-2. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2017	*2018*	*2019*	*2017*	*2018*	*2019*
Ozone (O_3)										
Carpinteria	ppm	Maximum 1-hour concentration	California	0.09	0.072	0.084	0.086	0	0	0
	ppm	Maximum 8-hour concentration	California	0.070	0.061	0.070	0.071	0	0	1
			National	0.070	0.060	0.070	0.071	0	0	1
Nitrogen Dioxide (NO_2)										
Carpinteria	ppm	Maximum 1-hour concentration	California	0.18	0.017	0.029	0.018	0	0	0
			National	0.100	0.017	0.029	0.018	0	0	0
	ppm	Annual concentration	California	0.030	0.001	0.002	0.001	0	0	0
			National	0.053	0.001	0.002	0.001	0	0	0
Carbon Monoxide (CO)										
Las Flores Canyon	ppm	Maximum 1-hour concentration	California	20	1.7	0.8	0.6	0	0	0
			National	35	1.7	0.8	0.6	0	0	0
	ppm	Maximum 8-hour concentration	California	9.0	1.3	0.6	0.5	0	0	0
			National	9	1.3	0.6	0.5	0	0	0
Sulfur Dioxide (SO_2)										
Isla Vista	ppm	Maximum 1-hour concentration	National	0.075	0.003	0.002	0.001	0	0	0
	ppm	Maximum 24-hour concentration	National	0.14	0.001	0.002	0.0005	0	0	0
	ppm	Annual concentration	National	0.030	0.0001	0.0005	0.00001	0	0	0

Table 3.2-2. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2017	*2018*	*2019*	*2017*	*2018*	*2019*
Coarse Particulate Matter (PM_{10})[a]										
Santa Barbara	µg/m³	Maximum 24-hour concentration	California	50	355.4	128.3	72.1	— (18)	11.1 (11)	4.3 (4)
			National	150	338.2	123.1	70.6	— (7)	0.0 (0)	0.0 (0)
	µg/m³	Annual concentration	California	20	—	26.6	21.5	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a]										
Santa Barbara	µg/m³	Maximum 24-hour concentration	National	35	231.6	37.7	22.5	— (13)	1.0 (1)	0.0 (0)
	µg/m³	Annual concentration	California	12	—	8.5	6.8	—	—	—
			National	12.0	—	8.5	6.8	—	—	—

Sources: CARB 2020; EPA 2020.

Notes: — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million

Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (https://www.epa.gov/outdoor-air-quality-data) represent the highest concentrations experienced over a given year.

Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a California 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

3.2.2 Relevant Plans, Policies, and Ordinances

3.2.2.1 Federal

3.2.2.1.1 Criteria Pollutants

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including the setting of the National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions.

Under the CAA, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The CAA requires the EPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames.

3.2.2.1.2 Hazardous Air Pollutants

The 1977 federal CAA amendments required the EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

3.2.2.2 State

3.2.2.2.1 Criteria Air Pollutants

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the CAA and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 3.2-3.

Table 3.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³
Lead[j,k]	30-day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 μg/m³)	—	—
Sulfates	24 hours	25 μg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016b; EPA 2016d.

Notes: O_3 = ozone; ppm = parts per million by volume; μg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the three-year average of the annual 98th percentile of the one-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the three-year average of the annual 99th percentile of the one-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[l] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over three years.

[j] California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling three-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

3.2.2.2.2 Toxic Air Contaminants

A TAC is defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Federal laws use the hazardous air pollutants to refer to the same types of compounds that are referred to as TACs under state law. California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588).

AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Pursuant to AB 2588, existing facilities that emit air pollutants above specified levels were required to (1) prepare a TAC emission inventory plan and report; (2) prepare a risk assessment if TAC emissions were significant; (3) notify the public of significant risk levels; and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

The following regulatory measures pertain to the reduction of DPM and criteria pollutant emissions from off-road equipment and diesel-fueled vehicles.

Idling of Commercial Heavy Duty Trucks (13 CCR 2485)

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to control emissions from idling trucks. The ATCM prohibits idling for more than five minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.)

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation requires that specific fleet average requirements are met for NO_x emissions and for particulate matter emissions. Where average requirements cannot be met, best available control technology requirements apply. The regulation also includes several recordkeeping and reporting requirements.

In response to AB 8 2X, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions due to the poor economy and overestimates of diesel emissions in California. The revisions delayed the first compliance date until no earlier than January 1, 2014, for large fleets, with final compliance by January 1, 2023. The compliance dates for medium fleets were delayed until an initial date of January 1, 2017, and final compliance date of January 1, 2023. The compliance dates for small fleets were delayed until an initial date of January 1, 2019, and final compliance date of January 1, 2028. Correspondingly, the fleet average targets were made more stringent in future compliance years. The revisions also accelerated the phaseout of older equipment with newer equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulation. The amendments included revisions to the applicability section and additions and revisions to the definition. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions also allow for the removal of emission control devices for safety or visibility purposes. The regulation also was amended to combine the particulate matter and NO_x fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NO_x fleet average, and the previous section regarding particulate matter performance requirements was deleted completely. The best available control technology requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified. Other amendments to the regulations included minor administrative changes to the regulatory text.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025)

On December 12, 2008, CARB adopted an ATCM to reduce NO_x and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. The original ATCM regulation required fleets of on-road trucks to limit their NO_x and particulate matter emissions through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011, and limited NO_x emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012 and never required all vehicles in a fleet be replaced.

In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the struggling California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements. Starting on January 1, 2015, lighter trucks with a gross vehicle weight rating of 14,001 to 26,000 pounds with 20-year-old or older engines need to be replaced with newer trucks (2010 model year emissions equivalent as defined in the regulation). Trucks with a gross vehicle weight rating greater than 26,000 pounds with 1995 model year or older engines needed to be replaced as of January 1, 2015. Trucks with 1996 to 2006 model year engines must install a Level 3 (85% control) diesel particulate filter starting on January 1, 2012, to January 1, 2014, depending on the model year, and then must be replaced after eight years. Trucks with 2007 to 2009 model year engines have no requirements until 2023, at which time they must be replaced with 2010 model year emissions-equivalent engines, as defined in the regulation. Trucks with 2010 model year engines would meet the final compliance requirements. The ATCM provides a phase-in option under which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the Executive Officer approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a gross vehicle weight rating of 26,000 pounds or less to clarify that *all* vehicles must be equipped with 2010 model year emissions equivalent engines by 2023. The amendments included revised and additional credits for fleets that have downsized; implement early particulate matter retrofits; incorporate hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implement early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to previous exemptions, delays, and extensions. Other amendments to the regulations included minor administrative changes to the regulatory text, such as recordkeeping and reporting requirements related to other revisions.

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

3.2.2.3 Local

San Barbara County Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project Site is located within the SCCAB and is subject to the guidelines and regulations of the SBCAPCD. The SBCAPCD operates monitoring stations in the County, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections.

In Santa Barbara County, O_3 and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants are experienced here in most years. For this reason, the SCCAB has been designated as a nonattainment area for the state PM_{10} standard. Santa Barbara County was designated

unclassifiable/attainment for the 2015 revised federal 8-hour ozone standard on April 30, 2018 and attainment for the state O_3 standard. The County is also unclassifiable/attainment for the federal $PM_{2.5}$ standard and unclassified for the state $PM_{2.5}$ standard. However, the County is currently in nonattainment for the state PM_{10} standard.

Clean Air Plans

Since 1992, Santa Barbara County has adopted or amended rules implementing over twenty five control measures controlling stationary source emissions. This has resulted in substantial amounts of reductions in ozone precursor pollutants (nitrogen oxides and reactive organic compounds). Prior to 1999, the County exceeded the national 1-hour O_3 standard, and in response to Clean Air Act requirements, the SBCAPCD prepared plans designed to bring the County into attainment of this standard. The SBCAPCD submitted a plan (maintenance plan) to CARB in November 2001 that demonstrated how the County would maintain the national 1-hour O_3 standard through the year 2015. This 2001 Clean Air Plan was approved by both CARB and the EPA. The 2001 Clean Air Plan also included a schedule to revise the plan in 3 years, as required by the California Clean Air Act, which would show how the County would work toward meeting the state 1-hour O_3 standard.

The 2004 Clean Air Plan was prepared to address the California Clean Air Act mandates under Health and Safety Code sections 40924 and 40925 that require areas update their Clean Air Plans to attain the state 1-hour O_3 standard every 3 years. The 2004 Clean Air Plan was a 3-year update to the 2001 Clean Air Plan. Similarly, the 2007 Clean Air Plan provided a 3-year update to the SBCAPCD's 2004 Clean Air Plan. The 2007 Clean Air Plan was prepared to address both federal and state requirements; specifically, the federal requirements that pertain to maintenance provisions of the federal Clean Air Act, which apply to the County's current designation as an attainment area for the federal 8-hour O_3 standard.

The 2010 Clean Air Plan addressed local plans to attain the California 8-hour O_3 standard. The 2010 Clean Air Plan was a 3-year update required to show how the SBCAPCD planned to meet the state 8-hour O_3 standard. In addition to planning for attainment of the state O_3 standard, the 2010 Clean Air Plan contained two chapters that were provided for informational purposes and were not regulatory in nature: a climate protection chapter, with an inventory of carbon dioxide emissions in the County, and a transportation and land use planning chapter (SBCAPCD and SBCAG 2011).

The 2013 Clean Air Plan implemented "an all feasible measures" strategy to ensure continued progress towards attainment of the state ozone standards and this plan satisfied all state triennial planning requirements. In this Plan, the SBCAPCD proposed to carry forward proposed stationary source control measures from the 2010 Plan that were pending rule adoption except for two which had been reclassified as "further study" measures. However, the primary focus was on marine shipping emissions. Marine shipping ozone precursor emissions have and will continue to account for the largest percentage of the County's inventory, over 50%. While CARB's future on-road vehicle standards for almost zero or zero tailpipe emissions (e.g., Partial Zero Emission Vehicles and Zero Emission Vehicles) will result in substantial emission reductions, without strategies to gain emission reductions from marine shipping, very little additional progress can be made towards attainment of the state 8-hour ozone standard (SBCAPCD and SBCAG 2015).

The 2016 Ozone Plan was adopted by the SBCAPCD Board in October 2016. The 2016 Ozone Plan incorporated and built upon the prior Clean Air Plans and predominantly focused on meeting attainment with the state ozone standards, in addition to achieving the adopted federal ozone standards. The 2016 Ozone Plan focused on reducing ozone precursor emissions through predicting vehicle activity trends and implementation of transportation control measures, which would serve to reduce mobile-source emissions, the primary source of ROC and NO_x emissions in the County. The 2016 Ozone Plan, carried forward proposed stationary source control measures that were identified

in the 2013 Clean Air Plan. The 2016 Ozone plan also moved two stationary source control measures that were previously listed as "further study" measures to proposed control measures. One control measure that was scheduled for adoption in the 2013 Clean Air Plan had been moved to the "further study" list. Finally, the 2016 Ozone Plan continued to pursue programs that will achieve near-term NO_x reductions in the marine shipping sector (SBCAPCD 2016).

The most recent update is the 2019 Ozone Plan, which builds upon the 2016 Ozone Plan. This 2019 Plan addresses the state ozone standards only. This is because the District is designated "attainment" for the federal 8-hour ozone standard of 0.070 ppm, which was promulgated by the U.S. EPA in December 2015. The federal attainment designation for Santa Barbara County was finalized in April 2018. Each plan update includes an evaluation of feasible reduction measures for stationary sources and considers numerous factors such as technology advancements, efficiency measures, cost-effectiveness, and the successful implementation of measures at other California air districts. All of the control measures that were found to be feasible in prior plan updates have been implemented, and any additional measures that could be proposed yield relatively smaller emission reductions with higher associated costs. The 2019 Plan still carries forward the contingency measures and some of the "further study" measures from the 2016 Plan. There is a discussion on how the Assembly Bill 617 Rule Development Schedule interacts with the 2019 Plan (SBCAPCD 2019).

The Santa Barbara County Association of Governments (SBCAG) is responsible for the development and analysis of the 2013 Clean Air Plan's on-road mobile source emission estimates and Transportation Control Measures (TCMs). SBCAG also provides the SBCAPCD with socio-economic projections that form the basis for many of the stationary and area source growth forecasts for the 2016 Ozone Plan. The 2016 Ozone Plan relies on the land use and population projections provided in SBCAG's Regional Growth Forecast. The Regional Growth Forecast is generally consistent with the local plans; therefore, the 2016 Ozone Plan is generally consistent with local general plans.

SBCAPCD Rules and Regulations

As stated above, the SBCAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SCCAB. The following rules and regulations apply to all sources in the jurisdiction of SBCAPCD, and would apply to the proposed project:

- **Rule 302 (Visible Emissions).** Rule 302 prohibits emissions of visible air contaminants from any potential source of air contaminants. The rule prohibits air contaminants, other than water vapor, that are a certain level of darkness or opacity from being discharged for a combined period of more than 3 minutes in any 1 hour.
- **Rule 303 (Nuisance).** This rule could apply to fugitive dust emitted during proposed construction activities or odors during operation. This rule states that a person shall not discharge air contaminants from any source that can cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or that can endanger the comfort, repose, health, or safety, of any such persons or their business or property.
- **Rule 311 (Sulfur Content of Fuels).** The purpose of this rule is to limit the sulfur content in gaseous fuels, diesel and other liquid fuels, and solid fuels for the purpose of both reducing the formation of SO_x and particulates during combustion.
- **Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities).** Rule 345 establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on and off site.

City of Carpinteria

The City has adopted measures within the Open Space, Recreation & Conservation element of its General Plan/Coastal Land Use Plan to protect air quality (City of Carpinteria 2003). The following policies within that element are protective or air quality:

OSC-11a	Carefully review development that will significantly impact air quality.
OSC-11b	Promote the reduction of mobile source emissions related to vehicular traffic (e.g. promote alternative transportation, vanshare, buses).
OSC-11c	Promote use of solar heating and energy efficient building design to reduce stationary source emissions.
OSC-11d	Encourage the improvement of air quality in the Carpinteria Valley by implementing measures in the South Coast Air Quality Attainment Plan. For air quality enhancement, measures will include but not be limited to, measures to reduce dependence on the automobile and encourage the use of alternative modes of transportation such as buses, bicycles and walking.
OSC-11e	Encourage agricultural uses in the Plan Area to use the most energy efficient equipment available and to seek grants available to upgrade existing equipment such as boilers and diesel fueled machinery to equipment that has lower emissions and greater energy efficiency.

The following implementation policies also apply to air quality:

55	Incorporate the relevant policies and strategies from the Santa Barbara County Air Quality Attainment Plan (AQAP).
56	Cooperate in regional air quality plans, programs and enforcement measures.

3.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan.
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
c) Expose sensitive receptors to substantial pollutant concentrations.
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

3.2.3.1 County of Santa Barbara Environmental Thresholds

The County of Santa Barbara Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2020) states that a significant adverse air quality impact may occur when air pollutant emissions associated with a project, individually or cumulatively:

- Interferes with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NO_x and ROC; or
- Equals or exceeds the state or federal ambient air quality standards for any criteria pollutant (as determined by modeling).

The evaluation of whether a project would conflict with or obstruct implementation of the applicable air quality plan is based on the consistency with land use and population forecasts. Consistency with an applicable air quality plan means that a project's direct and indirect emissions are accounted for in the air quality plan's emissions growth assumptions and the project is consistent with the policies developed in the air quality plan (SBCAPCD 2019). The relevant air quality plan to the proposed project is the 2019 Ozone Plan. The 2019 Ozone Plan relies on the land use and population projections provided by the SBCAG and CARB on-road emissions forecast in order to develop vehicle emission forecasts. In addition, the 2019 Ozone Plan utilizes SBCAG's Regional Growth Forecast to project population growth and associated air pollutant emissions within Santa Barbara County. Residential projects that exceed the amount of forecasted growth for the specific jurisdiction or sub-region would be considered inconsistent with the 2019 Ozone Plan.

The County's guidance also indicates that cumulative air quality impacts and consistency with the polices and measures in the Air Quality Supplement of the Comprehensive Plan, other general plans, and the Air Quality Attainment Plan should be determined for all projects (i.e., whether the project exceeds the Air Quality Attainment Plan emission projections or growth assumptions). Pursuant to the County's Threshold Manual, the following issues should also be discussed, but only if they are applicable to the project:

- Emissions which may affect sensitive receptors (e.g. children, elderly, or acutely ill);
- Toxic or hazardous air pollutants in amounts which may increase cancer risk for the affected population; or
- Odor or another air quality nuisance problem impacting a considerable number of people

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual addresses the subject of air quality. The Long-term/Operational Emission Thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- Emit (from all project sources, mobile and stationary), less than the daily trigger for offsets of any pollutant (Currently 55 pounds per day for NO_x and ROC, and 80 pounds for PM_{10});
- Emit less than 25 pounds per day of NO_x or reactive organic compounds from motor vehicle trips only;
- Not cause or contribute to a violation of California or National Ambient Air Quality Standards (except ozone);
- Not exceed the SBCAPCD's health risk public notification thresholds adopted by the SBCAPCD board; and
- Be consistent with the adopted federal and state Air Quality Plans.

As stated in the SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* (SBCAPCD 2017), no quantitative thresholds have been established for short-term impacts associated with construction

activities. However, the SBCAPCD uses 25 tons per year for ROC or NO_x as a guideline for determining the significance of construction impacts. Additionally, the County's grading ordinance requires standard dust control conditions for all projects involving grading activities. The Long-term/Operational Emission Thresholds listed above have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., station boilers, engines, paints, solvents, and chemical or industrial processing operations that release pollutants) (SBCAPCD 2017).

The County's Threshold Manual states that a project will have a significant air quality impact if it causes, by adding to the existing background CO levels, a CO "hot spot" where the California one-hour standard of 20 parts per million carbon monoxide is exceeded, which typically occurs at severely congested intersections. The County's project screening for CO impacts are the following:

1. If a project contributes less than 800 peak hour trips, then CO modeling is not required.
2. Project contributing more than 800 peak hour trips to an existing congested intersection at level of service (LOS) D or below, or will cause an intersection to reach LOS D or below, may be required to model for CO impacts. However, projects that will incorporate intersection modifications to ease traffic congestion, are not required to perform modeling to determine potential CO impacts.

3.2.4 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

SBCAPCD and the Santa Barbara County Association of Governments (SBCAG) are responsible for developing and implementing the Clean Air Plan (SBCAPCD 2019) for attainment and maintenance of the ambient air quality standards in the basin. SBCAPCD further describes consistency with the Clean Air Plan for projects subject to these guidelines, which means that direct and indirect emissions associated with the project are accounted for in the Clean Air Plan's emissions growth assumptions, and the project is consistent with policies adopted in the Clean Air Plan. The 2019 Ozone Plan was adopted by the District Board on December 19, 2019 and is the most recent applicable air quality plan. The 2019 Ozone Plan is the 3 -year update required by the state to show how SBCAPCD plans to meet the state 8-hour O_3 standard (SBCAPCD 2019). However, after the 2019 Ozone Plan was adopted the County was designated as attainment for the state O_3 standards on July 1, 2020.

The 2019 Ozone Plan relies primarily on the land use and population projections provided by SBCAG and CARB on-road emissions forecasts as a basis for vehicle emissions for all County incorporated and unincorporated areas. The project site within the City of Carpinteria has a Carpinteria General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (2003) and has been zoned for Resort Zone District use. The portion of the project within the County of Santa Barbara is designated as Other Open Land and Recreation and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2021). The proposed trail is an apt use for the City's and County's vision for the properties within each jurisdiction. The proposed project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project.

If a project proposes development that is greater than that anticipated in the local plan and SBCAG's growth projections, the project might be in conflict with the 2019 Ozone Plan and may contribute to a potentially significant cumulative impact on air quality. Based on the nature of the proposed project, implementation of the project would not result in growth-inducing development. As such, the proposed project would not contribute to the projected City of Carpinteria or Santa Barbara County populations as estimated in the Santa Barbara

County Association of Governments 2040 Regional Transportation Plan-Sustainable Communities Strategy Regional Growth Forecast. Accordingly, the project is considered to be consistent with the APCD 2019 Ozone Plan and impacts to air quality would be **less than significant**.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Cumulative air quality impacts are the effect of long-term emissions of the proposed project plus any existing emissions at the same location, as well as the effect of long-term emissions of reasonably foreseeable similar projects, on the projected regional air quality or localized air pollution in the County. As discussed in SBCAPCD's Scope and Content of Air Quality Sections in Environmental Documents (SBCAPCD 2017), the cumulative contribution of project emissions to regional level should be compared with existing programs and plans, including the most recent Clean Air Plan.

Emissions from construction were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (CAPCOA 2017). For the purposes of modeling, it was assumed that construction would commence in March 2022[3] and would be completed by approximately March 2024, which also accommodates periods where work would not occur due to potential weather-related conditions. The equipment mix anticipated for construction activity was based on the City of Carpinteria Parks and Recreation Department input for typical construction practices. The equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately eight hours per day, five days per week (22 days per month). To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction in dust generation to comply with SBCAPCD Rule 345.The analysis contained herein is based on the following subset area schedule assumptions (duration of phases is approximate):

- Site preparation: 2 months
- Grading: 11 months
- Trail Construction: 5 months
- Bridge Construction: 1 month
- Paving: 2 months
- Architectural Coating: 1 month

The majority of the phases listed above would occur concurrently and would not occur sequentially in isolation. The estimated construction duration was provided by the project applicant. Detailed construction equipment modeling assumptions are provided in Appendix B, Air Quality, Greenhouse Gas, and Energy Calculations.

The construction equipment mix used for estimating the construction emissions of the proposed project is based on information provided by the project applicant and is shown in Table 3.2-4.

[3] The analysis assumes a construction start date of March 2022, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 3.2-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Site Preparation	8	0	0	Graders	1	8
				Rubber Tired Dozers	1	7
				Tractors/Loaders/ Backhoes	1	8
Grading	8	0	11,764	Crawler Tractors	1	7
				Graders	1	6
				Tractors/Loaders/ Backhoes	1	7
Trail Construction	28	12	0	Crawler Tractors	1	7
				Tractors/Loaders/ Backhoes	1	6
Bridge Construction	28	12	0	Cranes	1	8
				Tractors/Loaders/ Backhoes	1	6
				Welders	3	8
Paving	6	0	0	Crawler Tractors	1	8
				Paving Equipment	1	8
Architectural Coating	6	0	0	Air Compressors	1	6

Note: See Appendix B for details.

For the analysis, it was assumed that heavy construction equipment would be operating five days per week (22 days per month) during proposed project construction. Construction worker and vendor trips were based on CalEEMod default assumptions and rounded up to the nearest whole number to account for whole round trips.

Proposed project construction would include 107,386 cubic yards of cut, a total of 14,860 cubic yards of fill, and the export of a total of 92,526 cubic yards of earth material during the grading phase. It is anticipated that earth movement would be primarily, if not completely, accomplished using off-road equipment (e.g., scrapers and excavators). Off-road travel was assumed to be 1,000 feet per trip for vendor and haul trucks.

A detailed depiction of the construction schedule—including information regarding phases and equipment used during each phase—is included in Appendix B of this Environmental Impact Report. The information contained in Appendix B was used as CalEEMod model inputs.

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emission can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be estimated, with a corresponding uncertainty in precise ambient air

quality impacts. Table 3.2-5 presents the estimated annual construction emissions generated during construction of the project. Details of the emission calculations are provided in Appendix B.

Table 3.2-5. Estimated Annual Construction Emissions

Year	ROC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
2022	0.14	2.50	1.03	0.01	0.24	0.10
2023	0.07	0.85	0.53	0.00	0.17	0.05
Maximum Annual Emissions	**0.14**	**2.50**	**1.03**	**0.01**	**0.24**	**0.10**
SBCAPCD Threshold	*25*	*25*	*25*	*25*	*25*	*25*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Appendix B.
Notes: ROC = reactive organic compound; CO = carbon monoxide; NO_x = oxides of nitrogen; SO_x = sulfur oxides; PM_{10} = course particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.2-5, annual construction emissions would not exceed the SBCAPCD significance thresholds for ROC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions during construction. Therefore, construction of the proposed project would result in a **less than significant** impact.

Operational Emissions

The proposed project would consist of maintenance activities including landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. There would be no energy use (electricity or natural gas) associated with the project. No lighting is incorporated into the project design.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

Mobile Sources

Following the completion of construction activities, the proposed project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the periodic maintenance of the proposed project. It was assumed that one maintenance trip would occur per week, for 2 one-way trips. CalEEMod default data, including trip characteristics and emissions factors, were used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within the CalEEMod. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with vehicular sources.

As discussed, pollutant emissions associated with long-term operations were quantified using CalEEMod. Project-generated area and mobile source emissions were estimated based on CalEEMod default user assumptions. Table 3.2-6 presents the daily maximum emissions associated with operation (Year 2024) of the proposed project. Details of the emission calculations are provided in Appendix B.

Table 3.2-6. Estimated Maximum Daily Operational Emissions

Emission Source	ROC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pound per Day					
Area	0.01	0.00	0.00	0.00	0.00	0.00
Vehicular	0.00	0.01	0.03	0.00	0.01	0.00
Combined Total Emissions	**0.01**	**0.01**	**0.03**	**0.00**	**0.01**	**0.00**
Vehicle Source Emissions Threshold	*25*	*25*	—	—	*N/A*	—
Threshold Exceeded?	No	No			N/A	
Area + Vehicle Source Emissions Threshold	*240*	*240*			*80*	
Threshold Exceeded?	No	No			No	

Source: Appendix B.
Notes: ROC = reactive organic compound; CO = carbon monoxide; NO_x = oxides of nitrogen; SO_x = sulfur oxides; PM_{10} = course particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.2-6, the combined daily emissions would not exceed the SBCAPCD operational thresholds for ROC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$.

Due to the County's nonattainment status for the PM_{10} standard and its regional nature, if a project's emissions exceed the long-term emission thresholds, then the project's cumulative impacts will be considered significant. For projects that do not have significant PM_{10} emissions or localized pollutant impacts, if emissions have been taken into account in the most recent Clean Air Plan growth projections, regional cumulative impacts may be considered less than significant. When a project's emissions exceed the thresholds and are clearly not accounted for in the most recent Clean Air Plan growth projections, then the project is considered to have significant cumulative impacts that must be mitigated to a less than significant level.

In analyzing cumulative impacts from the proposed project, the assessment must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the County is designated as nonattainment for the NAAQS or CAAQS. The County is currently in attainment of NAAQS and is in attainment for all CAAQS with the exception of the state standards for PM_{10}. Construction and operation of the proposed

project would generate emissions of ROCs and NO_x (O_3 precursors) and PM_{10}; however, the proposed project would not exceed SBCAPCD guidance for annual construction emissions or SBCAPCD thresholds for daily operational emissions. Because implementation of the proposed project would result in less than significant impacts associated with operation of the project, the project's contribution to the County's nonattainment status for the state PM_{10} standard would be less than cumulatively considerable. Because the proposed project would not result in significant PM_{10} emissions, and project-generated emissions have been taken into account in SBCAPCD's 2019 Ozone Plan growth projections, cumulative impacts would be **less than significant**.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Carbon Monoxide Hotspots

A CO hot spot is a localized concentration of CO that is above the state or national 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-loving vehicles. In accordance with the County Guidelines (as shown in Section 3.2.3.1), a potential hotspot may occur if a project contributes more than 800 peak hour trips to an existing intersection with a Level of Service (LOS) of D or worse (County of Santa Barbara 2020). The peak construction trips would generate up to 61 one-way trips per day (see Appendix B), six of which would be anticipated to occur during the peak hour. During operation, it was assumed that one maintenance vehicle would visit the site per week. With respect to trail users, keep in mind that the trail is intended to promote alternative transportation modes, and to reduce local vehicle trips to the Rincon Preserve and Rincon Beach County Park, by offering a pedestrian and cyclist link between these resources. While some visitors may drive to Rincon Preserve or Rincon Beach County Park specifically to use the new trail segment, such trips are expected to be very limited in comparison to existing visitors to either of these areas. The majority of trail users would be expected to walk from nearby areas or to cycle to and along the trail. Given there are approximately 190 parking spaces at Rincon Beach County Park, and future parking spaces for Rincon Preserve would not be anticipated to exceed 60, parking supply alone would practically limit peak hour trips for Rincon Beach, Rincon Trail, and Rincon Preserve to far below the 800 peak hour trip threshold. Therefore, the County's screening threshold for CO hotspots would not be exceeded during construction or operation. As such, impacts related to CO hotspots from the project would be **less than significant**.

Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TAC's resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. TACs that would potentially be emitted during construction activities would be diesel particulate matter (DPM), emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB ATCMs to reduce DPM emissions. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Therefore, for this project, the exposure period to consider would be 24 months, consistent with the duration of construction activity.

Because the project would involve construction activities in several areas across the site, the project would not require the extensive use of heavy-duty construction equipment or diesel trucks in any one location over the duration of the development, which would limit the exposure of any proximate individual sensitive receptor to

TACs. Furthermore, the closest sensitive receptors to the project site are residences of the Rincon Point community. The closest residence to the proposed trail is located approximately 180 feet (55 meters) from the truck haul route at the eastern end of the trail. Therefore, impacts to sensitive receptors would be **less than significant** during construction.

The VOC and NOx emissions, as described previously, would nominally contribute to regional O_3 concentrations and the associated health effects. In addition to O_3, NOx emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 3.2-2, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the proposed project's operational NOx emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO emissions would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, obstruct the SCCAB from coming into attainment for these pollutants, or contribute to significant health effects associated with the particulates. Therefore, the project would have a **less than significant** impact with respect to criteria air pollutant exposure for sensitive receptors.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Although SBCACPD has not adopted quantitative thresholds of significance for odor impacts, SBCAPCD recommends the development of an odor abatement plan for projects that may generate nuisance odors that may affect a substantial number of people.

Construction Odor Impacts

Potential sources that may emit odors during construction activities include diesel equipment and gasoline fumes. Odors from these sources would be localized and generally confined to the project site. The closest residence to the proposed trail is located approximately 180 feet (55 meters) at the eastern end of the trail. Such odors are temporary and generally occur at magnitudes that would not affect a substantial number of people. Furthermore, construction activity would not be centrally located or remain in one location for a substantial amount of time. Therefore, construction of the proposed project would not cause an odor nuisance, and impacts associated with odors during construction would be considered **less than significant**.

Operational Odor Impacts

Certain projects have the potential to cause significant odor impacts because of the nature of their operation and their location. Examples include fast-food restaurants, bakeries, and coffee roasting facilities (SBCAPCD 2017). The proposed project land use is not considered an odor-generating use. Trail maintenance activities involving the occasional use of a light-duty truck would not generate noticeable odor emissions above existing vehicles using Rincon Beach County Park or nearby US Highway 101. Odors associated with equipment and trail equipment and trail maintenance would be temporary and generally confined to the project alignment. Therefore, operation of the proposed project would not cause an odor nuisance, and impacts associated with odors during maintenance activities would be considered **less than significant**.

3.2.5 Mitigation

Impacts would be less than significant prior to mitigation. Therefore, no mitigation is required.

3.2.6 Level of Significance After Mitigation

The project would result in a less than significant impact prior to mitigation.

3.3 Biological Resources

This section describes the existing biological resources conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and proposes mitigation measures to reduce potential impacts to a less than significant level. The following discussion is based on review of existing databases; field surveys performed in 2011, 2018, 2019, and 2020; knowledge of the project vicinity from previous biological surveys, consultations with local expert; and information from the Carpinteria Rincon Trail Proposed Final Mitigated Negative Declaration (MND) (City of Carpinteria 2015) and the Carpinteria Rincon Trail Final Subsequent MND (City of Carpinteria 2019) certified January 6, 2020.

3.3.1 Existing Conditions

The project is located on lands within the jurisdiction of the City and the County of Santa Barbara (County) (Figure 2-1, Project Location). Carpinteria is a quaint seaside town located about 12 miles east of Santa Barbara near the intersection of Highway 150 and U.S. Highway 101, near the Ventura County line. The proposed trail alignment is located largely along an area of coastal bluff known as the Carpinteria Bluffs. As described in the City of Carpinteria General Plan/Local Coastal Land Use Plan & Environmental Impact Report (City of Carpinteria 2003), the Carpinteria Bluffs are among the last remaining coastal open space areas within the County and are a prime example of undisturbed California coastline. The Carpinteria Bluffs provide important public access to the coast for residents and visitors. The Carpinteria Bluffs are partially developed and further development or redevelopment of portions of the Carpinteria Bluffs are anticipated over time making the establishment of policies to protect the environment and character of the place of utmost importance.

The project site crosses several parcels of land owned by public agencies. The trail parking lot location on Carpinteria Avenue is owned by the City of Carpinteria. Heading east, the next portion of the proposed trail route is owned by the State of California as part of the U.S. Highway 101 right-of-way and from there the proposed trail route crosses two parcels of landed owned by Union Pacific Railroad (UPRR) (APN 001-010-032 and APN 001-220-092). The proposed trail route then connects to a parcel of land owned by the County as part of Rincon Beach County Park. A series of terraces interspersed with steep slopes along the proposed alignment route are evidence of extensive past grading for a former railroad bed and road cuts. Further evidence of extensive past grading is evident in the soils within the project site, as the vast majority of the site is composed of xerorthents, cut and fill areas, which are soils that are well drained, and are formed in material with a high content of gravel and cobbles derived from mixed rock sources (USDA 2020a). The remaining portion of the biological survey area contains a mapped section of beaches soils composed of sandy or stony alluvium along the coast, located along the bottom of the hill at the edge of the beach within Rincon Beach County Park (USDA 2020a).

The Union Pacific Railroad (UPRR) right-of-way provides an unvegetated corridor approximately 50 feet wide containing a single track that divides the project alignment near its center. The eastern terminus of the proposed trail alignment is within Rincon Beach County Park parking lot, consisting of both undeveloped terraces as well as a largely developed area where a paved parking lot and landscaping dominate. An existing unsanctioned trail extends between Rincon Beach County Park and the UPRR tracks extending west on the bluffs to the north of the UPRR tracks with spur trails providing beach access. The western portion of the alignment is situated west and south of U.S. Highway 101 and partly includes an unvegetated pull-out at the eastern terminus of Carpinteria Avenue as well as an area of disturbed ground adjacent to the pull-out and undeveloped open space south of U.S. Highway 101.

Despite past disturbances, long stretches of the proposed trail alignment are dominated by native scrub vegetation. In the eastern portion of the proposed trail alignment between the UPRR crossing and Rincon Beach County Park, the native shrub, quailbush (*Atriplex lentiformis*), is the dominant shrub throughout much of the area. Additional native vegetation borders the parking lot in Rincon Beach County Park and occupies portions of the proposed trail alignment. In the western portion of the proposed trail alignment between the eastern terminus of Carpinteria Avenue and the UPRR crossing, California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), and quailbush are the dominant plant species.

The project site region is identified by USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5-minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria).

3.3.1.1 Literature Review

Prior to the 2011 field visit conducted by Dudek, the California Natural Diversity Database (CNDDB) was queried for records of special-status plants and wildlife in the vicinity of the site. In addition, Carpinteria local botanist Larry Ballard was consulted for information on rare plants potentially occurring in the project vicinity, including those on the Rare Plants of Santa Barbara County list, issued by the Central Coast Center for Plant Conservation (CCCPC) (Wilken 2007). Additional field surveys were performed in 2018, 2019, and 2020. Prior to 2018, 2019, and 2020 field surveys, the location of documented special-status plant species near the project site and that have potential to occur on site were identified through a query of the CNDDB (CDFW 2018; CDFW 2020a) and the updated Rare Plants of Santa Barbara County (Wilken 2018). In summary the following were reviewed for this project:

- 2008-2009 Second Wet Season 90-Day Vernal Pool Branchiopod Survey Report, King Ventures Rincon Bluffs Carpinteria, California (Sage Institute Inc. 2009)
- Administrative Draft Environmental Impact Report Carpinteria Bluffs, Areas III Development Plan (INTERFACE Planning and Counseling Corporation 1981)
- Carpinteria Bluffs Areas 2 and 3 Biological Resource Analysis & Mapping (Firma 2008)
- Carpinteria Bluffs Biological Resources and Environmentally Sensitive Habitat (Condor Environmental Planning Services 1996)
- CDFW CNDDB (CDFW 2018; CDFW 2020a)
- CNPS Inventory of Rare and Endangered Plants (CNPS 2020)
- Draft Carpinteria Bluffs Area III Project Biological Resources Due Diligence Report (Dudek 2012a)
- Evaluation Report Carpinteria Bluffs Biological Resources and Environmentally Sensitive Habitat Areas (LSA Associates Inc. 1997)
- Initial Biological Assessment: Rincon Trail (VJS Biological Consulting 2008)
- List of potentially occurring listed species generated from a review of the USFWS's IPaC Trust Resources Report list of federal and threatened species (USFWS 2020a)
- Proposed Final Mitigated Negative Declaration Carpinteria Rincon Trail (City of Carpinteria 2015)
- Proposed Final Subsequent Mitigated Negative Declaration. Carpinteria Rincon Trail (City of Carpinteria 2019)
- Rare Plants of Santa Barbara County list (Wilken 2007, 2018)
- USGS National Hydrography Dataset (USGS 2020)
- USFWS Critical Habitat Mapper (USFWS 2020b)

- USFWS National Wetlands Inventory (USFWS 2020c)
- Wetland Delineation of Pool Features at Carpinteria Bluffs Areas III per the California Coastal Act, City of Carpinteria, California (Dudek 2012b)

The biological survey area includes the proposed trail alignment as well as the extent of proposed temporary impacts encompassing vegetated terraces and slopes above and below the proposed trail alignment as well as portions of the developed Rincon Beach County Park (see Figure 3.3-1).

3.3.1.2 Vegetation Communities and Wildlife Habitats

During 2018, Dudek biologists conducted vegetation community mapping within the biological survey area in the field using the List of Vegetation Alliances and Associations (Natural Communities List) (CDFW 2010), which is based on the *Manual of California Vegetation, Second Edition* (MCV2) (Sawyer et al. 2009), as shown in Table 3.3-1. The vegetation communities were updated to align with the California Natural Community List (CNCL) (CDFW 2020b), which incorporated changes based on taxonomic revisions related to dominant plants, reassignment of associations to new or different alliances, and revisions to the rarities rankings of some communities. If vegetation observed did not meet the membership rules of the vegetation communities in these sources, modifications were made to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land uses) using Oberbauer et al. (2008). Vegetation community mapping conducted in 2018 was confirmed and/or updated during the 2020 site visit.

The following minimum vegetation mapping units applied during vegetation mapping:

- 0.5–1.0 acre for inaccessible areas of the site due to steep terrain.
- acres for wetland (i.e., hydrophytic) vegetation in traditional wetland environments (i.e., OBL [obligate – plant species almost always in wetlands], FACW [facultative wetland – plant species usually occurring in wetlands but occasionally found in non-wetlands], but not all FAC [facultative – plant species equally likely to occur in wetlands and non-wetlands] species comprising a vegetation alliance will be mapped unless associated with a hydrologic unit – stream, depression, swale, etc.).
- all areas with sensitive vegetation communities were mapped (no minimum mapping unit identified for sensitive vegetation communities)

Table 3.3-1. Survey Dates, Times, Personnel, and Conditions for Biological Surveys

Survey Date	Time	Personnel	Survey Conditions	Survey Type
8/31/2011	0940-1253	Dave Compton	61°F–63°F, 70%–100% cloud cover, 1-8 mph winds	General Biological Survey
5/5/2018	0655-1040	Heather Moine	55°F–68°F, 50%–70% cloud cover, 1-2 mph winds	Special-Status Plant Species Survey
5/15/2018	0630-0755	Heather Moine	51°F–60°F, 0% cloud cover, 1-3 mph winds	Vegetation Mapping
7/21/2018	0700-0900	Heather Moine	63°F–64°F, 100% cloud cover, 1-2 mph winds	Special-Status Plant Species Survey
9/26/2018	1300-1510	Heather Moine	67°F–69°F, 50%–75% cloud cover, 2-3 mph winds	Special-Status Plant Species Survey, Vegetation Mapping
4/8/2019	1505-1825	Heather Moine	80°F–85°F, 10%–80% cloud cover, 2-3 mph winds	Special-Status Plant Species Survey

Table 3.3-1. Survey Dates, Times, Personnel, and Conditions for Biological Surveys

Survey Date	Time	Personnel	Survey Conditions	Survey Type
7/23/2019	1300-1605	Heather Moine	75°F–79°F, 0%–20% cloud cover, 4-5 mph winds	Special-Status Plant Species Survey
12/24/2020	1320-1505	Mackenzie Forgey	69°F–68°F, 90% cloud cover, 2-9 mph winds	General Biological Survey; Tree Assessment

Notes: °F = degrees Fahrenheit; mph = miles per hour.

The CNCL (CDFW 2020b) is a hierarchical classification system which classifies natural vegetation communities based on alliances, which contain associations, the most granular level of classification (CDFW 2020c). The CNCL includes a state rarity rank based on the NatureServe Standard Heritage Methodology (NatureServe 2020). The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). For the purpose of this report the focus is the S rarity rank. The numbers have the following meaning (NatureServe 2020):

1 = critically imperiled
2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure

For example, S1 would indicate that a vegetation community is critically imperiled within a particular state or province. A rank of S3 would indicate the vegetation community is vulnerable and at moderate risk within a particular state or province, although it may be more secure elsewhere (NatureServe 2020). The CNCL (CDFW 2020b) includes state-level rarity rankings (i.e., the subnational [S] rank) for vegetation communities. The CNCL is considered the authority for ranking the conservation status of vegetation communities in California. As described by CDFW 2020c, ranking is an ongoing process and some associations are considered sensitive, denoted by a "Y" in the "Sensitive" column of the list, while others lack association-specific global and state ranks. This "Y" in the sensitive column indicates rarity, although that alliance may not be rated S3 or below as well (CDFW 2020c). CDFW expects to provide association level ranks for all S3 or rarer entities in the future, including those associations that are considered sensitive despite lacking an S3 or rarer alliance ranking.

The overall condition and quality of habitat provided by each vegetation community including supporting wildlife species was assessed. Discussions include degrees of disturbance, biological productivity of supporting plant and/or wildlife populations, and the relative viability of the habitat resource are included for each vegetation community and land cover type.

County environmentally sensitive habitat (ESH) and City environmentally sensitive habitat areas (ESHA) were evaluated based on definitions in the County *Coastal Land Use Plan* (CLUP) (County of Santa Barbara 2019) and the *City of Carpinteria General Plan and Local Coastal Plan* (City of Carpinteria 2003). Although most undeveloped areas of the coastal zone, as well as many isolated pockets of open space within urban areas, provide a "habitat" for many species of animals and plants, the intent of the Coastal Act is preservation of significant habitat resources. Coastal Act environmentally sensitive habitat areas are defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Coastal Act, Section 30107.5). The

County CLUP (County of Santa Barbara 2019) identifies ESH based on such factors as intrinsic, scientific, and educational value and includes the following biological resource categories:

- Dunes
- Wetlands
- Native Grasslands
- Vernal Pools
- Butterfly Trees
- Marine Mammal Rookeries and Hauling Grounds
- White-tailed Kite Habitat
- Rocky Points and Intertidal Areas
- Subtidal Reefs
- Kelp Beds
- Seabird Nesting and Roosting Areas
- Native Plant Communities – examples: coastal sage scrub, chaparral, coastal bluff, closed cone pine forest, California native oak woodland (also individual oak trees), endangered and rare plant species as designated by CNPS, and other plants of special interest such as endemics
- Streams

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) ESHA includes a diversity and number of habitats and species not commonly found in urban areas and that warrant unique measures to ensure adequate protection. As such, the Carpinteria Bluffs have specifically been identified as an ESHA. The following list includes ESHA that have been identified as existing in Carpinteria:

- Wetlands
- Butterfly Habitat
- Marine Mammal Rookeries and Hauling Grounds
- Rocky Points and Intertidal Areas
- Subtidal Reef
- Kelp Beds
- Creeks and Riparian Habitat
- Significant Native Plant Communities such as coastal sage scrub, riparian scrub, coastal bluff scrub, and native oak woodlands
- Sensitive, rare, threatened or endangered species habitat

A total of 12 vegetation communities and land cover types were recorded within the biological survey area, including five native scrub communities and seven non-native communities and land cover types (Figure 3.3-1 and Table 3.3-2). All five of the native vegetation communities found are protected under the County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), identified as coastal sage scrub, coastal bluff scrub, and/or habitat for sensitive species, and are thus considered County ESH and City ESHA. Two of these five communities, California brittle bush scrub – ashy buckwheat scrub alliance and lemonade berry scrub alliance, are also sensitive by virtue of their state rank. These communities are described in

CNCL and MCV2. Eucalyptus, ice plant mats, and myoporum are non-native and do not have a state rank (state not applicable [SNA]). The other four communities and land cover types are not listed in CNCL or MCV2.

While two individual Monterey cypress (*Hesperocyparis macrocarpa*) trees were identified in separate locations within the project site, one within the temporary impact area along the western portion of the site and the other within the proposed alignment footprint in the eastern portion of the site (Figure 3.3-1), they were not mapped as separate vegetation communities because one tree is not considered a stand or woodland. The first Monterey cypress tree is located near the western terminus of the proposed trail alignment, between the alignment and the pull-out off Carpinteria Avenue, and has a diameter of approximately 10 inches measured 4 feet above the ground. The second Monterey cypress is located within the proposed trail alignment within an unsanctioned trail within Rincon Beach County Park and has a diameter of approximately 12 inches measured 4 feet from the ground. One additional Monterey cypress tree was identified in the northern portion of the project above the railroad right-of-way, which is located along the edge of the temporary impact area adjacent to disturbed habitat and was measured with an approximate 8-inch diameter measured from 4 feet above the ground. Two Monterey cypress trees are located within the developed portion of the Rincon Beach County Park, one of which is a very young sapling with a diameter under an inch and the other is a mature tree with a combined diameter measured 4 feet from the ground of 49 inches due to multiple stems. There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the temporary project impact area and include Monterey cypress trees.

Monterey cypress trees are not naturally occurring within the Carpinteria area and instead are documented as native in populations located in Monterey and Carmel, California (CNPS 2021); therefore, Monterey cypress trees are not considered sensitive vegetation communities or individual trees. However, Monterey cypress trees could be considered County ESH and/or City ESHA if used by sensitive wildlife species as further discussed in Section 3.3.1.4.

Two pine saplings that appeared to be newly planted with mulch placed around the trunks and stakes installed for tree stabilization, are located along the edge of the temporary impact area in the portion of the project above the railroad right-of-way, each under 4 inches diameter measured 4 feet from the ground. One of these newly installed pine saplings is a Norfolk Island pine (*Araucaria heterophylla*), and the other could not be identified to species due to the lack of cones present at the time of the survey but appears to be a native pine tree (*Pinus* sp.).

There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the biological survey area, and include a few non-riparian California sycamore (*Platanus racemosa*) trees and other ornamental tree species located approximately 50-feet from Rincon Creek.

The County CLUP (County of Santa Barbara 2019) does not include mapped ESH within the project site. The City of Carpinteria General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) includes mapped ESHA within the limits of the City north to but not including Carpinteria Avenue.

Table 3.3-2. Summary of Existing Vegetation Communities and Land Cover Types

Habitat Group	General Habitat	Vegetation Community (Alliance, Association)	Alliance-Association (State Sensitive)/County ESH/City ESHA	Acreage
Native Scrub Communities	Coastal Bluff Scrub	California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia california* Association	S3-Yes (Yes)/Yes/Yes	0.96
		Quailbush Scrub Alliance, *Atriplex lentiformis* Association	S4-No (No)/Yes/Yes	6.18
			Coastal Bluff Scrub Subtotal	*7.13*
	Coastal Scrub	California Sagebrush – (Purple Sage) Scrub Alliance, *Artemisia californica* Association	S5-S4 (No)/Yes/Yes	2.08
		Coyote Brush Scrub Alliance, *Baccharis pilularis* Association	S5-No (No)/Yes/Yes	1.18
		Lemonade Berry Scrub Alliance, *Rhus integrifolia* Association	S3-S3 (Yes)/Yes/Yes	0.31
			Coastal Scrub Subtotal	*3.57*
Non-native Communities and Land Cover Types	Non-native Communities	Eucalyptus – Tree of Heaven – Black Locust Groves Alliance, *Eucalyptus (globulus, camaldulensis)* Association	SNA-SNA (No)/No/No	0.21
		Ice Plant Mats Alliance, *Carpobrotus (edulis*) Association	SNA-SNA (No)/No/No	0.14
		Pepper Tree or Myoporum Groves Alliance, *Myoporum laetum/ Arundo donax* Association	SNR-SNA (No)/No/No	0.07
		Parks and Ornamental Plantings	NA (No)/No/No	0.10
		Ruderal	NA (No)/No/No	0.17
	Land Cover Types	Developed	NA (No)/No/No	1.08
		Disturbed Habitat	NA (No)/No/No	1.45
			Non-native Communities and Land Cover Types Subtotal	*3.22*
			Combined Total	***13.92***

Notes:
SNA – state not applicable. State status rank not applicable because the species or ecosystem is not a suitable target for conservation activities (NatureServe 2020).
SNR – state no rank (NatureServe 2020).
NA – not applicable. Not included in California Natural Communities List (CDFW 2020b).

Native Scrub Communities

California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia california* Association (S3-Sensitive [Sensitive], County ESH, City ESHA). This community includes California brittle bush and/or ashy buckwheat (*Eriogonum cinereum*) as the dominant or co-dominant shrub in the canopy. California brittle bush – ashy buckwheat scrub has an intermittent to continuous shrub canopy less than two meters (seven feet) in height with a variable herbaceous ground layer. The California brittle bush – ashy buckwheat scrub alliance occurs on sunny, steep south-facing slopes often rocky or eroded, with soils derived from sandstone, volcanic or shale substrates (Sawyer et al. 2009). Species associated with California brittle bush scrub on site include quailbush *(Atriplex lentiformis)*, California sagebrush, coyote brush, western prickly pear (*Opuntia littoralis*) and black mustard.

California brittle brush scrub occurs in limited patches within the project site, wildlife using this community is partly dictated by adjacent communities, which are generally other scrub communities. Brush rabbits (*Sylvilagus bachmani*) may occur within these areas, and some species of small mammals may occur here as well. The Coast Range western fence lizard (*Sceloporus occidentalis bocourti*) likely occur within this community and within adjacent communities. Songbirds with the potential to nest within this community include the mourning dove (*Zenaida macroura*), bushtit (*Psaltriparus minimus*), northern mockingbird (*Mimus polyglottos*), and song sparrow (*Melospiza melodia*).

California brittle brush scrub has a S3-Sensitive designation thus considered a sensitive vegetation community per CDFW (2020b). California brittle bush scrub is a state sensitive vegetation community, considered coastal bluff scrub per the County CLUP (County of Santa Barbara 2019), and supports sensitive plant species. Additionally, California brittle bush scrub is mapped as ESHA, considered coastal bluff scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and supports sensitive plant species. Therefore, California brittle bush scrub is considered County ESH and City ESHA.

The *Encelia californica* association within the California brittle bush – ashy buckwheat scrub alliance was mapped in the project site. This association occurs in the proposed trail alignment in and near the County's Rincon Beach County Park (see Figure 3.3-1). Approximately 0.96 acres of this community, or 6.9% of the total biological survey area was identified.

Quailbush Scrub Alliance*, Atriplex lentiformis* Association (S4-Not Sensitive [Not Sensitive], County ESH, City ESHA). This vegetation community includes quailbush as a dominant species. Quailbush scrub has an open to intermittent scrub canopy less than five meters (16 feet) in height with a variable herbaceous layer (Sawyer et al. 2009). In the proposed trail alignment, species associated with this community include California brittle bush, lemonade berry and Australian saltbush (*Atriplex semibaccata*).

Quailbush scrub provides shelter for brush rabbits and probably for other medium-sized mammal species such as the raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*). California voles (*Microtus californicus*) may occur in this vegetation community. Common reptile species that occur here include the Coast Range western fence lizard and San Diego gophersnake (*Pituophis catenifer annectens*). Nesting songbirds occurring here include the mourning dove, bushtit, northern mockingbird, and song sparrow. Songbirds that may perch on shrubs within this community include the black phoebe (*Sayornis nigricans*).

Quailbush scrub has a S4-Not Sensitive designation thus is not considered a sensitive vegetation community per CDFW (2020b). Quailbush scrub is considered coastal bluff scrub per the County CLUP (County of Santa Barbara 2019) and mapped as ESHA and considered coastal bluff scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and therefore considered County ESH and City ESHA. Additionally, this vegetation community supports sensitive plant species and has the potential to support the state species of special concern (SSC) California legless lizard and further warrants County ESH and City ESHA designations.

The *Atriplex lentiformis* association within the quailbush scrub alliance was mapped in the project site. It occurs extensively in the proposed trail alignment east of the UPRR and in patches west of the UPRR (see Figure 3.3-1). Approximately 6.18 acres of this community, or 44.3% of the total biological survey area was identified.

California Sagebrush – (Purple Sage) Scrub Alliance*, Artemisia californica* Association (S5-S4 [Not Sensitive], County ESH, City ESHA). This community includes California sagebrush (*Artemisia californica*) and/or purple sage (*Salvia leucophylla*) as the dominant or co-dominant shrub in the canopy. California sagebrush scrub has an

intermittent to continuous shrub canopy less than two meters (seven feet) in height with a variable herbaceous ground layer (Sawyer et al. 2009). Species associated with this community include California brittle bush (*Encelia californica*), coast goldenbush (*Isocoma menziesii*) and coyote brush (*Baccharis pilularis*). Black mustard (*Brassica nigra*) and other non-native species are found in this community on site.

Wildlife occupying California sagebrush scrub includes many species common to other scrub communities within the project site. Brush rabbits seek cover in these areas, and small mammals such as California voles likely occur here. Coast Range western fence lizards and San Diego gophersnakes are reptiles that occur in scrub habitats. Songbirds nesting here include the mourning dove, northern mockingbird, California towhee (*Melozone crissalis*), and song sparrow. White-crowned sparrows (*Zonotrichia leucophrys*) occur here in winter.

California sagebrush scrub has a S5-S4 designation thus is not considered a sensitive vegetation community per CDFW (2020b). California sagebrush scrub is considered coastal sage scrub per the County CLUP (County of Santa Barbara 2019) and mapped as ESHA and considered coastal sage scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and therefore considered County ESH and City ESHA. Additionally, this vegetation community supports sensitive plant species and further warrants County ESH and City ESHA designations.

The *Artemisia californica* association within the California sagebrush – (purple sage) scrub alliance was mapped in the project site. This association occurs in the western portion of the project site, near Carpinteria Avenue and U.S. Highway 101, in a heavily engineered portion of the proposed trail alignment graded during highway construction (see Figure 3.3-1). A smaller patch occurs adjacent to the parking lot for Rincon Beach County Park. Approximately 2.08 acres of this community, or 14.9% of the total biological survey area was identified.

Coyote Brush Scrub Alliance, *Baccharis pilularis* Association (S5-Not Sensitive [Not Sensitive], County ESH, City ESHA). Coyote brush scrub communities include greater than 50% relative cover of coyote brush and coyote brush as the dominant or co-dominant shrub in the canopy. Coyote brush scrub has a variable shrub canopy less than three meters (10 feet) in height with a variable herbaceous ground layer (Sawyer et al. 2009). Species associated with this community in the proposed trail alignment include scattered California sagebrush, California brittle bush, myoporum (*Myoporum laetum*) and black mustard.

Wildlife occurring in coyote brush scrub is very similar to that occurring in quailbush scrub and includes brush rabbits, raccoon, striped skunk, California voles, Coast Range western fence lizard, San Diego gophersnake, mourning dove, bushtit, northern mockingbird, song sparrow and black phoebe.

Coyote brush scrub has a S5-Not Sensitive designation thus is not considered a sensitive vegetation community per CDFW (2020b). Coyote brush scrub is not considered coastal sage scrub or associated with other ESH habitats by definition per the County CLUP (County of Santa Barbara 2019); however, coyote brush scrub does support sensitive plant species and as such is designated County ESH. Additionally, coyote brush scrub is mapped as ESHA in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and also supports sensitive plant species and therefore considered City ESHA.

The *Baccharis pilularis* association within the coyote brush scrub alliance was mapped in the project site. It occurs in the proposed trail alignment mostly near the western terminus, but also in small patches in the vicinity of Rincon Beach County Park. The coyote brush scrub between UPRR and U.S. Highway 101 occurs in old road cuts (see Figure 3.3-1). Approximately 1.18 acres of this community, or 8.5% of the total biological survey area was identified.

Lemonade Berry Scrub Alliance*, Rhus integrifolia* Association (S3-S3 [Sensitive], County Not Sensitive, City Not Sensitive). This vegetation community includes lemonade berry (*Rhus integrifolia*) as either a dominant or co-dominant species. Lemonade berry scrub has a two-tiered, open to continuous shrub canopy less than five meters (16 feet) in height with an open herbaceous ground layer and sparse cover of emergent trees (Sawyer et al. 2009). Species associated with this community on site include coyote brush and myoporum.

Wildlife occurring in lemonade berry scrub is similar to that occurring in Coyote brush scrub and includes brush rabbits, raccoon, striped skunk, California voles, Coast Range western fence lizard, San Diego gophersnake, mourning dove, bushtit, northern mockingbird, song sparrow and black phoebe.

Lemonade berry scrub has a S3-S3 designation thus is considered a sensitive vegetation community per CDFW (2020b). Additionally, lemonade berry scrub is not considered coastal sage scrub or associated with other ESH habitats by definition per the County CLUP (County of Santa Barbara 2019); however, it does support sensitive plant species and is a state sensitive vegetation community thus is considered County ESH. Additionally, lemonade berry scrub is not considered coastal sage scrub or associated with other ESHA habitats by definition per the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003); however, it does support sensitive plant species and is a state sensitive vegetation community and thus is considered City ESHA.

The *Rhus integrifolia* association within the lemonade berry scrub alliance was mapped in the project site. This association occurs in two small patches west of the Rincon Beach County Park (see Figure 3.3-1). Approximately 0.31 acres of this community, or 2.2% of the total biological survey area was identified.

Non-Native Communities

Eucalyptus – Tree of Heaven – Black Locust Groves Semi-Natural Alliance, *Eucalyptus (globulus, camaldulensis)* Provisional Association (SNA-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). This alliance contains eucalyptus trees (*Eucalyptus* sp.), tree of heaven (*Ailanthus altissima),* or black locust (*Robinia pseudoacacia*) as the dominant species in the tree canopy. These groves have an open to continuous tree canopy less than 60 meters (197 feet) in height. Understory shrubs and herbaceous layers are sparse to intermittent, and the herbaceous layer is sparse to intermittent. Throughout California, this semi-natural groves alliance occurs as planted trees, groves, and windbreaks, naturalized on uplands or bottomlands and adjacent to stream courses, lakes, or levees (Sawyer et al. 2009).

The Eucalyptus – tree of heaven – black locust groves semi-natural alliance and specific *Eucalyptus* (*globulus, camaldulensis*) association is listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA-SNA as it is composed of non-native species; it is not considered sensitive. Additionally, per the County CLUP (County of Santa Barbara 2019) eucalyptus trees are considered ESH if they are butterfly trees or provide habitat to sensitive species. Per the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) eucalyptus trees are considered ESHA if they provide habitat for butterfly habitat or sensitive, rare, threatened or endangered species habitat. Included below is a discussion of potential wildlife use of the eucalyptus trees.

Because of shade and possibly the allelopathic (toxic) properties of eucalyptus leaf litter, little other vegetation is present in this community, and relatively little wildlife is found here. But the relatively open ground under the canopy permits medium-sized mammals such as common raccoons and striped skunks to move easily through this community to access adjacent areas. Some bird species are adapted to this community. Yellow-rumped warblers (*Setophaga coronata*) feed on insects attracted to eucalyptus blossoms in the winter. Some birds of prey favor eucalyptus trees for nesting. Red-tailed hawks (*Buteo jamaicensis*), Cooper's hawks (*Accipiter cooperii*), and great horned owls (*Bubo virginianus*) also have the potential to nest in this community.

Monarch butterflies (*Danaus plexippus*) use eucalyptus trees for roosting in the region, but they are not known to use eucalyptus within the project site. The majority of eucalyptus trees within the project site are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. Several eucalyptus trees are located within the proposed trail alignment near its western terminus and U.S. Highway 101, and range in diameter from approximately 18 to 28 inches measured 4 feet from the ground. Additionally, a small stand of eucalyptus trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot; however, there is low potential for monarchs to overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. There are also three eucalyptus trees present near the western terminus of the biological survey area, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the eastern portion of the biological survey area and include some eucalyptus trees. Monarch butterflies and monarch butterfly habitat are further discussed in Section 3.3.1.4.

The white-tailed kite is known to occur in the area (City of Carpinteria 2003). The City specifically cites the Carpinteria Bluffs as a location where this species occurs and is protected. However, no white-tailed kites were detected in the biological survey area, and the eucalyptus trees in and around the western portion of biological survey area are relatively small, and located in areas with high levels of human disturbance where kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).

The *Eucalyptus (globulus, camaldulensis)* provisional association within the eucalyptus - tree of heaven - black locust semi-natural alliance was mapped in the project site. Within the biological survey area this community is dominated by eucalyptus trees, which are sparse and do not create a windrow and do not provide habitat for sensitive species; and thus are not included as ESH per County of Santa Barbara (2009) or ESHA per City of Carpinteria (2003). Approximately 0.21 acres of this community, or 1.5% of the biological survey area was identified.

Ice Plant Mats Semi-Natural Alliance, *Carpobrotus (edulis)* Association (SNA-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). Ice plant mats contains hottentot fig (*Carpobrotus edulis*), sea fig (*Carpobrotus chilensis*), or other ice plant taxa as the dominant or co-dominant species in the herbaceous layer. These species invade coastal bluff scrub, dune mat, dune scrub, and coastal prairies and compete with native plants (Sawyer et al. 2009). Ice plant semi-natural alliance areas have an intermittent to continuous canopy within the herbaceous layer less than 0.5 meters (1.6 feet) in height.

Very few wildlife species occur in ice plant mats. California ground squirrels (*Spermophilus* [*Otospermophilus*] *beecheyi*) often inhabit this community. This community provides poor nesting habitat for birds. Common reptiles such as the western fence lizard likely occur here. This community is not generally valuable to special-status wildlife species.

The ice plant mats semi-natural alliance and specific *Carpobrotus (edulis)* association is listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA-SNA as it is composed of non-native species; therefore, it is not considered sensitive. Additionally, ice plant mats vegetation community is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Ice plant mats are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The *Carpobrotus (edulis)* association within the ice plant mats semi-natural alliance was mapped in the project site. Approximately 0.14 acres of this community, or 1.0% of the biological survey area was identified.

Pepper Tree or Myoporum Groves Semi-Natural Alliance*, Myoporum laetum/Arundo donax* Association (SNR-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). Pepper tree or myoporum groves consist of myoporum or pepper trees (*Schinus* spp.) as the dominant species in the tree canopy. Within the biological survey area, this community is dominated by myoporum. These groves have an open to continuous tree canopy less than 18 meters (59 feet) in height. Understory shrubs are infrequent or common and the herbaceous layer is simple to diverse lacking trees and shrubs. Throughout Central and Southern California, the pepper trees or myoporum groves semi-natural alliance occurs in coastal canyons, washes, slopes, riparian areas, and roadsides (Sawyer et al. 2009).

Several myoporum trees are located within the proposed trail alignment west of Rincon Beach County Park, and are largely multistemmed. Myoporum groves provide shelter for medium-sized mammal species such as the brush rabbit, common raccoon, and striped skunk. California voles may occur in this vegetation community. Common reptile species such as the western fence lizard likely occur. Nesting songbirds occurring here likely include the mourning dove, bushtit, and northern mockingbird. Wintering black phoebes are among birds that likely perch on myoporum. Some birds of prey, such the white-tailed kite and other raptors, may also perch in this community where it is adjacent to foraging habitat.

This semi-natural alliance and specific *Myoporum laetum/Arundo donax* association mapped on site are listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA as it is composed of non-native species; thus, it is not considered sensitive. Additionally, myoporum is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Myoporum are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The *Myoporum laetum/Arundo donax* association within the pepper tree or myoporum groves semi-natural alliance was mapped in the project site. Approximately 0.7 acres of this community, or 0.5% of the biological survey area was identified.

Parks and Ornamental Plantings (NA [Not sensitive], County Not Sensitive, City Not Sensitive). This community is not described in CNCL or MCV2 because it is not a naturally occurring community in California; thus, it is not considered sensitive. It includes landscaping plants as dominants. Additionally, parks and ornamental plantings is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Parks and ornamental plantings are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The ornamental vegetation community in the proposed trail alignment is characterized by the dominance of landscaped plant species. Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel are among common mammals found in this community. Western fence lizards are a common reptile found in parks and ornamental plantings. Common nesting birds such as Eurasian collared-dove (*Streptopelia decaocto*), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), bushtit, and house finch (*Haemorhous mexicanus*) may be found here.

Parks and ornamental plantings occur within the eastern part of Rincon Beach County Park (see Figure 3.3-1). Approximately 0.10 acres of this community, or 0.7% of the biological survey area was identified.

Ruderal (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). Ruderal is not described in CNCL or MCV2 because it is not a naturally occurring community in California; thus, it is not considered sensitive. Additionally, ruderal habitats are not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Ruderal habitats are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

Ruderal areas are characterized by limited native vegetation resulting in low function ecological processes. Plants in these areas are dominated by non-native species and there is not a dominant plant species or overall structure to the habitat. Ruderal areas provide little habitat or foraging potential for wildlife, due to the lack of significant cover by vegetation; however, there are often patchy areas of non-native plant species. Mammals may include common species, such as the California ground squirrel, but medium-sized mammals such as raccoons may use ruderal habitats as movement corridors. Among common reptiles that may use these areas is the western fence lizard. Seed-eating birds found here include the California towhee and white-crowned sparrow. Ruderal does not provide habitat for special-status wildlife species.

Mapped ruderal includes roadside areas and areas with disturbed non-native vegetation (see Figure 3.3-1). Approximately 0.17 acres of this community, or 1.3% of the biological survey area was identified.

Land Cover Types

Developed (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). Within the biological survey area, developed areas are unvegetated areas such as pavement and development with impervious materials, it is not described in CNCL or MCV2, and does not provide habitat for sensitive species. Developed areas include the parking lot at Rincon Beach County Park and the wide turnout at the eastern terminus of Carpinteria Avenue (see Figure 3.3-1). Approximately 1.08 acres of developed area, or 7.7% of the biological survey area was identified.

Disturbed Habitat (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). This land cover type, which is not described in CNCL or MCV2, includes invasive non-native and other disturbance-tolerant species as dominants, and does not support sensitive species. Species occurring within this community, including some natives, are those that are tolerant to disturbances such as grading or vegetation clearing. On-site, species appearing in disturbed areas include poison hemlock (*Conium maculatum*), black mustard, Hottentot fig, and horseweed (*Erigeron canadensis*). Approximately 1.45 acres of this land cover type, or 10.45% of the biological survey area was identified.

3.3.1.3 Special-Status Plant Species

During 2018 and 2019 Dudek biologists performed floristic surveys for special-status plant species, as shown in Table 3.3-1. All plant species encountered during the field surveys were identified to subspecies or variety, if possible. Species that could not be identified in the field were brought into the laboratory for further investigation. Scientific and common names for plant species with a California Rare Plant Rank (CRPR) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2020). For plant species without a California Rare Plant Rank, scientific names follow the Jepson Interchange for California Floristics; Index to California Plant Names (Jepson Flora Project 2020) and common names follow the California Natural Community List (CDFW 2020b) or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2020b).

For the purpose of CEQA analysis, federal, state, CNPS CRPR 1A, 1B, 2A, and 2B plants, and locally rare plants (Wilken 2018) are considered special-status. CRPR 3 and 4 plants are CNPS designated rare, but not considered special-status as plant species but do add to the vegetation community value designated as County ESH and or City ESHA as CNPS CRPR 3 and 4 species.

In considering rarity beyond federal or state designations, the CNPS Inventory of Rare and Endangered Vascular Plants of California was the primary reference (CNPS 2020). Use of the CNPS inventory is helpful because it clearly defines levels of endangerment and rarity for all of the species addressed. The CNPS inventory divides its subject taxa into four ranks: CRPR 1 (which is further divided into 1A and 1B), CRPR 2 (which is further divided into 2A and 2B), CRPR 3, and CRPR 4. Plants with a CRPR of 1A are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. Plants with a CRPR of 1B are rare throughout their range, with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. Plants with a CRPR of 2A are presumed extirpated because they have not been observed or documented in California for many years. Except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. Plants with a CRPR of 3 have not had sufficient information collected to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. Plants with a CRPR of 3 are plants about which more information is needed and 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. CRPR 3 plants lack necessary information to assign them to one of the other ranks or to reject them. Should the degree of endangerment or rarity of a CRPR 4 plant change, it would be transferred to a more appropriate rank.

CRPR plants are further defined as follows:

- .1 = seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- .2 = moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
- .3 = not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

A total of 133 plant species were observed and identified during surveys. Of these, 57 (43%) are considered native and 76 (57%) are considered non-native to California, included as Appendix C1, Plant and Wildlife Species Compendium. The CNDDB (CDFW 2018; CDFW 2020a) and CNPS (CNPS 2020) queries returned 34 special-status plant species that have been documented within the USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5 minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria), hereafter referred to as the region. Only the four coastally influenced adjacent USGS 7.5-minute quadrangles were queried for sensitive biological resources instead of all adjacent quadrangle maps, since the habitats north of the foothills vary greatly from the project site and would not be representative of what species are likely to occur in coastal habitats. Dudek analyzed the resulting special-status plant species potential to occur based on known elevation or geographic range, suitable habitat, or the species has been extirpated from the region. Appendix C2, Plant and Wildlife Species Not Expected to Occur within the Biological Survey Area provides a list of the 20 special-status plant species that are not expected to occur based on site surveys, lack of suitable habitat, and the site being out of the species range. The special-status plant species in Appendix C2 are not analyzed in this report as no direct, indirect, or cumulative impacts are expected.

Based on Dudek's habitat suitability analysis including elevation and habitats, 11 of the special-status plant species had the potential to occur within the project site, and 3 special-status plant species were observed during 2018

and 2019 rare plant surveys. These 14 special-status plant species include aphanisma (*Aphanisma blitoides*), Miles' milk-vetch (*Astragalus didymocarpus* var. *milesianus*), Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), Coulter's saltbush (*Atriplex coulteri*), South Coast saltscale (*Atriplex pacifica*), southern tarplant (*Centromadia parryi* ssp. *australis*), Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), mesa horkelia (*Horkelia cuneata* var. *puberula*), California satintail (*Imperata brevifolia*), Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*), aparejo grass (*Muhlenbergia utilis*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), Nuttall's scrub oak (*Quercus dumosa*), salt spring checkerbloom (*Sidalcea neomexicana*), and woolly seablite (*Suaeda taxifolia*) (Table 3.3-3).

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Aphanisma blitoides	aphanisma	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/3–1,000 feet amsl	Low potential to occur. Suitable coastal scrub and coastal bluff scrub habitat is present, however the only CNDDB occurrence in the region was last confirmed in 1963 and located 1.5 miles west of the Ventura River (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Astragalus didymocarpus var. *milesianus*	Miles' milk-vetch	None/None/ 1B.2	Coastal scrub (clay)/annual herb/Mar–June/66–295 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although clay soils are absent (USDA 2020a). There are only two CNDDB occurrences in the region the most recent of which was recorded in the 1970s in the Ojai area (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Atriplex coulteri	Coulter's saltbush	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/10–1,505 feet amsl	Low potential to occur. Suitable coastal bluff scrub and coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. This species is known to occur along Carpinteria coastal bluffs, however this is from an occurrence last confirmed in 1927 (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Atriplex pacifica	South Coast saltscale	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460 feet amsl	Low potential to occur. Suitable coastal bluff scrub and coastal scrub habitat is present and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, there is only one occurrence in the region which was last confirmed in 1972 about 1.5 miles west of the Ventura River (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/ 1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/0–1,570 feet amsl	Low potential to occur. Suitable habitat is present in the disturbed habitat and ruderal areas on site, as this species can occur in disturbed sites (CDFW 2020a). However, the only occurrence in the region was last confirmed in 1997 and is considered possibly extirpated (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/None/ 1B.1	Coastal bluff scrub (sandy), Coastal dunes/annual herb/Jan–Aug/0–330 feet amsl	Low potential to occur. Suitable coastal bluff scrub habitat is present. However, the only occurrence in the region was last confirmed in 1961 and is considered possibly extirpated (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/ 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/230–2,655 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although the most recently confirmed occurrence in the region is from 1935 (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Imperata brevifolia	California satintail	None/None/ 2B.1	Chaparral, Coastal scrub, Mojavean desert scrub, Meadows and seeps (often alkali), Riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3,985 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, there are only two occurrences in the region, both of which are located behind the transverse ranges north the site, approximal 11 miles northeast of the project site (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Lonicera subspicata var. *subspicata*	Santa Barbara honeysuckle	None/None/ 1B.2	Chaparral, Cismontane woodland, Coastal scrub/perennial evergreen shrub/May–Aug(Dec–Feb)/33–3,280 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present. However, all the occurrences in the region are located within the foothills and not directly along the coast (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Malacothrix saxatilis var. *saxatilis*	cliff malacothrix	None/None/ 4.2[b]	Coastal bluff scrub, Coastal scrub/perennial rhizomatous herb/Mar–Sep/10–655 feet amsl	Present. Detected during 2018 or 2019 special-status plant species surveys.
Muhlenbergia utilis	aparejo grass	None/None/ 2B.2	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland; sometimes alkaline, sometimes serpentinite/perennial rhizomatous herb/Mar–Oct/82–7,625 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, the only occurrence in the region was last confirmed in 1964 and was located west of Matilija Lake (CDFW 2020a).

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	None/None/ 3.2[b]	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt); sandy, sometimes rocky/perennial herb/Mar–Aug/16–985 feet amsl	Present. Detected during 2018 or 2019 special-status plant species surveys.
Quercus dumosa	Nuttall's scrub oak	None/None/ 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr(May–Aug)/49–1,310 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although clay soils are absent (USDA 2020a). The closest occurrence in the region was last confirmed in 1929 and was described as occurring in Carpinteria, and the remaining occurrences in the region[2] are located within the foothills and not directly along the coast (CDFW 2020a). This species was not detected during 2018 or 2019 special-status plant species surveys.
Suaeda taxifolia	woolly seablite	None/None/ 4.2[b]	Coastal bluff scrub, Coastal dunes, Marshes and swamps (margins of coastal salt)/perennial evergreen shrub/Jan–Dec/0–165 feet amsl	Present. Detected during 2018 or 2019 special-status plant species surveys.

Notes: amsl = above mean sea level.

[a] **Status Legend:**
FE: Federally listed as endangered
SE: State listed as endangered
CRPR 1A: Plants presumed extinct in California
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants rare, threatened, or endangered in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Plants about which more information is needed – a review list
CRPR 4: Plants of limited distribution – a watch list
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

[b] For the purpose of CEQA analysis, federal, state, and CNPS CRPR 1A, 1B, 2A, and 2B plants are considered special-status. CRPR 3 and 4 plants are not considered special-status as plant species but do add to the vegetation community value designated as County environmentally sensitive habitat and or City environmentally sensitive habitat areas as CNPS CRPR 3 and 4 species.

No federal, state, or CNPS CRPR 1 or 2 plant species were observed. Two CNPS CRPR 4.2 plant species, cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*) and woolly seablite (*Suaeda taxifolia*), and one CNPS CRPR 3.2 plant species, south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*) were detected within the biological survey area (see Figure 3.3-1). Cliff malacothrix, south coast branching phacelia, and woolly seablite are not included on the Rare Plants of Santa Barbara County list (Wilken 2018); therefore, these are not considered special-status plant species.

Cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*). This CNPS CRPR 4.2 species is a perennial herb that occurs in coastal bluff scrub and coastal scrub at 10 to 220 feet in elevation. It occurs along the coast from Orange County north to Santa Barbara County, and inland in Kern and San Bernardino Counties and blooms March through September. A total of 68,385 square feet and 834 individuals were documented (Figure 3.3-1) in the biological survey area.

South coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*). This species is a perennial herb that is native to California and included as CNPS CRPR 3.2. It occurs in chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt) in sandy sometimes rocky soils and blooms March through August. A total of 14 square feet and 2 individuals were documented (Figure 3.3-1) in the biological survey area.

Woolly seablite (*Suaeda taxifolia*). This CNPS CRPR 4.2 species is found in coastal bluff scrub, coastal dunes, and marshes and swamps at 0 to 165 feet elevation. It occurs along the coast from Orange County north to San Luis Obispo County, as well as on the Channel Islands and blooms January through December, year-round. In the project vicinity, this species is distributed in monotypic patches along the bluffs just west of Rincon Beach County Park, adjacent to the trail alignment (Figure 3.3-1). A total of 75,161 square feet and 617 individuals were documented in the biological survey area.

3.3.1.4 Special-Status Wildlife Species

Wildlife species were documented during the 2011 general biological survey and subsequent vegetation mapping, and special-status plant species surveys during 2018 and 2019. Additionally, a Dudek biologist documented wildlife observed during the general biological survey conducted in December 2020.

A total of 32 special-status wildlife species (25 birds, two invertebrates, three mammals, and two reptiles) were either directly observed or detected based on vocal cues or observation of sign, included as Appendix C1. The CNDDB (CDFW 2018, 2020a) and USFWS (USFWS 2020a) queries returned 41 special-status wildlife species that have been documented within the USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5 minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria), herein after referred to as the region. Only the four coastally influenced adjacent USGS 7.5-minute quadrangles were queried for sensitive biological resources instead all adjacent quadrangle maps, since the habitats north of the foothills vary greatly from the project site and would not be representative of what species are likely to occur in coastal habitats.

A variety of special-status wildlife have recorded occurrences in the region (i.e., the five 7.5-minute quadrangles queried) and were evaluated for their potential to occur on the project site, including but not limited to the Monarch butterfly (*Danaus plexippus*; Special Animal), tidewater goby (*Eucyclogobius newberryi*; federally endangered [FE]), southern steelhead (*Oncorhynchus mykiss irideus*; FE), California red-legged frog (*Rana draytonii*); federally threatened [FT]), California legless lizard (*Anniella sp.*; California Species of Special Concern [SSC]), two-striped garter snake (*Thamnophis hammondii*; SSC), white-tailed kite (*Elanus leucurus*; state fully protected [FP]); light-footed clapper rail (*Rallus longirostris levipes*; FE, state endangered [SE], FP), snowy plover (*Charadrius nivosus*;

FT) and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*; SE). Appendix C2 provides a list of the 31 special-status wildlife species that are not expected to occur based on site surveys, lack of suitable habitat, and the site being out of the species range. The special-status wildlife species in Appendix C2 are not analyzed in this report as no direct, indirect, or cumulative impacts are expected.

Based on Dudek's knowledge of regional biological resources, distribution of local species, and species-specific habitat preferences, 8 of the special-status wildlife species queried had the potential to occur within the project site. These 8 special-status wildlife species include California legless lizard, Blainville's horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), white-tailed kite, western mastiff bat (*Eumops perotis californicus*), Townsend's big-eared bat (*Corynorhinus townsendii*), San Diego desert woodrat (*Neotoma lepida intermedia*), and the monarch butterfly and their overwintering population (Table 3.3-4).

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Reptiles				
Anniella sp.	California legless lizard	None/SSC/None/None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Moderate potential to occur. Note that the species of legless lizard occurring in the region is not known (Papenfuss and Parham 2013). Suitable scrub habitat is present, although loose, loamy soils are less abundant within the site due to extensive past grading to form the slopes adjacent to U.S. Highway 101. A 1952 CNDDB occurrence was within the western portion of the project site (CDFW 2020a). The next closest occurrence is located approximately 2 miles northwest of the site at Carpinteria State Beach (CDFW 2020a).
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC/None/None	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. Suitable coastal scrub habitat is present, although there is only one CNDDB occurrence in the region, located approximately 10.5 miles northeast of the site near the Los Robles Diversion Canal (CDFW 2020a).

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC/None/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Low potential to occur. Suitable coastal scrub shrubby habitat is present, although all three CNDDB occurrences in the region are located in the montane areas behind the site and not in coastal areas, the closest of which is located approximately 10.5. miles north of the site along E Camino Cielo (CDFW 2020a).
Birds				
Elanus leucurus (nesting)	white-tailed kite	None/FP/ESH/ESHA	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).
Mammals				
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/None/None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels	Low potential to occur, not expected to roost. Marginally suitable coastal scrub foraging habitat is present, while suitable roosting habitat is absent on site. There is only one CNDDB occurrence in the region, last confirmed in 1941 at the Carpinteria Salt Marsh (CDFW 2020a).

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Eumops perotis californicus	western mastiff bat	None/SSC/None/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Low potential to occur, not expected to roost. Suitable coastal scrub foraging habitat is present, while the slopes present on site are not large and far enough away from human disturbance to be suitable roosting habitat. There is only one CNDDB occurrence in the region, which is located approximately 10 miles east of the site near Weldon (CDFW 2020a).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur. Suitable coastal scrub habitat is present, and this species is known to occur along the coast in the region, the closet occurrence of which was last confirmed in 1992 located approximately 2.75 miles southeast of the site just east of Punta Gorda (CDFW 2020a). Additionally, woodrat middens have been observed within the project site during various surveys.
Puma concolor (southern and central coast California evolutionary significant units)	mountain lion	None/SC/None/None	Dense undergrowth and cover in deserts, humid coast forests, arid hillsides, and scrub and oak woodlands.	Low potential to occur. Suitable habitat north and east of the project site across U.S. Highway 101 in the vicinity of State Route 150. This species is known to occur in more rural areas and may access areas east of the project site via Rincon Creek; however, project site access is constricted by U.S. Highway 101 and adjacent chain link fencing along the southbound lanes of the highway, the narrow and frequently used State Route 150, and the beach.

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Invertebrates				
Danaus plexippus	monarch	FC/None/ESH[2]/ESHA[2]	Follows a pattern of seasonal migration and the Rocky Mountain population migrates southwest to wintering grounds along the California coast from Mendocino to the Mexico border extending into Baja, California, Mexico. Overwintering populations utilize wind-protected tree groves (typically eucalyptus [*Eucalyptus* sp.], Monterey cypress [*Hesperocyparis macrocarpa*], sycamore [*Platanus racemosa*], and coast live oak [*Quercus agrifolia*]) with nectar sources and nearby water sources.	Low potential to roost. While there are a few trees located on the project site including Monterey cypress and eucalyptus trees, most are isolated individuals, and none assemble into a woodland large enough to provide protection and other elements required by overwintering monarch butterflies. There is low potential for monarch butterflies to overwinter adjacent to the project site, including the stand of eucalyptus and trees associated with residential development at Rincon Point near Rincon Creek; however, monarch individuals were not observed during surveys and winter roost sites have not been documented in these areas (Xerces Society 2020). There are numerous occurrences in the region, including a stand of eucalyptus trees north of the project site along Rincon Creek and Bates Road north of Highway 101, last confirmed in 2002 (CDFW 2020a).

[1] **Federal Designations:**

FC	Candidate for federal listing as threatened or endangered
(FD)	Federally delisted; monitored for five years
FE	Federally listed Endangered
FT	Federally listed as Threatened
FDL	Federally delisted
BCC	Bird of Conservation Concern

State Designations:

SC	Candidate for state listing as endangered
SSC	Species of Special Concern
FP	California Department of Fish and Game Protected and Fully Protected Species
SE	State listed as Endangered
ST	State listed as Threatened
SDL	State delisted
WL	Watch List

[2] Monarch overwintering sites are protected under County CLUP (County of Santa Barbara 2019) and the City General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) as County environmentally sensitive habitat and City environmentally sensitive habitat areas.

Two special-status wildlife species were determined to have a moderate potential to occur within the project site, including Northern California legless lizard (SSC) and San Diego desert woodrat (SSC).

California legless lizard. The California legless lizard is a state SSC and is a fossorial lizard that occupies suitable habitats such as coastal dune, valley and foothill grassland, chaparral, and coastal scrub from Contra Costa County south to the Mexico border. This species requires loose, friable soils for burrowing, and often requires moist substrates and environments (CDFW 2020a). This species has been recorded within the project site from a 1952 occurrence along the coastal bluffs near Rincon Road and Rincon Beach County Park (CDFW 2020a). Suitable habitat for this species occurs on site in the coastal scrub and coastal bluff scrub vegetation communities mapped over a large portion of the site

San Diego desert woodrat. The San Diego desert woodrat is a state SSC known to inhabit scrub habitats, such as coastal sage scrub. Its distribution tends to be on the west side of Coast Ranges from San Diego County north to at least San Luis Obispo County. The San Diego desert woodrat prefers moderate to dense canopies, and are particularly abundant in rock outcrops, rocky cliffs, and slopes (CDFW 2020a). Unlike dusky-footed woodrats, San Diego desert woodrats do not construct large stick nests. This species normally occupies openings in rocks, vegetation (such as openings among patches of cactus), and even debris, and sometimes small stick nests are built within an opening or crevice. Suitable habitat for this species occurs on site in the coastal scrub and coastal bluff scrub vegetation communities mapped over a large portion of the site. Woodrat middens have been observed during surveys on site.

White-tailed kite. The white-tailed kite, a state fully protected species, is known to occur in the area (City of Carpinteria 2003), and in addition to protections by the state, the white-tailed kite receives protection under the Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003). The City specifically cites the Carpinteria Bluffs as a location where this species occurs and is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. Trees in and around the site are relatively small, and located in areas with high levels of human disturbance where kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).

Monarch butterflies and overwintering sites. Monarch butterflies are currently a federal candidate species, while their overwintering sites are also protected under Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. The monarch butterfly follows a pattern of seasonal migration. The summer grounds of the species are found in New England, the Great Lakes region, the northern Rocky Mountains, and some portions of the Arid West (Pelton et al. 2016). The New England and Great Lakes populations generally migrate southwest to wintering grounds in the Sierra Madre mountain range of Mexico, while the Rocky Mountains population generally migrates southwest to wintering grounds along the California coast.

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast

(Pelton et al. 2016). The majority of trees within the biological survey area are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however there is low potential for monarchs for overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. There are also three eucalyptus trees present at near the western terminus of the biological survey area, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. Additionally, the eucalyptus trees present along the hills behind the biological survey on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the biological survey area along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020).

3.3.1.5 Critical Habitat

There is no USFWS designated critical habitat for any plant species or wildlife species within or adjacent to the project site (USFWS 2020b).

3.3.1.6 Wildlife Movement Corridors

The project site is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small wildlife species. In addition, U.S. Highway 101 and adjacent chain link fencing along the southbound lanes of the highway provide impediments to wildlife movement between the bluffs and more inland areas. Additionally, development and restricted access from more open space areas to the north impede wildlife movement in accessing the project site. Large-sized mammal species such as mountain lion and California black bears (*Ursus americanus californiensis*) may utilize areas to the east of the biological survey area including Rincon Creek and the channelized portion under U.S. Highway 101 to access beach areas; however, the surrounding areas where Rincon Creek daylights is developed with residential homes and parking lot improvements, resulting in a high urban wildlife interface. Medium-sized mammal species such as the striped skunk (*Mephitis mephitis*) or northern raccoon (*Procyon lotor*) may move locally along the coast. The UPRR and associated right-of-way provides an unvegetated corridor approximately 50 feet wide containing a single track that divides the project alignment near its center. The UPRR tracks are at a much lower elevation than the adjacent bluffs creating an anthropogenic valley and break in continuous topography along the bluffs. The project includes a span bridge which connects the two bluffs and ultimately will not change the overall topography for wildlife to approach or cross the tracks. Additionally, minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since the overall height of the slope should remain at the same elevation.

To evaluate the change in wind uplift patterns above the bluff face from the proposed regrading for the project, Dudek commissioned an Airflow Analysis for the Proposed Regrading of the Rincon Bluffs study (Airflow Study) by an expert in fluid dynamics; the Airflow Study is included as Appendix I of this Environmental Impact Report. Several different approaches were used, based upon published literature including wind tunnel experiments and direct field measurements of the amplification effects of a slope or vertical face on horizontal wind vectors perpendicular to

the slope face. In the published literature reviewed for this Airflow Study, certain investigators compared the average slope angle of the entire slope or bluff face to determine the wind amplification effect, while others compared the angle of just the upper portion of the slope. The analysis of the effects of the proposed regrading of the bluff face for the project concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to paragliding and soaring activities, the reduction is expected to be closer to 30% (Appendix I). Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (of the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet (Appendix I). Migratory avian species travel hundreds to thousands of miles at various elevations during which they can be exposed to a variety of weather systems within days or weeks of each other and have behavioral plasticity in response to microscale through mesoscale conditions including extremely adverse weather (Sahmoun-Baranes 2017). The anticipated changes in velocity and turbulence would occur within a short linear distance relative to the distance traveled for a migrating avian species, and avian species regularly adjust to changing weather conditions. Additionally, the velocity and turbulence changes would be focused at altitudes near the bluff top and would not extend the whole altitude range for migrating birds.

3.3.1.7 Aquatic Resources

While a delineation of jurisdictional aquatic resources was not performed; no evidence of aquatic features was observed within the biological survey area during field surveys. Additionally, there are no USGS National Hydrography Dataset (USGS 2020) or USFWS National Wetlands Inventory (USFWS 2020b) mapped aquatic resources within the project site. On the adjacent Carpinteria Bluffs III site, to the south and west of the western most portion of the project site, multiple seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. No documented coastal wetlands occur within the project site; however, coastal wetlands (Dudek 2012b) are approximately 123 feet from project temporary impacts and 125 feet from project permanent impacts. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area.

3.3.2 Relevant Plans, Policies, and Ordinances

3.3.2.1 Federal

Clean Water Act, Section 404

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the United States, and regulating quality standards for surface waters. Under the CWA, the U.S. Environmental Protection Agency (USEPA) has implemented pollution control programs such as setting wastewater standards for industry and developing national water quality criteria recommendations for pollutants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. USEPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or human-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an

NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Federal Endangered Species Act

Under the federal Endangered Species Act of 1973 (ESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the planning area, and determine whether the project would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3][4]). The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service are responsible for implementation of the ESA.

USFWS also publishes a list of candidate species. Species on this list receive special attention from federal agencies during environmental review, although they are not protected otherwise under the ESA. The candidate species are those for which USFWS has sufficient biological information to support a proposal to list them as endangered or threatened.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as "pursue, hunt, shoot, wound, kill trap, capture, or collect, or any attempt to carry out these activities" (16 USC 703 et seq.). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species. Currently, birds are considered to be nesting under the Migratory Bird Treaty Act only when there are eggs or chicks that are dependent on the nest.

3.3.2.2 State

California Endangered Species Act

The California ESA establishes state policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Under the California ESA, CDFW is responsible for maintaining a list of threatened species and endangered species (California Fish and Game Code, Section 2070). CDFW also maintains a list of candidate species, which are species that CDFW has formally noticed as under review for addition to the threatened or endangered species list. CDFW also maintains lists of California species of special concern, which serve as watch lists. Pursuant to the requirements of the California ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the area, and determine whether the proposed project would have a potentially significant impact on such species. CDFW encourages informal consultation on any proposed project that may impact a candidate species.

California Fish and Game Code

Under the California Fish and Game Code, CDFW provides protection from take for a variety of species, including fully protected species. "Fully protected" is a legal protective designation administered by CDFW and intended to conserve wildlife species that risk extinction within California. Lists have been created for birds, mammals, fish, amphibians, and reptiles.

Birds of prey are protected in California under California Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW. Section 3511 prohibits take or possession of a fully protected species. In addition, Section 3513 states "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory [Bird] Treaty Act." Any loss of fertile eggs or nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Non-raptor native birds receive similar protection under California Fish and Game Code Section 3503. Project impacts to these species would not be considered significant unless the species are known to, or have a high potential to, nest in the area or rely on it for primary foraging.

The Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.) gives CDFW authority to designate state endangered, threatened, and rare plants, and provides specific protection measures for identified populations.

CDFW also protects streams, water bodies, and riparian corridors through the Streambed Alteration Agreement process under Sections 1601–1606 of the California Fish and Game Code. The California Fish and Game Code stipulates that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. Through policy, CDFW asserts jurisdiction to the top of banks of all streams, including intermittent and ephemeral streams, extending laterally to the upland edge of adjacent riparian vegetation. CDFW uses the Cowardin system for wetland identification and classification, which typically results in a larger jurisdictional area than federal jurisdiction under the Clean Water Act. Under this system, wetlands must

have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

3.3.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City's General Plan/Local Coastal Land Use Plan includes the following objectives and policies relevant to the proposed project and biological resources:

- OSC-1 Protect, Preserve and Enhance Local Natural Resources and Habitats
  - Policy OSC-1a. Protect ESHAs from development and maintain them as natural open space or passive recreational areas.
  - Policy OSC-1b. Prohibit activities, including development, that could damage or destroy ESHA.
  - Policy OSC-1c. Establish and support preservation and restoration programs for ESHA, including but not limited to Carpinteria Creek, Carpinteria Bluffs, Carpinteria Salt Marsh, seal rookery, Carpinteria reef, Pismo clam beds and the intertidal zones along the shoreline.
  - Policy OSC-1d. Property including ESHA should be designated with a zoning category that allows for the protection of, and access to, the resource area, such as Open Space/Recreation or Public Facility zoning. Any development on property including ESHA should be designed and conducted to protect the resources. Within environmentally sensitive habitat only uses dependent upon those resources shall be allowed and the resources shall be protected against any disruption.
  - Policy OSC-1f. Protect and restore degraded wetlands, butterfly habitat, native plant communities, and sensitive, rare, threatened or endangered species habitat on City-owned land to the maximum extent feasible.
- OSC-3 Preserve and Restore Wetlands Such as the Carpinteria Salt Marsh
  - Policy OSC-3a. Wetland delineations shall be based on the definitions contained in Section 13577 (b) of Title 14 of the California Code of Regulations
  - Policy OSC-3b. The upland limit of a wetland is defined as
    - the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;
    - the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric;
    - in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not.
    - If questions exist, the limit shall be determined by a habitat survey made by a qualified biologist in consultation with the California Department of Fish and Game.
  - Policy OSC-3c. Development adjacent to the required buffer around wetlands should not result in adverse impacts including but not limited to sediment runoff, chemical and fertilizer contamination, noise, light pollution and other disturbances.
- OSC-7 Conserve Native Plant Communities.
  - Policy OSC-7b. When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. Structures shall be sited and designed to minimize the impact of grading, paving

construction of roads, runoff and erosion on native vegetation. Sensitive resources that exhibit any level of disturbance shall be maintained, and if feasible, restored. New development shall include measures to restore any disturbed or degraded habitat on the project site. Cut and fill slopes and all areas disturbed by construction activities shall be landscaped or revegetated at the completion of grading. Plantings shall be of native, drought-tolerant plant species consistent with the existing native vegetation on the site. Invasive plant species that tend to supplant native species shall be prohibited.

Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to PRC Section 30500 of the California Coastal Act of 1976, Santa Barbara County was required to prepare an LCP for portions of the unincorporated areas of Santa Barbara County within the coastal zone. Sections of the Santa Barbara County Article II Zoning Ordinance that may be relevant to the proposed project include Section 35-140, Tree Removal. Section 35-140 regulates the removal of qualifying trees within the coastal zone, and requires Coastal Development Permit (CDP) approval prior to removal of any qualifying tree. A qualifying tree is defined as a tree which is six inches or more in diameter measured four feet above the ground and six feet or more in height and which is 1) located in a County street right-of-way; or 2) located within 50 feet of any major or minor stream except when such trees are removed for agricultural purposes; or 3) oak trees; or 4) used as a habitat by the monarch butterflies. However, a CDP to remove trees in the coastal zone shall only be issued for reasons such as: the trees are dead; the trees prevent the construction of a project for which a CDP has been issued and project redesign is not feasible; the trees are diseased and pose a danger to healthy trees in the immediate vicinity; or the trees are so weakened by age, disease, storm, fire, excavation, removal of adjacent trees, or any injury so as to cause imminent danger to persons or property.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan was partially certified by the Coastal Commission on March 17, 1981, adopted in 1982, and republished June 2019, as the Local Coastal Program for unincorporated Santa Barbara County. It details the rules and regulations of land use within Santa Barbara County's coastal areas. The following policies would apply to the proposed project. Policy 9-37 consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance Section 35-97.19, Development Standards for Stream Habitats. Policy 9-38 consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance Section 35-97.19.

- Policy 9-36: When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.
- Policy 9-37: The minimum buffer strip for major streams in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams in urban areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis. The buffer shall be established based on an investigation of the following factors and after consultation with the Department of Fish and Game and Regional Water Quality Control Board in order to protect the biological productivity and water quality of streams:
  1) Soil type and stability of stream corridors;
  2) How surface water filters into the ground;
  3) Slope of the land on either side of the stream; and
  4) Location of the 100-year flood plain boundary.

Riparian vegetation shall be protected and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible. Riparian vegetation shall be protected and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible.

- Policy 9-38: No structures shall be located within the stream corridor except: public trails, dams for necessary water supply projects, flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and other development where the primary function is for the improvement of fish and wildlife habitat. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible.

3.3.3 Thresholds of Significance

The County provides types of impacts to biological resources that may be considered significant if the project substantially alters biological resources in the following ways (County of Santa Barbara 2008):

1. Substantially reduce or eliminate species diversity or abundance
2. Substantially reduce or eliminate quantity or quality of nesting areas
3. Substantially limit reproductive capacity through losses of individuals or habitat
4. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
5. Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)
6. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Furthermore, the size, type, and timing of impacts should be considered in assessing the significance of project impacts on biological resources (County of Santa Barbara 2008).

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to biological resources would occur if the project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

g) Result in cumulatively considerable impacts to biological resources.

3.3.4 Impact Analysis

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

For the purpose of CEQA analysis, federal, state, CNPS CRPR 1A, 1B, 2A, and 2B plants, and locally rare plants (Wilken 2018) are considered special-status plant species. CRPR 3 and 4 plants, which are CNPS "rare", but not considered special-status yet these plant species do add to the vegetation community value designated as County ESH and or City ESHA as CNPS CRPR 3 and 4 species. No federal, state, or CNPS CRPR 1 or 2 species, or locally rare (Wilken 2018) species were observed. Two CNPS CRPR 4.2 plant species, cliff malacothrix and woolly seablite, and one CNPS CRPR 3.2 plant species, south coast branching phacelia, were detected within the biological survey area. Cliff malacothrix, south coast branching phacelia, and woolly seablite are not included on the Rare Plants of Santa Barbara County list (Wilken 2018) and therefore, are not considered special-status plant species. No special-status plant species were observed; thus, impacts to special-status plant species would be less than significant.

Habitat was documented for two special-status wildlife species, either within or adjacent to the trail alignment: California legless lizard and San Diego desert woodrat. Habitat for the California legless lizard was found in the proposed trail alignment immediately south of the UPRR crossing. California legless lizard individuals could suffer injury or mortality because of grading and other construction activities associated with the project. Therefore, impacts to California legless lizard would be potentially significant absent mitigation. Habitat for the woodrat is located throughout the scrub dominated portions of the site. Woodrat individuals could suffer injury or mortality because of grading and other construction activities. Therefore, impacts to woodrat would be potentially significant absent mitigation. Impacts to these species' habitats would be reduced to **less than significant with implementation of Mitigation Measure (MM) BIO-1 through MM-BIO-4**.

White-tailed kite is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020). The City specifically cites the Carpinteria Bluffs as a location where white-tailed kites occur and their habitat is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. Trees in and around the project site are relatively small, and located in areas with high levels of human disturbance where white-tailed kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park and within the Rincon Point housing development; however, proposed project impacts are greater than 500 feet from these habitats. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, impacts to white-tailed kites would be **less than significant.**

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast (Pelton et al. 2016). The majority of trees within the project site are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. There are three eucalyptus trees present near the western terminus of the project site, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however there is low potential for monarchs for overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. The easternmost proposed project impacts are over 1,000 feet from these eucalyptus trees. Additionally, the eucalyptus trees present along the hills behind the project site on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the project site along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020). While this population is not within 100 feet of the project site, it could be affected by project implementation due to changed weather patterns. However, no impacts to this monarch overwintering site is anticipated since the overall height of the slope within Rincon Beach County Park south of Highway 101 will not be reduced, as work includes proposed terraces to stabilize the hill but will not decrease its overall height, and therefore no changes to the wind conditions at the overwintering site are expected. Additionally, this overwintering site is largely protected by the hill below the single residential development at 637 Bates Road, and any possible changes to weather and wind patterns due to project implementation would not affect the protective contour this hill independently provides. Therefore, monarch butterflies are not anticipated to be affected since there is low potential for the project site to support overwintering populations, and because known overwintering populations in the vicinity would not be adversely affected due to project implementation. Therefore, impacts to monarch butterfly individuals and monarch butterfly overwintering sites would be **less than significant.**

Several trees, including eucalyptus, Monterey cypress, pine, are located within the proposed trail alignment near its western terminus and U.S. Highway 101. These trees are relatively small and located in areas with high levels of human disturbance including U.S. Highway 101 vehicular traffic and pedestrian use of Carpinteria Avenue and adjacent areas. These isolated and singular trees lack dense foliage and are located in areas vulnerable to strong winds and weather. Several myoporum trees are located within the proposed trail alignment and are largely multistemmed. The myoporum located directly adjacent to the unsanctioned trail experiences high levels of human disturbance. Due to the locations of these trees in areas with high levels of human disturbance, relatively small size of these trees, isolated nature of the trees, and vulnerability to strong winds and weather, raptors are unlikely to nest in these trees. Therefore, removal of these trees would not substantially reduce or eliminate quantity or quality of raptor nesting areas and impacts would be **less than significant.**

Additionally, a stand of trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot. The eastern most proposed project impacts are over 1,000 feet from this stand of trees. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, project impacts to raptor nesting trees would not substantially reduce or eliminate quantity or quality of nesting areas and impacts to nesting trees would be **less than significant.**

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As discussed in Section 3.1.1.2, five native scrub communities ([California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association], [quailbush scrub alliance, *Atriplex lentiformis* association], [coastal sage scrub: California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association], [coyote brush scrub alliance, *Baccharis pilularis* association], and [lemonade berry scrub alliance, *Rhus integrifolia* association]) are found in the proposed trail alignment and adjacent areas. These five native scrub communities are designated sensitive by CDFW, County ESH by definition (coastal bluff scrub or coastal sage scrub habitat) or supporting sensitive species, and/or City ESHA by definition (coastal bluff scrub or coastal sage scrub habitat), mapped as ESHA by the City, or supporting sensitive species, as described in Table 3.3-5.

Communities impacted by the proposed project are shown in Table 3.3-5, below, and include California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association (0.38 acres temporary impacts, 0.04 acres permanent impacts) and quailbush scrub alliance, *Atriplex lentiformis* association (1.31 acres temporary impacts, 0.41 acres permanent impacts) as well as coastal sage scrub: California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association (1.15 acres temporary impacts, 0.14 acres permanent impacts), coyote brush scrub alliance, *Baccharis pilularis* association (0.57 acres temporary impacts, 0.14 acres permanent impacts), and lemonade berry scrub alliance, *Rhus integrifolia* association (0.14 acres temporary impacts, 0.03 acres permanent impacts).

Table 3.3-5. Temporary and Permanent Impacts to Sensitive Native Vegetation Communities

Vegetation Community Alliance, Association	Alliance-Association (State Sensitive)/ County ESH/ City ESHA	Temporary Impacts (acres)	Permanent Impacts (acres)	Total Impacts (acres)
Coastal Bluff Scrub				
California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica* Association	S3-Yes (Yes)/Yes/Yes	0.38	0.04	0.42
Quailbush Scrub Alliance, *Atriplex lentiformis* Association	S4-No (No)/Yes/Yes	1.31	0.41	1.73
Coastal Bluff Scrub Subtotal		*1.69*	*0.46*	*2.15*
Coastal Scrub				
California Sagebrush – (Purple Sage) Scrub Alliance, *Artemisia californica* Association	S5-S4 (No)/Yes/Yes	1.15	0.14	1.29
Coyote Brush Scrub Alliance, *Baccharis pilularis* Association	S5-No (No)/Yes/Yes	0.57	0.14	0.71
Lemonade Berry Scrub Alliance, *Rhus integrifolia* Association	S3-S3 (Yes)/Yes/Yes	0.14	0.03	0.17
Coastal Scrub Subtotal		*1.86*	*0.30*	*2.17*
Combined Total		**3.55**	**0.76**	**4.32**

As shown in Table 3.3-5, approximately 3.55 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be temporarily impacted due to construction. An additional 0.76 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be permanently impacted due to construction. These native plant communities are considered CDFW sensitive, County ESH, and/or City ESHA and protected under County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. Therefore, the proposed project would result in a substantial adverse effect on a sensitive natural community, and impacts would be potentially significant.

County CLUP (County of Santa Barbara 2019) and the City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) policies require County ESH and City ESHA avoidance. With implementation of **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-5**, impacts would be reduced to **less than significant with mitigation.**

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in Section 3.1.1.8, above, no jurisdictional aquatic resources were detected at the biological survey area during the field survey. Therefore, no direct impacts to jurisdictional aquatic resources would occur. On the adjacent Carpinteria Bluffs III site, to the south and west of the western most portion of the project site, multiple seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. These coastal wetlands (Dudek 2012b) are approximately 123 feet from project temporary impacts and 125 feet from project permanent impacts. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area and over 1,000 feet from the eastern terminus of proposed impacts. The existing developed areas near this portion of Rincon Creek included the Rincon Beach County Park asphalt parking lot and associated developments of a standard curb, vegetation, paved Rincon Point Lane, and additional vegetation.

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) includes implementation policies associated with wetlands which state, "*Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts. The minimum setback may be adjusted upward to account for site-specific conditions affecting avoidance of adverse impacts.*"

Project impacts, both temporary and permanent, are greater than 100 feet from known coastal wetlands near the western terminus of the project and greater than 1,000 feet from Rincon Creek near the eastern terminus of the project. Therefore, the project would not have a substantial adverse effect on coastal wetlands including creeks and **no impact** would occur.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As discussed in Section 3.1.1.7, the proposed trail alignment is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small terrestrial wildlife species. In addition, U.S. Highway 101 and the chain link fence adjacent to the southbound lanes of the highway provide impediments to movement of larger and medium-sized wildlife. Additionally, development and restricted access from more open space areas to the north impede wildlife movement in accessing the project site. Large-sized mammal species such as mountain lion and California black bears (*Ursus americanus californiensis*) may utilize areas to the east of the biological survey area including Rincon Creek and the channelized portion under U.S. Highway 101 to access beach areas; however, the surrounding areas where Rincon Creek daylights is developed with residential homes and parking lot improvements, resulting in a high urban wildlife interface. Medium-sized mammal species such as the striped skunk (*Mephitis mephitis*) or northern raccoon *(Procyon lotor)* may occasionally use the opening provided by the trail to move locally along the coast. The trail may provide some hazard to common, smaller terrestrial species such as the western fence lizard *(Sceloporus occidentalis)*, common side-blotched lizard *(Uta stansburiana)* and California pocket mouse *(Chaetodipus californicus),* but the trail and associated fencing will not present a physical barrier to their movement.

Concerning avian species, minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since the overall height of the slope should remain at the same elevation. As identified in the Airflow Study (Appendix I), the analysis of the effects of the proposed regrading of the bluff face for the project concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to paragliding and soaring activities, the reduction is expected to be closer to 30%. Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (of the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet. Migrating avian species may experience reduced airflow velocity by approximately 30% and an increase in turbulence (of the order of 5%) at an altitude of 30 feet above the front of the bluffs. Migratory avian species travel hundreds to thousands of miles at various elevations during which they can be exposed to a variety of weather systems within days or weeks of each other and have behavioral plasticity in response to microscale through mesoscale conditions including extremely adverse weather (Sahmoun-Baranes 2017). The anticipated changes in velocity and turbulence would occur within a short linear distance relative to the distance traveled for a migrating avian species, and avian species regularly adjust to changing weather conditions. Additionally, the velocity and turbulence changes would be focused at altitudes near the bluff top and would not extend the whole altitude range for migrating birds. Therefore, changes in topography associated with regrading would not substantially impact migratory avian species and impacts would be **less than significant.**

In addition, as discussed under Threshold a, above, 22 species of native birds were detected on site, including several with the potential to nest there. Nests, eggs and nestlings of all native bird species are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Vegetation clearing and grading, if occurring during the nesting season (typically mid-February to August), have the potential to destroy nests, eggs and nestlings, which could violate these regulations. Therefore, the project impacts to nesting birds from project disturbances would be potentially significant. With implementation of **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-6**, project impacts would be reduced to **less than significant with mitigation**.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Section 3.1.1.4, three Monterey cypress trees (*Hesperocyparis macrocarpa*), a species native to California but not to the project region, exist on or near the proposed alignment, or within the temporary impact area. This includes a single tree near the western terminus of the project site near the pull-out off Carpinteria Ave., a single tree at the edge of the temporary disturbance area near disturbed habitat in the western half of the project, and a single tree adjacent to the myoporum grove along an unsanctioned trail within Rincon Beach County Park. Additionally, two newly planted pine saplings (*Pinus* sp.) exist near the edge of the temporary disturbance area in the western portion of the project, both of which were under 3 inches diameter measured 4 feet from the ground and were installed with supportive stakes and mulch. Several eucalyptus (*Eucalyptus* sp.) are adjacent to the western portions of the proposed trail, located within the City, as well as exist near the eastern terminus of the biological survey area overhanging the Rincon Beach County Park parking lot. All of the trees described above are not native or naturally occurring in the region, therefore they should not be considered native trees under Policy 9.36 of the Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019).

Furthermore, the only trees on site that meet the definition for qualifying trees under the Santa Barbara County Article II Coastal Zoning Ordinance, are the few eucalyptus trees located at the eastern terminus of the biological survey area, the canopies of which spread across the Rincon Beach County Park parking lot. These few trees are large enough and are located within 50 feet of Rincon Creek satisfying the definition for a qualifying tree. Note that Rincon Creek is outside the biological survey area and greater than 1,000 feet from proposed project impacts. The trees associated with Rincon Creek and trees south of the Rincon Beach County Park parking lot are not proposed to be impacted or altered in any way, and thus the project would not conflict with the Coastal Zoning Ordinance. None of the other trees on site meet the definition of a qualifying trees under the Santa Barbara County Article II Coastal Zoning Ordinance as they are not located in a County street right-of-way, located within 50 feet of any major or minor stream, oak trees or used as a habitat by the monarch butterflies. In addition, none of the trees identified on site are not a part of any windbreak on the Carpinteria Bluffs, which are protected under the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003). Therefore, the project does not conflict with any local tree preservation policy and impacts to trees would be **less than significant.**

White-tailed kite is known to occur along the south coast, however, most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020). The City specifically cites the Carpinteria Bluffs as a location where white-tailed kites occur and their habitat is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. Trees in and around the project site are relatively small, and located in areas with high levels of human disturbance where white-tailed kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park and within the Rincon Point housing development; however, proposed project impacts are greater than 500 feet from these habitats. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, impacts to white-tailed kites would be **less than significant.**

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast (Pelton et al. 2016). The majority of trees within the project site are either singular and isolated, or do not form a

large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. There are three eucalyptus trees present near the western terminus of the project site, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however, there is low potential for monarchs to overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. The easternmost proposed project impacts are over 1,000 feet from these eucalyptus trees. Additionally, the eucalyptus trees present along the hills behind the project sit on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the project site along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020). While this population is not within 100 feet of the project site, it could be affected by project implementation due to changed weather patterns. However, no impacts to this monarch overwintering site is anticipated since the overall height of the slope within Rincon Beach County Park south of U.S. Highway 101 will not be reduced, as work includes proposed terraces to stabilize the hill but will not decrease its overall height, and therefore no changes to the wind conditions at the overwintering site are expected. Additionally, this overwintering site is largely protected by the hill below the single residential development at 637 Bates Road, and any possible changes to weather and wind patterns due to project implementation would not affect the protective contour this hill independently provides. Therefore, monarch butterflies are not anticipated to be affected since there is low potential for the project site to support overwintering populations, and because known overwintering populations in the vicinity would not be adversely affected due to project implementation. Therefore, impacts to monarch butterfly individuals and monarch butterfly overwintering sites would be **less than significant.**

Several trees, including eucalyptus, Monterey cypress, and pine, are located within the proposed trail alignment near its western terminus and U.S. Highway 101. These trees are relatively small and located in areas with high levels of human disturbance including U.S. Highway 101 vehicular traffic and pedestrian use of Carpinteria Avenue and adjacent areas. These isolated and singular trees lack dense foliage and are located in areas vulnerable to strong winds and weather. Several myoporum trees are located within the proposed trail alignment and are largely multistemmed. The myoporum located directly adjacent to the unsanctioned trail experiences high levels of human disturbance. Due to the locations of these trees in areas with high levels of human disturbance, relatively small size of these trees, isolated nature of the trees, and vulnerability to strong winds and weather, raptors are unlikely to nest in these trees. Therefore, removal of these trees would not substantially reduce or eliminate quantity or quality of raptor nesting areas and impacts would be **less than significant.**

Additionally, a stand of trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot. The easternmost proposed project impacts are over 1,000 feet from this stand of trees. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, project impacts to raptor nesting trees would not substantially reduce or eliminate quantity or quality of nesting areas and impacts to nesting trees would be **less than significant.**

County environmentally sensitive habitat (ESH) and City environmentally sensitive habitat areas (ESHA) were evaluated based on definitions in the County *Coastal Land Use Plan* (CLUP) (County of Santa Barbara 2019) and the *City of Carpinteria General Plan and Local Coastal Plan* (City of Carpinteria 2003). As shown in Table 3.3-5,

approximately 3.55 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be temporarily impacted due to construction. An additional 0.76 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be permanently impacted due to construction. These native plant communities are considered CDFW sensitive, County ESH, and/or City ESHA and protected under County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. Therefore, the proposed project would result in a substantial adverse effect on a sensitive natural community, and impacts would be potentially significant. County CLUP (County of Santa Barbara 2019) and the City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) policies require County ESH and City ESHA avoidance. With implementation of **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-5**, impacts would be reduced to **less than significant with mitigation.**

As discussed in Section 3.1.1.8, above, no jurisdictional aquatic resources were detected in the biological survey area during the field survey. Therefore, no direct impacts to jurisdictional aquatic resources would occur. On the adjacent Carpinteria Bluffs III site, to the south and west of the western most portion of the project site, multiple seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. These coastal wetlands (Dudek 2012b) are approximately 123 feet from project temporary impacts and 125 feet from project permanent impacts. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area and over 1,000 feet from the eastern terminus of proposed impacts. The existing developed areas near this portion of Rincon Creek included the Rincon Beach County Park asphalt parking lot and associated developments of a standard curb, vegetation, paved Rincon Point Lane, and additional vegetation.

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) includes implementation policies associated with wetlands which state, *Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts. The minimum setback may be adjusted upward to account for site-specific conditions affecting avoidance of adverse impacts.*

Project impacts, both temporary and permanent, are greater than 100 feet from known coastal wetlands near the western terminus of the project and greater than 1,000 feet from Rincon Creek near the eastern terminus of the project. Therefore, the project would not have a substantial adverse effect on coastal wetlands including creeks and **no impact** would occur.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No habitat conservation plans apply to the project area (CDFW 2019). **No impact** would occur.

g) Would the project result in cumulatively considerable impacts to biological resources?

The surrounding land uses of the project site include transportation, open space, residential development, and recreational facilities. While the project site is primarily composed of undeveloped lands, they have been previously subject to extensive grading to form the terraces and slopes that abut U.S. Highway 101 to the north

and UPRR which bisects the site. The coastal bluffs west of the project site are moderately trafficked areas used for recreation, walking, and biking. In 2017, The Land Trust for Santa Barbara County partnered with the Citizens for the Carpinteria Bluffs, the City of Carpinteria, the County of Santa Barbara, and over a thousand community members to purchase, initiate restoration, and ensure long-term maintenance of the Carpinteria Bluffs III property (also referred to as Rincon Bluffs Preserve), the 21-acre property directly to the west of the project site. A conservation easement of the Carpinteria Bluffs III property/Rincon Bluffs Preserve has been recorded which provides permanent preservation and provides long-term conservation of the open space, scenery, habitat for native plants and animals, and coastal access and recreational opportunities. And within the eastern portion of the project site, the currently developed Rincon Beach County Park provides infrastructure for recreation and is highly utilized. Areas to the south are associated with undeveloped beach areas and the Pacific Ocean. As discussed in Section 3.1.1.7, the proposed trail alignment is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small terrestrial wildlife species, and minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since the overall height of the slope would remain at the same elevation. Mitigation measures have been identified to reduce potential impacts to special-status wildlife species and sensitive vegetation communities to less-than-significant levels. Therefore, cumulative impacts resulting from the proposed project, in combination with the reasonably foreseeable future projects in the area, would be less-than-significant.

3.3.5 Mitigation

MM-BIO-1 **Workers Environmental Awareness Program (WEAP).** The City shall fund an approved biologist to prepare and implement a worker education and awareness program (WEAP) specific to the project. The program shall be presented to all individuals involved in the construction of the project. The program shall include information focused on sensitive vegetation communities, sensitive wildlife and plant species, and common wildlife species and their habitats and shall include, but not be limited to, the following:

- Description of sensitive vegetation communities.
- Workers shall be provided with photographs of sensitive biological resources including sensitive wildlife and plant species.
- Workers shall be informed verbally and in writing of the various project tasks that require biological surveys and monitoring for resource protection.
- Workers shall be provided with a photograph or description of the markers for active bird nests, trees, or other mitigation areas, so that they shall know these are not to be disturbed without a biological monitor present.
- Workers shall be informed not to litter. All trash and litter shall be picked up and removed from the construction sites at the end of each day.
- Workers shall be informed to obey a speed limit of 15 miles per hour while traveling on the project site to avoid collisions with wildlife.
- Workers shall avoid driving over or otherwise disturbing areas outside the designated construction areas.

Plan Requirements and Timing: The applicant shall submit the WEAP to the City of Carpinteria (City) and County of Santa Barbara (County) for review and approval prior to implementation. All workers, contractors, and visitors shall attend the WEAP prior to entering the project site and performing any

work. The applicant shall provide copies of the training attendance sheets to City of Carpinteria and County staff as a record of compliance with this measure on a monthly basis. The WEAP shall be reviewed and approved by the City of Carpinteria and County prior to Zoning Clearance approval. Implementation of the WEAP training shall occur prior to the start of construction and as new crew members are added to the project.

Monitoring: The City of Carpinteria and County permit compliance staff will ensure compliance with the WEAP throughout construction by review of attendance sheets and hardhats, inspection of the site, and interviewing workers, as appropriate.

MM-BIO-2 **Fencing.** To prevent inadvertent impacts on adjacent sensitive vegetation communities including County ESH and City ESHA, native vegetation, special-status species, and common wildlife species and their habitats, construction limits will be fenced with highly visible fencing and staked. Wildlife-safe highly visible construction fencing shall be installed to identify the limits of grading/disturbance, which would reduce potential human trampling outside of the construction limits and minimize the potential spread of non-native weeds or invasive plant species. Wildlife-safe construction fencing and flagging shall remain in place during construction and replaced as needed.

Plan Requirements and Timing: The detailed fencing plan, showing the location of required fencing shall be reviewed and approved by City of Carpinteria and County staff prior to Zoning Clearance approval. This condition shall be printed on all project plans. The detailed fencing plan, showing the location of fencing shall be submitted to City of Carpinteria and County staff for review and approval prior to Zoning Clearance approval. The fence shall be installed prior to the start of ground disturbing activities.

Monitoring: The City of Carpinteria and County staff will inspect the project plans and site, to ensure compliance with this measure as appropriate.

MM-BIO-3 **Pre-construction California Legless Lizard Survey and Relocation**. Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:

1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall include areas with loose, moist soils occurring in scrub habitat with high coverage of deerweed (*Lotus scoparius*) or California goldenbush, in arroyo willow (*Salix lasiolepis*) thickets or in other suitable scrub or woodland habitat.
2. Capture and relocation shall take place no more than five days prior to the initiation of construction.
3. These surveys shall be performed by lightly raking loose soil, sand and leaf litter with a wooden rake for a sufficient period to determine that no legless lizards are present, or all legless lizards have been captured.
4. Any lizards found shall be placed in a receptacle with sand and a wet towel and relocated to the previously designated receptor site.

Plan Requirements and Timing: Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

MM-BIO-4 Pre-construction Woodrat Survey and Relocation. Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:

1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall be within similar habitat and an adequate distance away from any locations that might be subject to increased human disturbance, such as adjacent to a walking path.
2. These pre-construction surveys shall be performed searching all coastal sage scrub or coastal bluff scrub within the disturbance area for middens or other sign of the species.
3. Any middens and woodrats found shall be live-trapped and relocated to the pre-determined receptor site. The midden shall be dismantled and the materials placed at the relocation site.

Plan Requirements and Timing: Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

MM-BIO-5 Habitat Mitigation and Monitoring Plan. Prior to approval of a coastal development permit, the City shall contract with a qualified biologist to develop a Habitat Mitigation and Monitoring Reporting Plan (Plan) to mitigate for impacts to County ESH/City ESHA vegetation communities. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities, and, therefore, preserve or provide wildlife habitat, in areas temporarily impacted by construction of the trail and within similar habitats adjacent to the impacted biological resources. The Plan may focus on the following:

- In-kind, on-site restoration of areas where coastal sage scrub or coastal bluff scrub has been removed;
- Enhancement of temporarily impacted areas on site currently occupied by ornamental, disturbed or developed areas;
- Restoration of areas occupied by non-native habitats or native habitats with large components of non-native vegetation, within similar habitats adjacent to the impacted biological resources.

Under the Plan, a total of 3.55 acres of County ESH/City ESHA native vegetation communities temporarily impacted by vegetation clearance shall be restored on site in kind at 1:1. A total of 0.76 acres of County ESH/City ESHA native vegetation communities permanently impacted shall be mitigated on site in kind at 3:1. As mitigation potential within the project area may be insufficient for mitigating 0.76 acres permanent impacts to County ESH/City ESHA native vegetation communities at 3:1, any additional mitigation required shall be carried out on areas within adjacent

land controlled by the County or City, such as the Rincon Bluffs Preserve . Off-site mitigation for permanent impacts shall be implemented in-kind at 3:1.

A qualified biologist/botanist shall develop the Plan, which shall provide specific measures to restore or enhance habitat to replace the loss of coastal sage scrub and coastal bluff scrub communities. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with long-term timing and monitoring requirements. The Plan shall:

1. Provide an up-to-date inventory of on-site native vegetation resources.
2. Define attainable and measurable goals and objectives to achieve through implementation of the Plan. Goals and objections shall focus on replacement of coastal sage scrub, coastal bluff scrub and rare plants removed during construction.
3. Provide site selection and justification.
4. Detail a restoration work plan including methodologies, restoration schedule, plant materials (seed and container plant) sourcing – locally genetic stock, and implementation strategies.
5. Provide a detailed maintenance plan to include removal of invasive non-native species.
6. Define performance standards.
7. Provide a monitoring plan to include methods and analysis of results. Also, include goal success or failure criteria, and an adaptive management plan and suggestions for failed restoration efforts.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria shall contract with a qualified biologist to develop a Plan. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities in areas temporarily and permanently impacted by construction of the project.

***Monitoring*:** The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. City and County staff shall periodically conduct site inspections to ensure compliance on site. Restored areas shall be monitored for five years following planting. Annual reports and the final report shall be submitted to the City and County.

MM-BIO-6 **Pre-construction Nesting Bird Surveys**. Within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically mid-February through August in the project region, or as determined by a qualified biologist), the City shall have weekly surveys conducted by a qualified biologist to determine if active nests of special-status bird species, or of any bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code, are present in the disturbance zone or within 300 feet (500 feet for raptors) of the area to be disturbed. The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground disturbance is delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. The City or contractor shall provide the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort.

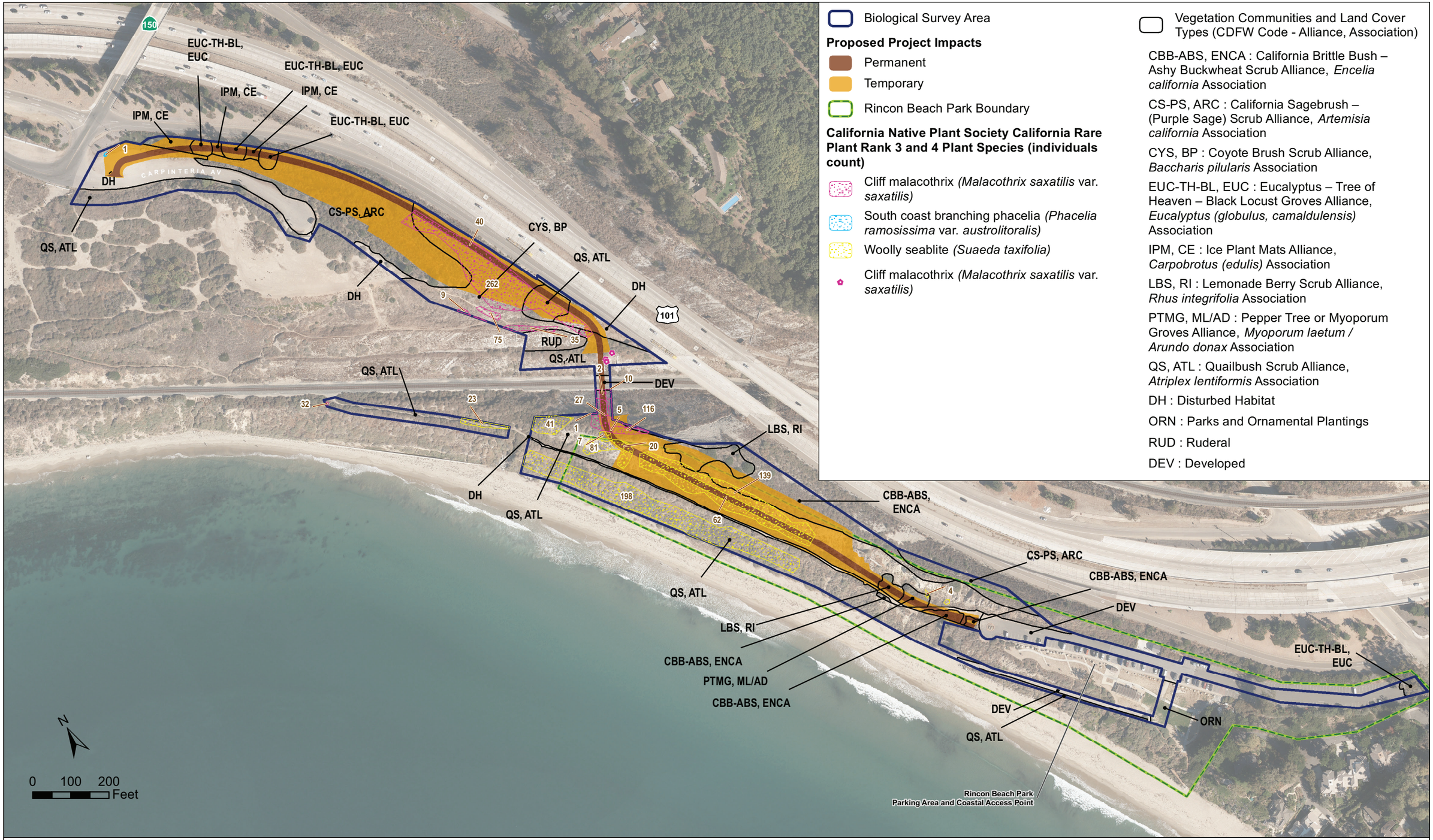
If active nests are found, including any nests for Cooper's hawk, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. The results of the surveys, including graphics showing the locations of any nests detected, and any avoidance measures recommended, shall be submitted to the City and County within 14 days of completion of the pre-construction surveys to document compliance with applicable state and federal laws pertaining to the protection of native birds.

Plan Requirements and Timing: Pre-construction nesting bird surveys shall be completed within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading during the bird nesting season (typically mid-February to August). The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction nesting bird surveys and any avoidance requirements are completed prior to commencement of any earth-moving activities.

3.3.6 Level of Significance After Mitigation

Implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-3** would reduce impacts to California legless lizard to less than significant. Implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-4** would reduce impacts to San Diego desert woodrat to less than significant. After implementation of **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-5**, impacts to sensitive vegetation communities, including County ESH and City ESHA, would be less than significant**.** After implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-6**, impacts to nesting birds during the bird nesting season would be less than significant.



Biological Survey Area

Proposed Project Impacts

Permanent

Temporary

Rincon Beach Park Boundary

California Native Plant Society California Rare Plant Rank 3 and 4 Plant Species (individuals count)

Cliff malacothrix *(Malacothrix saxatilis* var. *saxatilis)*

South coast branching phacelia *(Phacelia ramosissima* var. *austrolitoralis)*

Woolly seablite *(Suaeda taxifolia)*

Cliff malacothrix *(Malacothrix saxatilis* var. *saxatilis)*

Vegetation Communities and Land Cover Types (CDFW Code - Alliance, Association)

CBB-ABS, ENCA : California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia california* Association

CS-PS, ARC : California Sagebrush – (Purple Sage) Scrub Alliance, *Artemisia california* Association

CYS, BP : Coyote Brush Scrub Alliance, *Baccharis pilularis* Association

EUC-TH-BL, EUC : Eucalyptus – Tree of Heaven – Black Locust Groves Alliance, *Eucalyptus (globulus, camaldulensis)* Association

IPM, CE : Ice Plant Mats Alliance, *Carpobrotus (edulis)* Association

LBS, RI : Lemonade Berry Scrub Alliance, *Rhus integrifolia* Association

PTMG, ML/AD : Pepper Tree or Myoporum Groves Alliance, *Myoporum laetum / Arundo donax* Association

QS, ATL : Quailbush Scrub Alliance, *Atriplex lentiformis* Association

DH : Disturbed Habitat

ORN : Parks and Ornamental Plantings

RUD : Ruderal

DEV : Developed

AERIAL SOURCE: CIRGIS 2017
ENGINEERING SOURCE: Bengal 2019

FIGURE 3.3-1

Biological Resources

Carpinteria Rincon Trail EIR

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3.4 Cultural Resources

This section describes the existing cultural resources conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.4.1 Existing Conditions

A Phase 1 cultural resources investigation for the originally proposed Carpinteria Rincon Trail was prepared by Dudek in March 2008. The cultural resources investigation included an archaeological site records and literature search at the Central Coast Information Center (CCIC), University of Santa Barbara, California and an intensive surface survey covering the entire project area. For the current revised trail design, Dudek performed a new Phase 1 Cultural Resources Survey in 2018 of the entire alignment to document existing conditions and in order to assess impacts of the updated trail alignment on cultural resources. The updated Phase 1 cultural resources investigation included an archaeological site records and literature search at the Central Coast Information Center (CCIC), University of Santa Barbara, California and an intensive surface survey of the revised trail alignment and area within earthwork limits and temporary impact areas delineated for the transportation and storage of construction equipment. As is customary for Phase 1 cultural resource surveys, the document is not circulated with the associated CEQA document. The updated Dudek Phase 1 survey is on-file with the City of Carpinteria, Community Development Department and with the County of Santa Barbara Planning & Development Department.

Although limited weathered shell was observed in disturbed contexts, no cultural resources were observed in situ, or within intact soils, during the intensive field survey under generally good to excellent ground surface visibility. However, the project site is not only located partially within an archaeological site (CA-SBA-1168), it is also surrounded, in every direction, by archaeological sites with the closest loci of CA-SBA-1/CA-VEN-62 located immediately adjacent to the southeastern extent of the proposed project site. Based on the presence of a portion of the proposed project site overlapping a small portion of the archaeological site CA-SBA-1168, the close proximity of multiple archaeological sites to the proposed project site, as well as the general archaeological sensitivity of the area surrounding the proposed project site, there is substantial evidence for potential unknown significant prehistoric and historic archaeological resources to exist within the project site. Technical Reports and supporting documentation are available in Confidential Appendix D. These confidential appendices are archived at the City and are only accessible to eligible individuals as defined under applicable regulations governing cultural resources confidentiality.

3.4.1.1 Prehistoric Setting

California has one of the best studied archaeological records in the world, and the Santa Barbara Channel is among the most studied regions of California. The basic regional culture historical patterns (i.e., what life was like at different points in time) have been articulated for many decades, and in spite of the ever increasing intensity of archaeological work in the region, our understanding (or at least our definition) of these general patterns has changed only slightly in part because our understanding of how to distinguish them has been compromised by conflicting data and interpretations; notable exceptions include our understanding of the earliest inhabitants, which keeps getting earlier and better defined (Erlandson et al. 2011; Erlandson, Rick, et al. 2007), and our perspectives on the late prehistoric evolution of socio-political complexity, which have matured and expanded rapidly since the late 1980s (e.g., Erlandson and Jones 2002; Arnold 2001, 2004).

The cultural history of the Santa Barbara Channel has seen many iterations, and much of our understanding of change through time is based on foundational research by Rogers (1929) and Warren (1968), both of whom conducted substantial primary research on the mainland coast. Higher resolution periodization was later established by King (1990) who used a combination of stylistic change in shell beads and absolute ages from radiocarbon dates. This bead-based chronology dovetails well with a more recent chronology based on lower-resolution changes in human behavior and material culture (Arnold 1992), and this has been further refined with a larger set of absolute age estimates pegged to a background of regional environmental change matched with more accurate radiocarbon calibration (Kennett 2005).[1] Note that the temporal span of each period in the sequence is approximate, and naming conventions for them vary across different authors; the cultural patterns (e.g., subsistence and settlement) and temporal markers (shell bead styles, for example) used to define them, also vary across temporal boundaries by region.

Paleoindian/Paleocoastal Period (The Earliest Inhabitants): 13,000 – 11,000 BP

Though the earliest appearance of people in the New World is a contentious issue with new data generating new ideas every few years about who they were and how they got here, the evidence from the California Bight is relatively straightforward: cultural deposits and human remains from a series of sites on Santa Rosa and San Miguel islands date from 13,000-11,500 years ago and suggest that people at the time were well-adapted to life on the sea but also had connections to people who lived much further east, deep in the American continent (Erlandson et al. 2011). While this isn't the earliest evidence of human activity in the New World (which, at most is somewhere between 16,000 and 15,000 years old), this early evidence from the West Coast gives credit to the idea that (at least some of) its earliest inhabitants were a marine-adapted people able to move skillfully and quickly between islands and near-shore environments across the southern landmass of the (now submerged) continent of Beringia, down the entire Pacific Coast of North America, and eventually to the southern tip of South America in only a few thousand years (Erlandson, Graham, et al. 2007; Fladmark 1979; Dixon 2001). Though these "Paleocoastal" sites from the islands are the earliest we know of, we may never find evidence for the earliest coastal inhabitants as the shorelines they lived on are now submerged under more than 50 m of water (Masters and Aiello 2007). Indeed, sites of this antiquity are unknown on the mainland, though the occasional isolated – and undated – fluted projectile point (for example from Gaviota State Park CA-SBA-1951) may be suggestive (Erlandson, Cooley, and Carrico 1987).

Early Holocene/Milling Stone Horizon: 11,000 – 5500 BP

Many scholars of North American archaeology separate the Paleoindian/Paleocoastal period from the succeeding Archaic period on the rough (and now debatable) observation that the earlier people were more focused on large game while the later people exploited a broader range of resources and required a different set of tools to do so. On a continent-wide scale, the Archaic therefore sits in the middle of a trajectory of increasing technological and social intensity, somewhere between big-game hunting and full-fledged farming; in California, this crude trajectory has little value as farming was never part of the pre-Columbian picture, yet use of the term "Archaic" persists (cf. Meighan 1959). Colloquially, it applies to everything from the Early Holocene to the end of the Middle-Late Period transition (ca. 11,000 – 1000 years ago), distinguished only by the late prehistoric intensification of economy, technology, population, and political complexity (though see Glassow 1992 for a slightly different interpretation).

[1] Note that all dates provided herein are rounded and drawn from the literature. We attempt to maintain consistency by using calendar, calibrated, years before present (cal BP) which are essentially the same as saying "years ago." However, most authors prior to the mid-1990s (e.g., Glassow 1996) typically report in uncalibrated radiocarbon years before present, uncorrected for marine reservoir offsets, therefore their cultural chronologies can differ from current age estimates for the same site (or cultural period) by 200 – 1500 years, depending on the age and material dated. This is a general problem for the interpretation of California culture history as even current authors use a mixture of differently reported dates. We've tried to account for this, as much as possible, herein, but it further suggests the need to maintain a large, fully vetted, and corrected radiocarbon database, preferably shared across multiple research teams and authors.

Here, the division between Paleoindian and Early Archaic is somewhat arbitrary, but follows current convention; likewise, we combine the earliest known settlements on the mainland coast in this period with those of the more well-documented Milling Stone Horizon because they exist in many of the same places, show evidence for the intensive use of shellfish, use many of the same tools (albeit in different proportions), and overlap in time.

One of the reasons these sites are so visible, stratified, and well-preserved is they contain the remains of shellfish, leading many to suggest that this early Holocene occupation of the region was heavily oriented towards the intensive and persistent exploitation of marine resources. The material remains (and perhaps adaptations) of these earliest Holocene[2] inhabitants of the mainland occasionally differ however, from their predecessors on the islands, but also from their successors on the mainland. However, some of these early sites also differ from the later coastal (and Coast Range interior) occupants as they do not contain millingstones, which become increasingly common after about 8500 years ago. However, it is important not to overstate the differences, as there are clearly sites dating to the early Holocene where groundstone dominates the formal lithic assemblage, both on the coast (Fitzgerald 2000) and deep into the interior (McGuire 1993). Contemporaneous variability in site types and artifact assemblages may point to variability in mobile foraging strategies, or reveal that very different groups exploited an otherwise sparsely inhabited coastal region at slightly different times. These alternatives demand interrogation, as do the relationships between the evidence for human activity on the coast and that of the California interior and the more distant Desert West (Koerper, Langenwalter, and Schroth 1991).

While the emergence of an adaptation tuned to marine resources seems beyond question (particularly if the first people to come to coastal California brought this ability with them from somewhere else), the emergence of a processing technology centered on the use of groundstone slabs and handstones (i.e., the hallmarks of the Milling Stone Horizon) has been the focus of investigation for decades (see Warren 1968; Basgall and True 1985). Like shell middens, grinding tools, especially in high frequencies, are highly visible in the archaeological record and at face value can bias (indeed have biased) interpretation of their relative economic importance (see Nelson and Lippmeier 1993). Recent efforts to understand the highly visible "Milling Stone" sites focus on patterns of groundstone manufacture and use. Following Basgall and True (1985), Hale (2001) analyzed groundstone (millingstones and handstones) and battered stone (scraper planes, cobble tools, etc.) tools from well-known Milling Stone sites across Southern California, including CA-SBA-142 (Glen Annie Canyon) on the Santa Barbara mainland, and found that Milling Stone sites were places that people visited repeatedly, over hundreds to thousands of years to conduct similar economic activities, perhaps for only short periods of time. The large numbers of reused or expedient groundstone tools at these sites speak to food processing. Indeed, regular use of milling tools for processing seeds and other plant foods, such as roots and tubers, does not preclude using them to process rodents, reptiles, and other animals (which might be more easily cooked or dried with less costly tools). Costs associated with acquiring and transporting raw materials suitable for milling, and investments in shaping them to accomplish specific tasks may be modest (depending on local geology), but significant enough to suggest they were essential for survival; investing in them would make them available for use in less essential tasks, like pulverizing non-essential foods or pigments, that might otherwise be processed in other ways. Therefore, while millingstones may have been used for many things, their prominence indexes their importance to a specific adaptive strategy, and archaeological research should be geared towards understanding that relationship.

Hale (2001) interprets Milling Stone sites as places of seasonal occupation for intensive processing, but not as sedentary villages as Wallace (1955) and others envision. Large, well-used assemblages in single locations (as is typical of the classic Milling Stone identity) result from recurrent seasonal visits to specific locations for food processing over multiple years. The milling equipment in these kinds of sites are typically made from locally abundant stone (encountered either in its raw form or as previously discarded tools). Therefore, analysis of tool shaping and maintenance as well as use-wear reveal much about the nature and intensity of occupation and activity.

[2] Note that the Holocene is set at the end of the Younger Dryas, ca. 11,500 years ago (+/-).

Hale (2001) also laments the rarity of other kinds of sites linked both temporally and socioeconomically to those of the Milling Stone period, as they would help to illustrate the full picture of the Archaic in California, and help us to move beyond simple definitions of it as a period marked by economic drudgery imposed by marginalizing climatic regimes (e.g., the Altithermal - see Antevs 1948). Herein lies an important research avenue: assembling well-dated archaeological site data across broad regions to better understand socioeconomic nuance during the Archaic and abandon the site-specific interpretation of the Milling Stone period that is itself an artifact of early archaeological research.

Generally speaking, adaptations attributed to the Archaic (including the Milling Stone phenomenon) involved small groups of people who moved regularly throughout the year to exploit a broad range of resources using a very flexible tool kit that could be made relatively easily or expediently and applied to a wide range of scenarios (Hale 2001; Fitzgerald and Jones 1999; Lantis 1938; Basgall and True 1985). Here, and elsewhere throughout the California Bight and central coast, the full suite of material attributes aligned with the classic Milling Stone horizon is found in a relatively small number of archaeological sites; together with evidence for somewhat different activities at other kinds of sites, presumably within the spatial catchment of annual, or even generational human activity, the Milling Stone pattern reveals a "highly successful strategy of mobility, flexibility, and emphasis on low-risk, moderate-return resources, such as small game, shellfish, and certain plants… (that) seems downright practical" for the environmental and cultural context of the age (Stevens 2013: 54).

The Early Period: 5500 – 2500 BP

The identity of the California "Early Period" in Santa Barbara (in both definition and timing) differs from that of other parts of California. The problem is really about the naming conventions assigned to trends (i.e., the "Periods") in the production and use of shell beads which vary around the state (Bennyhoff and Hughes 1987; Groza 2002; Groza et al. 2011) rather than local conditions or broader patterns of behavior.[3] Instead, here it helps to imagine the shift in quasi-adaptive terms, initially characterized by both Rogers (1929) and Greenwood (1972) as a "Hunting" people or period, marked quite notably by an increase in the abundance of projectile points and a decline in the relative abundance of millingstones. On the central coast, Jones and colleagues (Jones 1992; Jones and Codding 2019; Jones et al. 2007) put the division somewhere between 5500 and 5100 BP, though others (Glassow et al. 2007; Lebow and Moratto 2005) see this transition happening around the Northern California Bight at 7500-7000 BP; yet the use of millingstones continues here, and elsewhere in California, into the late Holocene (Erlandson 1997a, 1997b; Sutton, Schneider, and Yohe II 1993).

Beyond the bead-based periodization, temporal distinctions are hazy, as identification of the Early Period as a clear-cut behavioral or cultural shift at a specific point in time is less obvious. In the literature from the mainland of the California Bight, some authors identify change in patterns of settlement, specifically a shift away from a practice of relocating the entire residential settlement multiple times throughout the year (i.e., a "residentially mobile" pattern), to a pattern the entails moving the residential base only a few times a year (i.e., a "logistically mobile" pattern). For example, Glassow (1990, 1996) saw this shift happening at approximately 8500 years ago for the broader region (prior to the dates he uses for the end of the Milling Stone Horizon) while research from the far northern end of the California Bight puts this shift much later, at approximately 3000 years ago (Lebow et al. 2006). Unfortunately, the differences in interpretation make it difficult to identify or define temporal periods for the region on the basis of cultural behavior alone.

Use of milling equipment persists through this period, though the form and variety of the manos and metates change (Gamble and King 1997), while mortars and pestles were "added to the milling repertoire" around 6000 years ago (Glassow et al. 2007:197). At CA-SBA-53 on the Goleta Slough, millingstones and mortars in roughly the

[3] By contrast, archaeologists in other parts of the state have abandoned this confusion in favor of chronologies based on a broader range of material culture anchored to absolute dates (Rosenthal 2011; Rosenthal et al. 2007) Either way, these names and boundaries are all somewhat arbitrary, imprecise, and/or artificial.

same proportions (and in greater numbers than in most any other excavated sites in the region) come from deposits dating to 5650-5050 BP (Harrison and Harrison 1966; Rick and Glassow 1999). Whether any of these things point to a change in diet is still an open question. Importantly, mortars are costly to make and signal an investment in processing technology much greater than the use of millingstones (Hale 2001, 2010). Such an investment was likely made to increase processing efficiency of pulpy nut meat such as acorns (Hale 2009). Glassow (1997) suggests that they could have been used to process bulrush and other estuarine resources, though millingstones would have offered similar efficiency in processing such things. It is certain, however, that the addition of mortars marks a socioeconomic shift that placed emphasis on intensive resource extraction and/or processing beyond that which could be accomplished using a basined millingstone. Perhaps this is the economic shift that identifies the onset of the Early Period. The extent to which this change in economy reflects change in the density and distribution of subsistence resources as a function of regional environmental change at the end of the Mid-Holocene warm period, or "Altithermal" (Glassow 1997; Rick and Glassow 1999; Glassow, Wilcoxon, and Erlandson 1988), along with a decline in marine productivity associated with warming sea-surface temperatures (Kennett et al. 2007) is an important but unresolved issue.

A broad range of evidence regarding subsistence diversification, increasing sedentism, status differentiation, ritual activity, rock art, and population growth have all been marshalled to suggest that the second half of this interval (after 4000 years ago, or what Lebow and Moratto call the "Late Early Period") contains some of the earliest evidence for the evolution of cultural complexity in the region (Glassow et al. 2007; Erlandson and Rick 2002), though dramatic, fundamental change did not happen until the end of the Middle Period and into the Late Period.

The Middle Period: 2500 – 800 BP

Glassow (1996: 22) suggests that the defining feature of this period is the elevated importance of fish and marine mammals in the subsistence budget. Appearance of the single-piece shell fishhook around 2900 BP, along with increasing importance of notched stone sinkers corroborates this and may have been essential to the intensification of the marine-based economy on the mainland as well as on the islands (Rick et al. 2002; Erlandson 1997b). Indeed, intertidal resources (namely shellfish) remained important to everyone living within walking distance of the coast. And though it seems clear that people in some places acquired more of their protein from large terrestrial and marine mammals during the Middle Period than did people in earlier periods (Lebow et al. 2007) shellfish was still the dominant source of protein throughout the region (Glassow 1992).

During this time, the old groundstone food processing slabs of the early and middle Holocene are mostly absent throughout the region, while mortars become more common, and with increasing effort invested in their production (Glassow 1996; Hale 2009). Whether or not this shift from millingstones to mortars points to the rising importance of the acorn to the subsistence economy, as it is thought to do elsewhere in California (Hale 2010; Basgall 1987), is a question that demands further attention. Answering it depends, in part, on establishing a solid understanding of the distribution of different kinds of oak trees in different parts of the region. For example, oak trees are rare, or entirely absent from the landscape within about 10 km of the coastline throughout the northern end of the California Bight (see Glassow 1996: 6). Where oak trees were scarce, mortars were either used for processing other things, or acorns were transported from considerable distance – a pattern well documented from other parts of California (Morgan 2007).

Land use patterns observed to the west, in the Vandenberg region (Lebow et al. 2006), suggest that these changes in resource use were accompanied by a shift in settlement patterns: though the shift to a logistical pattern of residence began around 3000 years ago, it was fully in place throughout the Middle Period. If the patterns observed from the compilation of radiocarbon dates, both from Vandenberg (Lebow et al. 2010; Lebow et al. 2011) and the

surrounding region (Glassow 1996) can be used to evaluate change in human population, then the Middle Period is the first episode of measurable and sustained demographic increase in the history of the region, increasing noticeably approximately 2800-1800 years ago, and then dramatically after that. Thereafter, life across the Channel on the Islands starts to change markedly: the number of settlements starts to increase and people start to live in those settlements for longer periods of time while commanding more rigid territories and controlling the natural resources within them; at the same time, the incidence of inter-personal violence increases while human health and stature start to decline (Kennett 2005; Lambert and Walker 1991; Lambert 1997, 2002; Walker 1989). Together, these things mark the beginning of a trend that continues into the Late Period where it intensifies dramatically. The extent to which these patterns obtained on the mainland and the adjacent interior, or how people in any given area were affected by the dramatic change on the Islands, are open questions.

The Late Period: 800 B.P. – European colonization (ca. A.D. 1780)

For most of this periodization, the exact starting and ending dates are mostly inconsequential, but the Late Period is different, in part because the bead-based chronology is more precise, the archaeological record is better preserved, change in that record is more pronounced, and because change in the cultural record seems to match dramatic change in well-dated, high-resolution paleo-environmental archives from the Santa Barbara Basin that are also reflected in written records from other parts of the world (Kennett and Kennett 2000; Kennett 2005; Raab and Larson 1997; Jones and Kennett 1999; Arnold, Colten, and Pletka 1997). Setting it at 800 B.P. follows King's (1990) bead-based chronology, and includes the period of dramatic environmental change (ca. 800-650 BP) along with its purported role in rapid Late Period cultural change. However, one could easily define this cultural period by everything that happens after that environmental change, as Arnold (1992) does, or alternatively by putting it at 1300 BP – the beginning of Lebow and Moratto's (2005) Late Middle Period – by which time many of the material hallmarks of Late Period cultural complexity (the sewn-plank canoe, the bow and arrow, exotic raw materials, intensive fishing, standardized *Olivella* shell beads, status differentiation, skeletal evidence for interpersonal violence, stable primary villages) were all in place, and the pace of cultural change began to increase (Kennett 2005).

Hale (2010) argues that the rate-limiting factors on cultural evolution are socioeconomic, rather than techno-environmental. Therefore, the archaeological signatures of culture change (namely, the types and uses of artifacts, including food remains) that appear to be more rapid during the Late Period are more important when viewed in the light of major socioeconomic shifts, rather than seeing them simply as a rapid accumulation of variability. More to the point, a time-limited strategy would actively resist change while an energy-limited strategy would actively pursue it, and would accumulate material representation in the archaeological record accordingly simply through technological improvements to make tools more efficient or specialized, and in specialized subsistence (Bettinger 1999). The causal relationship between the archaeologically visible increase in material diversity over shorter periods of time, and socioeconomic strategy (i.e., time- or energy-limited) on the one hand, or demographic increase on the other (see below), merits further investigation throughout the region (particularly at sites with rich artifact assemblages).

Since the mid-1980s an enormous body of literature has accumulated on the origins of cultural, social, and political complexity in the Santa Barbara Channel. Much of this has been dedicated to the Late Period and most of that has been done on the Islands. The archaeology of this is spectacular, and dovetails dramatically with the written accounts of European explorers, Mission colonists, and 20th century ethnographers. In addition to basic archaeological reconnaissance, there has been focused attention on understanding subsistence (e.g., Bernard 2004; Martin and Popper 2001), the context of shell bead money production (Arnold and Munns 1994), the production of tools (i.e., microlithic drills) used to manufacture that money (Arnold 1987, 2001), the differential access to exotic goods (Arnold and Graesch 2001), the presence of trade centers (Arnold 2001; Gamble 2008), the production and control of sea-worthy watercraft (Gamble 2002; Arnold 1995), and established patterns of exchange (Arnold 1995; Fauvelle 2011).

By 650 BP the full suite of attributes that early European chroniclers noticed of the Chumash were in place on the Islands: sedentary villages of permanent semi-subterranean architecture, high dietary diversity that also included prestige items like pelagic fish, a monetized market economy, specialized craft production, inter-village and island-mainland exchange networks, political control of natural resources, numerous forms of personal adornment, and an unequal distribution of wealth. Presumably, these things also index the social order documented of the Chumash, including elite offices, formal religious systems, hereditary power and prestige (i.e., the "Dynasty of Nobility"), a ranked social order, institutional inequality, and chiefly control (e.g., Blackburn 1976; Gamble 2008; Harrington 1942; Hollimon 2004; Johnson 1988).

3.4.1.2 Historic Context

The earliest European exploration of California was by sea approximately one generation following the Spanish conquest of the indigenous groups in what is now Mexico. In 1542, ships under the command of former conquistador Juan Rodríguez Cabrillo explored the coast perhaps as far north as Mendocino. The expedition spent time ashore on the mainland and islands of the Santa Barbara Channel, long enough to record various attributes of Chumash social and political life, and noted that the region along the mainland coast from approximately Point Mugu to Point Conception was heavily populated. That said, the Cabrillo expedition only report going ashore here to visit settlements at *Pueblo de las Canoas* (interpreted variously as either Ventura, Mugu, or Malibu Lagoon), *Pueblo de las Sardinas* (perhaps at Mission Creek near downtown Santa Barbara), and *Xexo* (likely Cojo Anchorage at Point Concepcion). Inhabitants from these settlements, as well as those at Dos Pueblos, Goleta Lagoon, and perhaps Carpinteria likely paddled out to encounter, and board, the European sailing vessels (Gamble 2008; McDaniel McDevitt 2013; Johnson 1982; Rindge 1985; Heizer 1972; Wagner 1928). The Cabrillo expedition also anchored and landed at various points on the islands, including on their return trip south, where Juan Rodríguez Cabrillo died under conflicting accounts, perhaps on San Miguel Island (Heizer 1972).

Spanish ships engaged in the Manila Galleon trade regularly sailed south along the California coast beginning in 1565. This resulted in a least two known instances of contact with indigenous groups in California. One instance occurred when Pedro de Unamuno entered Morro Bay in 1587 and traveled inland perhaps as far as what is now the city of San Luis Obispo and made claim to the land in the name of the King of Spain. Later, Sebastian Cermeño visited San Luis Obispo Bay in 1595 in a small boat following the loss of his ship further north at Point Reyes (Greenwood 1978). These voyages did little to strengthen the Spanish presence in the remote province of Alta California. In 1602, Sebastián Vizcaíno sailed north through the Santa Barbara channel long enough to grant one of the islands (and therefore the region) the name "Santa Barbara." While in the region the expedition encountered several Chumash who had come out by canoe to greet and inspect them (Wagner 1929). Vizcaíno's cosmographer, Jerónimo Martín Palacios, may have paid a return visit to the mainland long enough to comment on the size of the settlements and the quality of its natural resources, though this remains uncertain (Brown 1967).

Spanish Mission Period (1786–1834)

Following the earliest boat-based exploratory visits to the Santa Barbara Channel, and the subsequent, irregular, and largely undocumented contacts through the Manila Galleon trade, the Spanish Period in the California Bight began with the 1769 overland expedition led by Captain Gaspar de Portolá in an effort to establish a system of missions and fortifications in Alta California. The goal of the Portolá expedition was to establish a mission in Monterey, the second mission in Alta California following the mission in San Diego, and to reconnoiter the region for colonization.

Diaries from the Portolá expedition provide the most detailed accounts of the mainland around Santa Barbara, where they made elaborate descriptions of Chumash generosity, ceremony, performance, cuisine, village size, population, and even politics (Bolton 1967; Priestley 1937; D.E. Smith and Teggart 1909; Teggart 1909). Notably, the village names recorded by the Portolá expedition did not match those recorded by Cabrillo 227 years earlier, perhaps revealing something about the long term stability and tenure of village locations in the area, possibly associated (at least during the protohistoric era) with shifting socioeconomic interests and political allegiances (C.D. King 1978; Johnson 1982).

When the Portolá expedition traveled overland, heading north from Ventura in 1769, they were famously taken by what they witnessed in the vicinity of modern day Carpinteria: a large, prosperous bluff-top village next to a freshwater outlet (Carpinteria Creek) oriented substantially towards the sea. To the Spanish, the presence of several *tomol* sewn-plank canoes in various states of manufacture or repair seemed like a shipyard, and they dubbed the location *La Carpinteria* (Brown 2001). This was the village of *Mishopshno*, and over the years the Spanish estimated between 500 and 97 inhabitants, notably declining from A.D.1770 to 1796 (Gamble 2008; Brown 1967, 2001). An important feature of this location, as noted by Friar Crespí of the Portolá expedition, were the natural "springs" of asphaltum, which provided essential raw materials for (among other things) the waterproofing of ocean-going canoes (Brown 2001). As the expedition moved north from here, they would have had to circumvent a large lagoon or estuary occupying an area much larger than that represented by the Carpinteria Salt Marsh today. Beyond that, near the mouth of Toro Canyon they encountered the village of *Q'oloq'* (*Coloc*), which was considerably smaller than *Mishopshno*, before continuing up the coast. This area was later visited by Felipe de Goycoechea in 1796 while conducting a formal census of the California coast.

With the establishment of Mission San Luis Obispo (1772), Mission San Buenaventura (1782), the Presidio of Santa Barbara (1782), and later Mission Santa Barbara (1786), Mission La Purísima (1787), and Mission Santa Ynez (1804), life changed profoundly for the indigenous inhabitants of the region. The root cause of change was Spanish religious and political hegemony brought by the Franciscan missionaries and enforcement of their assumed authority by the Spanish military. Religious conversion, adoption of farming and ranching practices, forced labor, capital and corporal punishment, virulent exotic disease, and intermarriage with other groups also contributed to the rapid dissipation or modification of many aspects of traditional tribal culture. The effect of the early Spanish Period on the Native population was dramatic. By 1805, the vast majority of pre-existing Chumash villages had been abandoned as their inhabitants either relocated to the Mission districts to assimilate with communities there, or moved further inland to the periphery of traditional Chumash territory and beyond (McLendon and Johnson 1999; Byrd and DeArmond 2018; Byrd, DeArmond, and Engbring 2018).

The extent to which the armed Chumash resistance of 1824, and the subsequent response by both Spanish and Chumash (Sandos 1985) affected the lifeways, residences, and genealogical histories of people originally tied to the villages of *Mishopshno* and *Q'oloq'* – both of which are recorded in the baptismal records of Mission Santa Barbara (Johnson 1988) – is an ongoing and important avenue of research, perhaps answerable only through a combination of documentary records, oral history, and thoughtful, ongoing consultation and collaboration (Ranch 2012).

3.4.2 Relevant Plans, Policies, and Ordinances

3.4.2.1 Federal

Although there is no federal nexus for this project, the trail proposal was evaluated in consideration of National Register of Historic Places (NRHP) designation criteria and integrity requirements.

National Register of Historic Places

The National Register of Historic Places (NRHP) is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks and historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide federal agencies, state and local governments, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
> B. That are associated with the lives of persons significant in our past; or
> C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
> D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, How to Apply the National Register Criteria for Evaluation, as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990). In assessing historic integrity, the NRHP recognizes seven aspects or qualities that, in various combinations, define integrity. In order to retain historic integrity "a property will always possess several, and usually most, of the aspects" (NPS 1990). The seven aspects of integrity are: location, design, setting, workmanship, materials, feeling, and association. NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for listing.

3.4.2.2 State

California Register of Historical Resources

In California, the term "historical resource" includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1(j)). In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). The criteria for listing resources on the CRHR, enumerated as follows, were developed to

be in accordance with previously established criteria developed for listing in the NRHP, previously enumerated above. According to Public Resources Code (PRC), Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity" and (ii) meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
(2) Is associated with the lives of persons important in our past.
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following California Environmental Quality Act (CEQA) statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

> PRC Section 21083.2(g) defines "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2(g)):
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.

- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5(b)). If a site is listed or eligible for listing in the CRHR, included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(c)), it is an "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of an historical resource is materially impaired when a project does any of the following (14 CCR 15064.5(b)(2)):

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any historical resources, then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)). Impacts on non-unique archaeological resources are generally not considered significant environmental impacts (PRC Section 21083.2(a); 14 CCR 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as a tribal cultural resource (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has examined the remains (Health and Safety Code Section 7050.5(b)). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code Section 7050.5(c)). The NAHC will notify the "most likely descendant" (MLD). With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

3.4.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City's General Plan/Local Coastal Land Use Plan includes the following objectives and policies relevant to the proposed project and cultural resources:

- OSC-16 Preserve Carpinteria's Cultural Resources

  Implementation Policies

  74. Explore all available measures, including purchase, tax relief, purchase of development rights, etc. to avoid development on important archaeological sites. Where these measures are not feasible and development will adversely affect identified archaeological or paleontological resources, require adequate mitigation.
  75. Prohibit activities, other than development, which could damage or destroy archaeological sites, including off-road vehicle use and unauthorized collecting of artifacts.
  76. Review all proposals for development in or adjacent to cultural resource areas for their potential to impact the resource. Give special consideration to development of facilities that enhance the cooperation, enjoyment or maintenance of these areas.
  77. Prior to the city granting a development permit, all archaeological sites (or areas near known archeological sites that have been determined though Phase 1 investigation to potentially include cultural or paleontological resources) must undergo a subsurface test to determine the integrity and significance of the site. Through the project environmental review process, the disposition and/or preservation of any archaeological sites deemed to have significance as a result of the subsurface testing shall be determined. Preservation of cultural/paleontological resource sites through avoidance shall be preferred, however, other methods of disposition may be approved through the environmental review process as identified in the city's Guidelines for the Implementation of CEQA.
  78. A qualified archaeologist and Native American observer (acceptable to the city) shall be retained to monitor grading activities on identified archeological sites and in the vicinity of identified archaeological

resources. If cultural artifacts or similar material of potential cultural or paleontological importance, are uncovered during grading or other excavation the following shall occur:

a. The monitor or archaeologist shall halt the grading or excavation and notify the City.
b. A qualified archaeologist shall prepare a report assessing the significance of the find and recommending any actions to be taken by the applicant(s) prior to the city granting permission for grading to resume.
c. The removal of cultural artifacts or other materials shall only occur after preparation of the report and in conformance with the recommendations of the report as approved by the City.

Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to PRC Section 30500 of the California Coastal Act of 1976, Santa Barbara County was required to prepare a Local Coastal Program (LCP) for portions of the unincorporated areas of Santa Barbara County within the coastal zone. Sections of the Santa Barbara County Article II Zoning Ordinance that may be relevant to the proposed project include standards for archaeological resources (Section 35-65).

Section 35-65. Archaeology

1. When developments are proposed for lots where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.
2. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.
3. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan was partially certified by the Coastal Commission on March 17, 1981 and is the Local Coastal Program for unincorporated Santa Barbara County. It details the rules and regulations of land use within Santa Barbara County's coastal areas. The following policies would apply to the proposed project.

- Policy 10-1: All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological, and other classes of cultural sites.
- Policy 10-2: When developments are proposed for parcels where archaeological or other cultural sites are located, Project design shall be required which avoids impacts to such cultural sites if possible.
- Policy 10-3: When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

3.4.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the project would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
c) Disturb any human remains, including those interred outside of dedicated cemeteries.
d) Result in a cumulatively considerable impact to cultural resources.

3.4.4 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

One previously recorded cultural resource site partially intersects the proposed project area (CA-SBA-1168); CA-SBA-1168 is a prehistoric archaeological site and therefore, no historical built environment resources exist within or near the proposed project site. CA-SBA-1168 has not been evaluated for NRHP or CRHR eligibility; however, based on the site record description, it likely meets the criteria for eligibility on either or both the CRHR and NRHP.

Extensive topographic modification of the existing terrain in the proposed project area overlapping CA-SBA-1168 occurred with construction of U.S. Highway 101 in the late 1960s, after the earliest archeological investigations in this area were completed. Information to conclusively define the boundary of CA-SBA-1168 compared to limits of earthwork completed for the U.S. Highway 101 construction does not evidently exist (the boundary description in the original archaeological investigation was poorly described, and was not verified with perimeter excavations at many points). It is therefore possible that some portion of CA-SBA-1168 exists at depth beneath fill materials used to construct some of the slope faces along the south side of U.S. Highway 101. Deep excavations for the Rincon Trail UPRR bridge foundation on both the northern and southern sides of the UPRR alignment could potentially encounter intact deposits associated with CA-SBA-1168. Additionally, based on information gathered during AB-52 consultation, the fill materials placed on portions of CA-SBA-1168 originated from the immediate area and could retain displaced cultural material from CA-SBA-1168 and other surrounding sites. Therefore, the proposed project could have potentially significant impacts to archaeological resources. Mitigation measures CR-1 through CR-4 are required in order to address this impact. Implementation of **Mitigation Measure (MM) CR-1** through **MM-CR-4** would reduce impacts to historical resources to **less than significant with mitigation.**

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The current updated Phase 1 Cultural Resources Survey identified several pieces of weathered shellfish within the proposed project area, in disturbed contexts near the metal gate at the western end of Rincon Beach County Park and along the northern edge of the Rincon Beach County Park parking lot. Particularly since the shellfish pieces were identified on the ground surface in areas that have been impacted by previous grading and documented placement of fill soils, their location is considered to be the result of modern activities and soil movement (i.e., grading associated with construction of U.S. Highway 101, the UPRR alignment, an asphalt path and the Rincon Beach County Park parking lot) and not an intact or disturbed cultural deposit. The recovered

shellfish, mainly unidentifiable Veneridae (Venus clams), lacked the density and diversity documented at CA-SBA-1. No other cultural material associated with prehistoric occupation including stone tools, animal bone, or groundstone implements were identified. Even if the shellfish were in situ (i.e., in its original depositional location) and associated with prehistoric activity, the shell is not of sufficient density or diversity to provide important information to explain and understand the prehistoric occupation of coastal areas of Santa Barbara County, particularly when compared to the substantial CA-SBA-1 deposits. Additionally, it is important to understand that CA-SBA-1168 is documented as existing under 10-15 feet of imported fill and is only exposed along the south cut of Highway 101. Therefore, the pieces of shellfish observed in disturbed contexts within the proposed project area are not considered a potentially significant archaeological resource under CEQA Guidelines Section 15064.5.a.3, City of Carpinteria Environmental Review Guidelines and Santa Barbara County Cultural Resources Guidelines.

Extensive topographic modification of the existing terrain in the project area occurred with construction of U.S. Highway 101 in the late 1960's, after the earliest archeological investigations in this area were completed. Information to conclusively define the boundary of CA-SBA-1168 compared to limits of earthwork completed for the U.S. Highway 101 construction does not evidently exist (the boundary description in the original archaeological investigation was poorly described, and was not verified with perimeter excavations at many points). It is therefore possible that some portion of CA-SBA-1168 exists at depth beneath fill materials used to construct some of the slope faces along the south side of U.S. Highway 101. Deep excavations for the Rincon Trail UPRR bridge foundation on the both the northern and southern sides of the UPRR alignment could potentially encounter intact deposits associated with CA-SBA-1168. Additionally, based on information gathered during AB-52 consultation, the fill materials placed on portions of CA-SBA-1168 originated from the immediate area and could retain displaced cultural material from CA-SBA-1168 and other surrounding sites. Therefore, the proposed project could have potentially significant impacts to archaeological resources. Mitigation measures CR-1 through CR-4 are required in order to address this impact. Implementation of **MM-CR-1** through **MM-CR-4** would reduce impacts to historical resources to **less than significant with mitigation.**

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No burial areas have been previously identified or were observed during the pedestrian survey within the proposed project area. The Phase 1 Survey included a search of the Native American Heritage Commission's (NAHC) Sacred Land Files. The search results were negative but did include a strong suggestion from the (NAHC) that specific Native American individuals be contacted to see if they might have any additional information regarding the cultural or archaeological significance of the proposed project site. Tribal consultation was conducted in support of the project and is documented in detail in Section 3.13, Tribal Cultural Resources. No human burials were documented as a result of tribal consultation. No human remains have been identified within the proposed project or within the associated archaeological site CA-SBA-1168 as a result of previous or current archaeological investigations. **No impacts** relating to disturbance of human remains is expected to occur as a result of this project.

d) Would the project result in a cumulatively considerable impact to cultural resources?

Potentially significant project-specific impacts to cultural resources would be reduced to less than significant with implementation of **MM-CR-1, MM-CR-2**, **MM-CR-3**, and **MM-CR-4**, avoiding the potential for the proposed project to contribute to significant cumulative impacts to cultural resources. The project would, therefore, result in a less than cumulatively considerable impact to cultural resources.

3.4.5 Mitigation

The potential exists for significant cultural resources impacts. The project would require the implementation of **MM-CUL-1** through **MM-CUL-4** to reduce such impacts to less than significant levels.

MM-CR-1 Cultural Resource Treatment and Inadvertent Discovery Plan.

Potential impacts to cultural resources shall be minimized through development of protocols for practical adherence of mitigation measures CR-2 and CR-3 prior to and after ground disturbing construction activities associated with the proposed project. These protocols shall be outlined in a Cultural Resource Treatment Plan (CRTP). The CRTP shall be developed by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, prior to the implementation of ground disturbing activities and include wording of each mitigation measure CR-2-4, specific and detailed explanation for implementation of each mitigation measure and contact protocol. The CRTP shall be provided to all agency personnel, consulting tribes, contractors and archaeological personnel. The existence and necessity for adherence to the CRTP shall be noted on plans, handbooks, or the like associated with tasks that may incur ground disturbance either intentionally or inadvertently.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to develop the required CRTP in accordance with the above criteria. **Monitoring:** City of Carpinteria/County of Santa Barbara staff shall review and authorize the CRTP prior to the commencement of ground disturbance activities to ensure that the CRTP adheres to the criteria established in CR-1.

MM-CR-2 Workers Environmental Awareness Program (WEAP) Training.

All personnel participating in tasks that may incur ground disturbance either intentionally or inadvertently shall be briefed regarding unanticipated discoveries prior to the start of said activities. A basic presentation shall be prepared by a City-qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards to inform all personnel working on the project about the archaeological sensitivity of proposed project areas. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during project activities and explain the importance of and legal basis for the protection of cultural resources. Each personnel shall also be instructed in the proper procedures to follow in the event that cultural resources or human remains are encountered. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor, qualified archaeologist and if human remains are encountered, the County coroner.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to develop and conduct the required WEAP Training in accordance with the above criteria. **Monitoring:** City of Carpinteria/County of Santa Barbara staff shall ensure the required WEAP training has been conducted by attending the WEAP Training and documenting attendance of required personnel by means of a sign in sheet completed by all attendees of the WEAP Training.

MM-CR-3 **Initial ground disturbing activities shall be monitored by a County-qualified/City-approved archaeologist in accordance with the following specifications:**

Temporary Impact Areas (equipment staging and materials storage outside trail alignment) - a County-qualified/City-approved archaeologist shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site.

Permanent Impact Areas not including bridge piling installation (all areas of the trail alignment excepting the bridge approaches area on both sides of the UPRR alignment) – a County-qualified/ City-approved archaeologist shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.

Bridge piling installation – a County-qualified/City-approved archaeologist shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.

The monitor shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitoring reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to both the City and County.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to monitor initial ground disturbance activities in accordance with the above criteria. ***Monitoring***: City of Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist provide monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources.

MM-CR-4 **In the event cultural resources are encountered, construction shall be redirected to another area of the project while data/resource assessment and recovery is accomplished.**

Grading/construction shall be immediately suspended in the immediate area (no less than 50 feet from the area of the discovery) where cultural resources are encountered and temporarily redirected to another portion of the project area to allow the archaeologist to assess the nature, extent and significance of any discoveries and develop appropriate management recommendations for archaeological resource treatment consistent with Santa Barbara County Guidelines for the Implementation of California Environmental Quality Act of 1970 (as amended May 25, 2010). It is anticipated that recovery of artifacts would occur where project elements (such as pilings) would conflict with in situ artifact locations, and such artifacts would be properly archived

in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol.

Identified remedial action for the discovery shall be completed prior to allowing construction to re-commence in the area, no less than 50 feet from the area of the discovery. The project sponsors shall be responsible for funding the assessment of archaeological resources encountered during construction, and for the proper archiving or preservation of such resources. A Phase 3 Archaeological Resources Assessment and Data Recovery Report shall be prepared to document any archaeological resources encountered during construction.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall contract with a County-qualified/City-approved archaeologist to provide archaeological assessment and recovery of any archaeological resources encountered during project construction, in accordance with the above criteria. ***Monitoring***: City of Carpinteria/County of Santa Barbara staff shall ensure the contracted archaeologist assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment in accordance with the project CEQA, City of Carpinteria and Santa Barbara County guidelines and the CRTP protocol..

The contracted archaeologist shall assess the nature, extent and significance of any archaeological discoveries occurring during project construction and develop appropriate management recommendations for archaeological resource treatment.

3.4.6 Level of Significance After Mitigation

After implementation of **MM-CR-1** through **MM-CR-4**, impacts would be reduced to less than significant.

3.5 Geology and Soils

This section describes the existing geologic and soils conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. The following analysis is based in part upon the following document:

- Geotechnical Report for the Proposed Rincon Beach Multi-Use Trail, prepared by Bengal Engineering in January 2019, the body of which is included as Appendix E of this Environmental Impact Report (EIR). The complete Geotechnical Report (including all plates and attachments) is on file with the City of Carpinteria.

Other sources consulted are listed in Section 3.5.7, References.

3.5.1 Existing Conditions

The proposed trail alignment lies generally within an elevated marine terrace, which has been subject to extensive grading associated with current and former transportation facilities. Exhibit 3.5-1 is an oblique aerial illustrating the topographic conditions along the northern/western portion of the trail alignment, starting at the existing eastern terminus of Carpinteria Avenue.



Exhibit 3.5-1 Topography of the Northern Trail Portion

US Highway 101 was constructed via massive excavation of earth material, which is immediately evident in the two planar slopes off-set by a bench along the left-hand side of the freeway, The angle of the slope and a mid-elevation bench were created during the cuts for the freeway, to stabilize these manufactured slopes. On the opposite side of the freeway, similar cut slopes were also created, but the cut slopes have become less evident with the growth of vegetative cover. The flat, roughly triangular area at the Carpinteria Avenue terminus was leveled through the local placement of some of the excavated freeway earth materials. With reference to the trail alignment in Exhibit 3.5-1 (the red line), the trail would be located entirely on artificial landforms on the north side of the Union Pacific Railroad (UPRR) alignment. For reference, the ground surface at the "Wave Overhead" (the highway bridge which provides the grade separation between mainline US Highway 101 and the Union Pacific Railroad) was originally approximately 100-feet higher in elevation than today (Bengal 2020), The cut slope along the south of US Highway 101 (right side of US Highway 101 in the aerial) would be re-graded again to form a mid-elevation bench to carry the trail.

Exhibit 3.5-2 shows the topography in the area of the proposed UPRR crossing bridge, which is entirely the result of grading to depress the UPRR tracks below the elevation of the new US Highway 101.



Exhibit 3.5-2 Topography at the Proposed UPRR Bridge Crossing

The planar cut slopes separated by a bench are evident again along the left-side of the railroad tracks, a single less steep cut slope exists along the right-hand side of the tracks. At the location of the Wave Overhead, the railroad line was excavated about 140-feet below the natural grade (Bengal 2020). The red rectangle is the approximate location of the proposed bridge, which would have foundations within the slopes previously created via the rail line excavation. This portion of the trail, the bridge segment, would therefore also only involve artificial landforms, not natural slopes.

Exhibit 3.5-3 illustrates the topography within the portion of the trail along the southern side of the UPRR alignment. The railroad tracks at the bottom left-hand corner lead toward the Wave Overhead, but they originally followed the bench visible along the right side of the ridge. The slope above the bench was cut for the railroad, and along the top of the slope the coastal highway was previously located. Remnants of retaining walls constructed to protect the old highway alignment can be seen sliding from the top of the cut slope manufactured for the former railway bench. Thus, again, this segment of the trail would entirely traverse artificial landforms (i.e., cut slope and bench), here originally created via the UPRR construction. These artificial slope faces would be regraded to a more geotechnically stable configuration (i.e., less steep in profile) and a new bench created upon which to set the trail. In summary,

the entire length of the proposed trail alignment would be located on landforms resulting from former grading for construction of US Highway 101 and current or former UPRR alignments.



Exhibit 3.5-3 Topography of the Southern Trail Portion

Regional Geology

The City of Carpinteria is located in the Transverse Ranges geomorphic province of Southern California. According to the California Geological Survey (CGS), the Transverse Ranges geomorphic province is composed of a series of steep east-west trending mountain ranges, which is in contrast to the northwest trend of coastal California and surrounding mountain ranges (CGS 2002). Geologic deposits within the City and adjacent unincorporated County lands are generally represented by alluvium. The mountains and foothills north of the project site are characterized by alluvium, quaternary nonmarine terrace deposits, Pleistocene nonmarine, Pleistocene volcanic, and Eocene marine deposits (Dibblee and Ehrenspeck 1986; USGS 2009).

Faults and Seismicity

Faults in the Carpinteria area include the Carpinteria Fault, the Rincon Creek Fault, the Arroyo Parida Fault and the Shepard Mesa Fault. According to the State of California Conservation Department, California Geologic Survey (CGS), none of these faults are considered "active" (CGS 1996). The CGS has calculated the probabilities for earthquakes throughout the state of California; the research indicates a 10% probability within the next 50 years for an earthquake between magnitudes 6.5 and 7.0 to occur along a fault within five miles of the Carpinteria Planning Area. The geotechnical report for Rincon Trail (Bengal Engineers 2019) identifies a potential peak ground acceleration of 0.8 g for the project site (“g” represents acceleration rate of gravity). There are no Alquist-Priolo Special Studies Zones for the Carpinteria Planning Area (CGS 2018b). No recent movement (within the last 11,000 years) or recent fault rupture has been identified along the known faults in the Carpinteria Planning Area.

Geologic Formations

The trail alignment north of the UPRR corridor is underlain by Miocene age and older surficial sediments (Qoa or alluvium), bedrock of the Santa Barbara Formation (Qsb) consisting of silty sand and sand-like material, and bedrock of the Monterey Formation (Tm) consisting mainly of sandy silt and siltstone/shale (Dibblee and Ehrenspeck 1986; Bengal Engineers 2019). The trail alignment within and south of the UPRR corridor is underlain directly by bedrock of the Monterey Formation (Tm) siltstone/shale and Sisquoc Formation (Tsq) siltstone/mudstone both consisting mainly of sandy silt/silt-like materials (Dibblee and Ehrenspeck 1986; Bengal Engineers 2019). The Monterey Formation has been identified in some locations to contain an abundance of fossil specimens including birds, fish, sea lions, sea cows, porpoises, whales, and sharks (Dibblee and Ehrenspeck 1986).

Liquefaction

Liquefaction is a phenomenon that occurs when loosely consolidated soils lose their load bearing capabilities during ground shaking and flow in a fluid-like manner. The specific soil condition conducive to liquefaction is loose sands and silty sands below the water table and typically within the top 50 feet of the ground surface. The Bengal geotechnical investigation did not identify the presence of soil horizons that would have the potential for liquefaction (Bengal Engineers 2019). Consequently, soils with liquefaction potential are not anticipated to occur within the trail alignment.

Landslide/Rockfall

Landslides generally occur on steep slopes that have been undercut by erosion or on slopes where the bedding planes of the bedrock are inclined down the slope. The updated project alignment avoids slopes with identified historic landslide activity. However, the Bengal geotechnical investigation found that due to the relatively low shear strength of the Monterey and Sisquoc Formations (Tm and Tsq) and the slope face orientation, the existing ocean-facing slope south of the proposed trail bridge is considered to be susceptible to surficial/local instability under static conditions. These steep slopes in the southern trail alignment are the result of former landform modification carried out for the railroad alignment and former state highway, and do not represent natural conditions resulting from natural weathering of the involved earth materials and geologic formations.

Soil Settlement/Consolidation

Settlement is the downward movement of soil or of structures it supports, resulting from a reduction in the voids in the underlying strata. The Bengal geotechnical investigation did not identify the presence of soil horizons that would have the potential for settlement or consolidation (Bengal Engineers 2019). Consequently, soils with settlement potential are not anticipated to occur within the trail alignment.

Expansive Soils

Expansive soils are those characterized as having a high shrink-swell potential, associated with a high percentage of clay content. The Bengal geotechnical investigation did not identify the presence of soil horizons that would have the potential for expansiveness (Bengal Engineers 2019). Consequently, soils with expansion potential are not anticipated to occur within the trail alignment.

3.5.2 Relevant Plans, Policies, and Ordinances

3.5.2.1 Federal

U.S. Geological Survey Landslide Hazard Program

In fulfillment of the requirements of Public Law 106-113, the USGS created the Landslide Hazard Program in the mid-1970s. According to USGS, the primary objective of the National Landslide Hazards Program is to reduce long-term losses from landslide hazards by improving our understanding of the causes of ground failure and suggesting mitigation strategies (USGS 2018). The federal government takes the lead role in funding and conducting this research, whereas the reduction of losses due to geologic hazards is primarily a state and local responsibility.

3.5.2.2 State

Alquist-Priolo Earthquake Fault Zoning Act (1972)

The Alquist-Priolo Act was passed in 1972 to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep (CGS 2018a). In accordance with this act, the State Geologist established regulatory zones, called "earthquake fault zones," around surface traces of active faults and has published maps showing these zones. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. The project is not located on a site designated to be an active earthquake fault zone (CGS 2018c).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (PRC Chapter 7.8, Section 2690 et seq.) directs the CGS to protect the public from earthquake-induced liquefaction and landslide hazards (note that these hazards are distinct from fault surface rupture hazard regulated by the Alquist-Priolo Act). This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with CGS Special Publication 117A, adopted March 13, 1997, by the State Mining and Geology Board, as updated in 2008.

California Building Code (CBC) (2019)

The CBC has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or those standards are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability, by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The 2019 edition of the CBC is based on the 2018 International Building Code published by the International Code Conference.

Chapters 16 and 16A of the 2019 CBC include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include (but are not limited to) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2019 CBC includes (but is not limited to) requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

Occupational Safety and Health Administration Regulations

In California, the California Occupational Safety and Health Administration (Cal/OSHA) has responsibility for implementing state standards that have been determined to be "as effective as" federal rules relevant to worker safety, including slope protection during construction excavations.

3.5.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan – Safety Element

The City of Carpinteria General Plan/Local Coastal Land Use Plan outlines goals, policies, and programs designed to protect the community from geologic and seismic hazards. The General Plan/Local Coastal Land Use Plan Safety Element includes the following objectives and policies applicable to the project:

Objective S-1 Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from fault surface rupture in the planning area, from ground shaking due to an earthquake along a fault in the planning area or in the region, from seismically -induced liquefaction in the planning area, and from seismically-induced tsunamis.

Policy S-1c Development in areas identified as having high seismically-induced liquefaction potential shall follow structural engineering foundation design parameters outlined in the Uniform Building Code or obtained through an independent structural engineering study.

Objective S-2: Minimize the potential risks and reduce the loss of life, property and economic and social dislocations resulting from seismically-induced and naturally-occurring landslides, from mud and debris flows, from rock falls, and from seacliff retreat.

Policy S-2a. Areas identified on Figure S-2 as High Landslide Potential shall either be designated in an open space zoning category or the potential for landslide will be mitigated through avoiding disturbance of the slope area of the site subject to landslide potential.

Policy S-2b. Building improvements and other development including any irrigated landscape areas shall be setback sufficiently to protect the development and all associated improvements from bluff failure and bluff retreat over a 100-year term.

Objective S-3 Minimize the potential risks and reduce the loss of property and the economic and social dislocations resulting from expansive soils, soil settlement, subsidence, and hydrocompaction.

Policy S-3b All new development will comply with the Uniform Building Code, local City building ordinances, and geotechnical recommendations related to construction in areas identified as having a high potential for expansive soils or soil settlement.

Santa Barbara County Comprehensive Plan Seismic Safety and Safety Element

Geologic, soil, and seismic factors affect the suitability of land for various uses and, hence, should be considered, along with other factors, in land use planning to eliminate or minimize their adverse effects. Geologic and Seismic Goal 1 applies to the proposed project (County of Santa Barbara 2011):

- Protect the community to the extent feasible from risks associated with the effects of seismically induced incidents by requiring:
  - Protection Policy 1: The County minimizes the potential effects of geologic, soil, and seismic hazards through the development review process.
  - Protection Policy 2: The County shall refer to the CBC, the Land Use Development Code (LUDC), County Ordinances, the Coastal Land Use Plan (CLUP), and the Comprehensive Plan when considering the siting and construction of structures in seismically hazardous areas.
  - Protection Policy 3: The County shall ensure compliance with state seismic and building standards in the evaluation, design, and siting of critical facilities.
  - Protection Policy 4: The Office of Emergency Services (OES) shall continue coordinating emergency planning for the Santa Barbara Operational Area pursuant to the California Emergency Services Act of 1970.
  - Protection Policy 5: The County shall require a preliminary soil report prepared by a qualified civil engineer be submitted at the time a tentative map is submitted.

Santa Barbara County Comprehensive Plan Environmental Resources Management Element

This element states that urbanization should be prohibited on slopes 30% and greater and should be prohibited, except in a relatively few special instances on slopes between 20% and 30% (County of Santa Barbara 2009).

Santa Barbara County Comprehensive Plan Coastal Land Use Plan

The purpose of the Coastal Land Use Plan (CLUP) is to protect coastal resources while accommodating land use development within the coastal zone. Policies outlined in the CLUP that are applicable to the project are listed below (County of Santa Barbara 2019):

Policy 3-8 Applications for grading and building permits, and applications for subdivision shall be reviewed for adjacency to, threats from, and impacts on geologic hazards arising from seismic events, tsunami runup, landslides, beach erosion, or other geologic hazards such as expansive soils and subsidence

areas. In areas of known geologic hazards, a geologic report shall be required. Mitigation measures shall be required where necessary.

Policy 3-13 Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Policy 3-14 All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Policy 3-15 For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.

Policy 3-16 Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained throughout the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location.

Policy 3-17 Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with accepted landscaping practices.

Santa Barbara County Grading Code

Ordinance No. 4766, 11-9-2010 of County Code of Ordinances (SBCCO) addresses compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II stormwater regulations and sets forth local stormwater requirements for the disturbance of less than 1 acre, to avoid pollution of water courses and drainage ways with sediments or other pollutants generated on or caused by surface runoff on or across a construction site.

Santa Barbara County Building Code

SBCCO Ord. No. 4822, 1-17-2012 addresses geological, topographical, and climatic conditions in the County including extreme weather conditions, firefighting resources, flammable vegetation, High Hazard Areas, extreme wind conditions, and seismic shaking and the minimum standards to safeguard and protect life, buildings, and structures within the County.

3.5.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to geology and soils are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to geology and soils would occur if the project would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
   i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   ii. Strong seismic ground shaking.
   iii. Seismic-related ground failure, including liquefaction.
   iv. Landslides.
b) Result in substantial soil erosion or the loss of topsoil.
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
g) Result in considerable cumulative impacts to geology and soils.

3.5.3.1 Local Significance Thresholds

City of Carpinteria

The City of Carpinteria's Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (1997), states the following conditions or impacts shall be considered significant:

- The graded or cleared portion of the site includes more than 10,000 square feet of area having a slope greater than 15 percent.
- There is a significant risk that more than 2,500 square feet will be unprotected or inadequately protected from erosion during any portion of the rainy season.
- Grading or clearing will occur within 50 feet of any watercourse or 100-year floodplain.
- Grading will involve cut and fill volumes of 3,000 cubic yards or more, or cut or fill heights of 15 feet or greater.
- The project will significantly increase water runoff, velocities, peak discharges, or water surface elevations on or off-site. Coordinate with the Department of Public Works for clarification.
- The project will produce erosion impacts which constitute a structural hazard or significant visual impact, or will result in sediment or excessive drainage flows which cannot be contained or controlled on-site.
- The project will result in impacts which violate or are in conflict with any of the Federal, State, or local policies, ordinances or regulations listed above.

- Any cut or fill slope over 15 feet in height is potentially significant for grading, visual, erosion, siltation and community character impacts.
- Any grading which includes the addition, removal or moving of earth is potentially significant.
- Any grading proposed within environmentally sensitive areas is potentially significant.

County of Santa Barbara

The County thresholds are similar and include the following criteria:

- The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D or PWD. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.
- The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.
- The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
- The project is located on slopes exceeding 20% grade.

3.5.4 Impact Analysis

The following analysis is based upon the CEQA Appendix G checklist, as described above.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

ii. Strong seismic ground shaking?

iii. Seismic-related ground failure, including liquefaction?

iv. Landslides?

The California Department of Conservation provides an index map that identifies all Official Maps of Earthquake Fault Zones delineated by the California Geological Survey through December 2010 under the Alquist-Priolo Earthquake Fault Zoning Act. According to the most recent data, the proposed project is not located within an Alquist-Priolo earthquake fault zone; however, the project site is to the north of the Pitas Point quadrangle (CGS 2018c). The northwestern corner of the Pitas Point quadrangle encompasses a very small portion of Santa Barbara County, consisting of the Rincon Point neighborhood south of Rincon Point Lane. The fault line within the Pitas Point Quadrangle that is closest to the proposed project runs northwest-southeast, north of La Conchita Beach in Ventura County, approximately two miles southeast from Rincon Beach County Park (Dibblee and Ehrenspeck 1986).

According to the City of Carpinteria's General Plan Fault Map, the Rincon Creek fault is located to the north of the proposed project and the Carpinteria Fault is located to the south (City of Carpinteria 2003). In the immediate vicinity of the proposed trail and parking lot, the project is located on the up-thrown side on an inferred fault located to the north of US Highway 101 near the connection to Highway 150 (City of Carpinteria 2003). According to the Santa Barbara County's South Coast Seismic Tectonic Map, the entire south coast portion of the county, including the project site, is rated as having a high seismic potential with a moderate possible variation from the assigned rating (County of Santa Barbara 2011). The Santa Barbara County South Coast Seismic Tectonic Map indicates that the Red Mountain fault is the closest known potentially active fault and traverses the proposed trail near the intersection of the UPRR and the trail alignment. The Red Mountain fault is approximately 39 km (24 miles) long and trends in a generally east-west direction, running parallel to the coastline, near the project area. A maximum credible earthquake of moment magnitude 6.8 has been assigned to this reverse displacement fault (CGS 1996).

The proposed project consists of a shared-use path with pedestrian bridge and other trail improvements. The project would not introduce new buildings that would be subject to structural damage in the unlikely event of strong seismic ground shaking. Moreover, there are no existing buildings within the project area that would pose a risk of loss, injury, or death as a result of potential structural damage caused by earth movement. However, the pedestrian bridge structure could be damaged by seismic activity if not designed to withstand the potential peak ground acceleration of 0.8 g, as identified in the Bengal geotechnical report (Appendix E).

Previously manipulated and engineered slopes along the trail alignment are proposed to be re-graded to achieve a finished slope face that is more gradual (less steep) than the existing slope faces. Slopes adjacent to US Highway 101 would be reshaped with those above the trail having a slope ratio of 1.25:1, fill slopes (which would be present only adjacent to the bridge over the UPRR) are proposed to have slope ratios between 2:1 and 4:1. For the portion of the path on the ocean side of the UPRR alignment, the regraded slopes for the trail "bench" would employ cut slopes with a ratio of 1:1 above the trail, while a ratio of 1.25:1 would be employed for the "reinforced" fill slopes below the trail. These slope angles are each shallower than existing conditions, and mid-elevation benches in the slopes would further decrease the potential for mass soil movement (shallow landslides). It is important to note that all of the earthwork proposed for the project involves manipulation of manufactured slopes (previously modified landforms) and not natural topography. In addition, the project proposes to vegetate all new slope areas to minimize the potential for shallow erosion to occur.

The Carpinteria Valley is subject to geologic hazards related primarily to earthquakes and secondary hazards, such as landslides and liquefaction; the project includes manufactured slopes and a bridge structure that could be damaged by seismic ground shaking. As such, potential impacts relating to adverse effects caused by strong seismic ground shaking, or seismic related ground failure would be potentially significant. **Mitigation Measure (MM) GEO-1** through **MM-GEO-3** would reduce impacts to **less than significant with mitigation**.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Soils within the project site have been classified as Xerorthents, cut and fill areas (USDA 2020). The NRCS Web Soil Survey provides an erosion hazard rating that indicates the hazard of soil loss from off-road and off-trail areas after disturbance activities that expose the soil surface. Xerorthents in the project area have a moderate erosion hazard rating, which indicates that some erosion is likely and that erosion control measures may be needed (USDA 2020). The project does propose to vegetate all new slope area to minimize the potential for soil erosion to occur.

To prepare the site for trail construction, the trail alignment along with adjacent slopes would be graded to meet the proposed finished grade surface and to achieve stable slope profiles above and below the trail. It is anticipated that total cut would be approximately 107,386 cubic yards and total fill would be approximately 14,860 cubic yards during the grading phase. Cut material on site would be utilized for the necessary fill material, as feasible. The re-grading of previously manufactured slopes is intended to reduce the angle of the slope face, decreasing historic erosion rates and increasing the long-term stability of the slope faces. The lower angle slopes would not be noticeably different from the existing manufactured slopes but should eliminate or greatly reduce the amount of soil materials moving down the slope areas to be deposited on the trail or areas below the trail. Erosion potential would be lessened with the proposed engineered slope design. However, soil erosion could be increased unless proper slope construction techniques are employed. Accordingly, soil erosion impacts would be potentially significant. **MM-GEO-3** would reduce impacts to **less than significant with mitigation**.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Due to relatively low strength of the underlying Monterey Formation (Tm) siltstone/shale bedrock, the single span bridge structure could experience differential settlement and related damage or collapse, a potentially significant impact unless mitigation is required. The Bengal geotechnical report also concluded that from a slope stability perspective, the slopes along the coastal bluff, both above and below the existing unsanctioned County trail are problematic with respect to local/surficial slope instability. The proposed grading plans were reviewed by Bengal and existing slopes and proposed cut slopes were analyzed for gross stability. Shear strength test results were obtained and slope stability analyses were performed to evaluate the global or overall static as well as seismic loading conditions. Based on the Bengal slope stability analysis, the subject slopes containing the proposed trail alignment are considered to have adequate stability against static loading or under normal, short- and long-term service conditions. However, with seismic activity, shallow slope instability could occur. As such, shallow slope instability associated with seismic activity is considered potentially significant. **MM-GEO-3** would reduce impacts to **less than significant with mitigation**.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The Bengal geotechnical report did not identify soils with expansive characteristics, and therefore the potential is very low for expansive soils to be present within the trail alignment. Potential impacts relating to expansive soil would be **less than significant**.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed project does not include restrooms of other waste generating facilities that would require the use of septic tanks, sewers or alternative wastewater disposal systems. **No impact** would occur

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The soil in the area of the proposed trail was characterized as Xerorthents, cut and fill areas consisting of mechanically manipulated soils where the original profile is no longer discernible (USDA 2020). Monterey

Formation marine siliceous shale of the early to late Miocene age, sand and cobbles of the Santa Barbara formation, and older dissected surficial sediments composed of former alluvial deposits of silt, sand and gravel that in places are weakly consolidated, form the geologic base of the project site (Dibblee and Ehrenspeck 1986). The potential for paleontological resources to be encountered during project grading is low due to the extensive historical cut and fill within the project area and due to the existing quality of soils, which have been mechanically manipulated as a result of previous construction projects.

The Phase 1 survey found that no prehistoric artifacts are mixed with modern debris and that the area has already been subject to extensive ground disturbances associated with construction. The Phase 1 conclusion is confirmed by the previous SAIC investigation (SAIC 1996) that was conducted along the northern edge of the Rincon Beach County Park parking lot for a cellular communications facility. The investigation concluded that prehistoric artifacts were mixed with modern debris and the area had been subject to extensive ground disturbances associated with the construction, and subsequent abandonment, of US Highway 101. Therefore, the prehistoric cultural remains were not considered an important resource and no additional measures were required. Impacts would be **less than significant**

g) Would the project result in considerable cumulative impacts to geology and soils?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to geologic resource impacts. However, the project's contribution to cumulative geologic resource impacts would not be considerable based on the information above because the project impacts would each be reduced to less than significant with incorporation of required mitigation measures.

3.5.5 Mitigation

The potential exists for significant geology-related impacts to occur involving structural damage from seismic events, differential settlement of the pedestrian bridge structure, shallow slope instability associated with seismic activity, and increased soil erosion on slopes graded for the project. The project would require the implementation of **MM-GEO-1** to **MM-GEO-3** to reduce such impacts.

MM-GEO-1 **Seismicity.** The pedestrian bridge shall adhere to the recommendation identified in Appendix E to this Environmental Impact Report to withstand a peak ground acceleration (PGA) at the site of 0.8g generated by an earthquake of moment magnitude Mw=7.4.

Plan Requirements and Timing: Prior to issuance of a grading or building permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge design specification. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect bridge construction to verify conformance with this specification.

MM-GEO-2 **Differential Settlement of Pedestrian Bridge Foundations.** Bridge foundation construction shall adhere to the recommendation identified in Appendix E to this Environmental Impact Report, which specifies a deep foundation employing cast-in-drilled hole (CIDH) piles. Based on the anticipated loadings, Caltrans Standard Plan 24" CIDH Concrete Piles with 200 kips design capacity are recommended in the geotechnical report. Should hard cemented bedrock be encountered during the installation of the CIDH piles, coring may be necessary.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include this bridge foundation specification. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect foundation construction to verify conformance with this specification.

MM-GEO-3 **Soil Erosion/Slope Stability.** Slope construction shall adhere to the recommendations in the geotechnical report, summarized below.

1. All new fills placed along the trail alignment shall be placed as engineered geotextile-reinforced soils with subsurface/back drains.
2. Manufactured slope profiles shall be no steeper than as specified in the Bengal 2019 geotechnical report (Appendix E), or any updated version thereof which has been prepared to address final trail design.
3. Install adequate surface drainage facilities to collect and dispose of surface runoff properly, consistent with the drainage system designs included in 30% Project Plans for Rincon Multi-Use Trail (Appendix E), or as updated to address final trail design.
4. Hydro-seed the exposed newly cut and fill surfaces. Periodic watering and re-application of hydro-seed shall occur as necessary until vegetation on slope surfaces has been successfully established.

These measures, in conjunction with the slope flattening and load reduction resulting from the proposed slope cutbacks, should substantially reduce the hazards associated with both slope erosion and local/surficial slope instability under both static and seismic loading conditions.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria/County of Santa Barbara shall verify the engineering plans include the above specifications. ***Monitoring***: City of Carpinteria/County of Santa Barbara public works staff or construction inspector retained for the project shall inspect slope and drainage system construction to verify conformance with these specifications.

3.5.6 Level of Significance After Mitigation

Potential impacts related to geology and soils would be reduced to less than significant with implementation of mitigation measures GEO-1, GEO-2, and GEO-3.

3.6 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) emissions conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.6.1 Existing Conditions

3.6.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate—such as temperature, precipitation, or wind patterns—lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the Sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and is the most significant driver of observed climate change (EPA 2017; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system as discussed further in Section 3.6.1.5, Potential Effects of Climate Change.

3.6.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and

sulfur hexafluoride (SF_6).[1] Some GHGs—such as CO_2, CH_4, and N_2O—occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases (e.g., HFCs, HCFCs, PFCs, and SF_6), which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[2] Also included is a discussion of other climate-forcing substances.

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities, and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels (e.g., coal, oil, natural gas, and wood) and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers; manure management; industrial processes, such as in nitric acid production, nylon production, and fossil-fuel-fired power plants; vehicle emissions; and using N_2O as a propellant (such as in rockets, race cars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., chlorofluorocarbons [CFCs], HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as byproducts of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with HFCs, to O_3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas that is soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** Nitrogen trifluoride is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

[1] California Health and Safety Code 38505 identifies seven GHGs that CARB is responsible for monitoring and regulating to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and nitrogen trifluoride.

[2] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's Glossary of Terms Used in GHG Inventories (CARB 2015), and the EPA's Glossary of Climate Change Terms (EPA 2016).

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds with a structure very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter ($PM_{2.5}$), which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is short lived and varies spatially, which makes it difficult to quantify its global warming potential (GWP). DPM emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining DPM from CARB's regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen, plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

3.6.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of one kilogram of a trace substance relative to that of one kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO_2e).

The current version of CalEEMod (Version 2016.3.2) assumes that the GWP for CH_4 is 25 (so emissions of one MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed project.

3.6.1.4 Sources of Greenhouse Gas Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2017 (the most recent year for which data is available) totaled approximately 50,860 MMT CO_2e, excluding land use change and forestry (Olivier and Peters 2018). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 65% of the total global emissions, or approximately 33,290 MMT CO_2e (Olivier and Peters 2018). Table 3.6-1 presents the top GHG-emissions-producing countries and the European Union.

Table 3.6-1. Six Top GHG Producer Countries and the European Union

Emitting Countries	2014 GHG Emissions (MMT CO_2e)[a,b]
China	13,530
United States	6,640
European Union	4,560
India	3,650
Russian Federation	2,220
Japan	1,490
Brazil	1,200
Total	**33,290**

Source: Olivier and Peters 2018.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.
[b] GHG emissions do not include land use change and forestry-related GHG emissions.

National and State Inventories

Per the 2020 EPA Inventory of U.S. GHG Emissions and Sinks: 1990–2018, total U.S. GHG emissions were approximately 6,677 MMT CO_2e in 2018 (EPA 2020). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 81.3% of total GHG emissions (5,428 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018 (5,032 MMT CO_2e). Relative to the 1990 emissions level, gross U.S. GHG emissions in 2018 were 3.7% higher; however, the gross emissions were down from a high of 15.2% above the 1990 level that occurred in 2007. GHG emissions decreased from 2017 to 2018 by 2.9% (188 MMT CO_2e) and, overall, net emissions in 2018 were 10.2% below 2005 levels (EPA 2020).

According to California's 2000 through 2018 GHG emissions inventory (2019 edition), California emitted 425 MMT CO_2e in 2018, including emissions resulting from out-of-state electrical generation (CARB 2020). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2018 are presented in Table 3.6-2.

Table 3.6-2. GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	169.5	39.8%
Electric Power	63.1	14.8%
Industrial	89.2	21.0%
Commercial and Residential	41.4	9.7%
Agriculture	32.6	7.7%
High GWP	20.5	4.8%
Recycling and Waste	9.1	2.1%
Total	**425.4**	**100%**

Source: CARB 2020.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.

Between 2000 and 2018, per-capita GHG emissions in California dropped from a peak of 14.0 MT per person in 2001 to 10.7 MT per person in 2018, representing a 24% decrease. In addition, total GHG emissions in 2018 were approximately 1 MMT CO_2e more than 2017 emissions (CARB 2020).

The City of Carpinteria (City) provided an update to their GHG emission inventory in their Energy and Climate Action Plan 2017 Progress Report (County of Santa Barbara 2018). GHG emissions for the County of Santa Barbara (County) in 2016 are presented in Table 3.6-3.

Table 3.6-3. GHG Emissions Sources in the County of Santa Barbara

Source Category	Annual GHG Emissions (MT CO_2e)	Percent of Total[a]
Transportation	588,246	45.0%
Building Energy	374,164	28.6%
Off-Road	138,950	10.6%
Agriculture	119,360	9.1%
Solid Waste	82,750	6.3%
Water and Wastewater	3,364	0.3%
Totals	**1,306,833**	**100.0%**

Source: County of Santa Barbara 2017.
Notes: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide equivalent per year.
Emissions reflect the 2016 County of Santa Barbara GHG inventory.
[a] Percentage of total has been rounded, and total may not sum due to rounding.

3.6.1.5 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C [0.36°F]) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the Western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been the greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). It is predicted that the Sierra snowpack, which accounts for approximately half of the surface water storage in California and much of the state's water supply, will decline by 30% to as much as 90% over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in Safeguarding California: Reducing Climate Risk (CNRA 2014), is provided below.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. The agriculture sector and farmers face some specific challenges that include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding and extreme drought to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests, and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. Nonetheless, it is predicted that current crop and livestock production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if climate change is not managed or mitigated.

Biodiversity and Habitat. The state's extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites, and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; and threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurs). Habitat restoration, conservation, and resource management across California and through collaborative efforts among public, private, and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species' ability to relocate as temperature and water availability fluctuate as a result of climate change.

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex integrated system. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events, and sea-level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants, since power plant cooling is less efficient at higher ambient temperatures. Increased temperatures will also increase electricity demand associated with air conditioning. Natural gas infrastructure in coastal California is threatened by sea-level rise and extreme storm events.

Forestry. Forests occupy approximately 33% of California's 100 million acres and provide key benefits, such as wildlife habitat, absorption of CO_2, renewable energy, and building materials. The most significant climate change-related risks to forests are accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale mortalities and, combined with increasing temperatures, have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts, and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat, and decreased carbon absorption. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes or quickly occupy areas denuded by fire, insect mortality, or other climate change effects on vegetation.

Ocean and Coastal Ecosystems and Resources. Sea-level rise, changing ocean conditions, and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea-level rise, in addition to more frequent and severe coastal storms and erosion, is threatening vital infrastructure, such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities, as well as negatively impacting the coastal recreational assets, such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the 21st century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies and extreme events, such as heat, floods, droughts, and wildfires. Increased frequency, intensity, and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat-related illness, as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness, such as asthma and allergies. Additional health impacts that may be caused by climate change include cardiovascular

disease, vector-borne diseases, mental health impacts, and malnutrition injuries. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality.

Transportation. Residents of California rely on airports, seaports, public transportation, and an extensive roadway network to gain access to destinations, goods, and services. While the transportation industry is a source of GHG emissions, it is also vulnerable to climate change risks. Particularly, sea-level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports, and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand, which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes, and ecosystems and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter. Increased risk of flooding has a variety of public health concerns, including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively affect groundwater reserves and result in increased overdraft and subsidence. Droughts can negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat.

In May 2017, the CNRA released the draft Safeguarding California Plan: 2017 Update, which was a survey of programmatic responses for climate change and contained recommendations for further actions (CNRA 2017).

3.6.2 Relevant Plans, Policies, and Ordinances

3.6.2.1 Federal

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act (CAA):

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."

- The administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In response to the Massachusetts *v. EPA* ruling, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011. In 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intends to set standards for model years 2022 through 2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 FR 57106–57513).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On September 27, 2019, EPA and NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. The Part One Rule impacts some of the underlying assumptions in the CARB EMFAC 2014 and EMFAC 2017 models for criteria air pollutant emissions from gasoline light-duty vehicles, which CARB released off-model adjustment factors for on November 20, 2019, primarily for use in federal Clean Air Act conformity demonstration analyses. Part Two of these regulations has not been adopted yet. Because CARB does not know the full impacts of these rules until Part Two is released, no off-model adjustments factors are available for GHG emissions at this time. In addition, the EMFAC off-model adjustments have not yet been incorporated into CalEEMod. This issue is evolving as California and 22 other states, as well as the District of Columbia and two cities, filed suit against the EPA over the vehicle waiver revocation on November 15, 2019 and a petition for reconsideration of the rule was filed on November 26, 2019 by California and 22 other states, the District of Columbia, and four cities. Accordingly, the timing and consequences of these types of federal decisions and subsequent challenges are speculative at this time.

3.6.2.2 State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32 and CARB's Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. Assembly Bill (AB) 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified

requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons [MMT] CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020 (CARB 2008). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 29% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations [referred to as "business-as-usual"]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document (Final Supplement), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG-reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 22% (down from 29%) from the business-as-usual conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009 through 2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 29%) from the business-as-usual conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on

track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are energy, transportation (e.g., vehicles/equipment, sustainable communities, housing, fuels, infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies (CARB 2014).

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 29% or 16%) from the business-as-usual conditions (CARB 2014).

On January 20, 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017). This update proposed CARB's strategy for achieving the state's 2030 GHG target as established in SB 32 (discussed below), including continuing the Cap-and-Trade Program through 2030. The Second Update incorporated approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document adopted by CARB in March 2017; SLCP Reduction Strategy), and acknowledged the need for reducing emissions in agriculture and highlighted the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2017). When discussing project-level GHG emissions-reduction actions and thresholds, the Second Update stated, "Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (CARB 2017). The Second Update was approved by CARB's Governing Board on December 14, 2017.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 called for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets; made changes to CARB's membership and increased legislative oversight of CARB's climate change-based activities; and expanded dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; required CARB to make available and update (at least annually through its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and required CARB to identify specific information for GHG emissions-reduction measures when updating the Scoping Plan.

SB 605 and SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state; SB 1383 (2016) required CARB to approve and implement the SLCP Reduction Strategy. SB 1383 also established specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provided direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017, which established a framework for the statewide reduction of emissions of black carbon, CH4, and fluorinated gases.

EO B-55-18

EO B-55-18 (September 2018) established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." This executive order directed CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

Building Energy

Title 24, Part 6 of the California Code of Regulations

Title 24 of the California Code of Regulations was established in 1978, and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]), and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and [b][3]). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply

reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The 2019 standards continue to improve upon the 2016 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 standards went into effect on January 1, 2020.

Title 24, Part 11 of the California Code of Regulations

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR 11) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, schools, and hospitals. The CALGreen 2019 standards went into effect on January 1, 2020, and continue to improve upon the 2016 CALGreen standards for new construction of, and additions and alterations to, residential and nonresidential buildings (CALGreen 2016).

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards will further reduce energy used and associated GHG emissions compared to current standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

Title 20 of the California Code of Regulations

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Renewable Energy and Energy Procurement

SB 1078

SB 1078 (2002) established the RPS program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB 1368

SB 1368 (2006) required the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. This effort helps protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350

SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also required the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100

SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. Under SB 100, it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not occur through resource shuffling.

Mobile Sources

EO S-1-07

Issued on January 18, 2007, EO S-1-07 set a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations were then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, would achieve, if feasible, the GHG reduction targets. If a SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code, Section 65080(b)(2)(K), a SCS does not (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for SBCAG are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SBCAG completed and adopted its 2040 Regional Transportation Plan (2050 RTP/SCS) in August 2013 (SBCAG 2013). In November 2013, CARB, by resolution, accepted SBCAG's GHG emissions quantification analysis and determination that, if implemented, the 2040 RTP/SCS would achieve CARB's 2020 and 2035 GHG emissions-reduction targets for the region. In August 2017, SBCAG adopted the Fast Forward 2040, SBCAG RTP/SCS. Like the 2040 RTP/SCS, the Fast Forward 2040 meets CARB's 2020 and 2035 reduction targets for the region (SBCAG 2017).

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025, cars will emit 75% less smog-forming pollution than the average

new car sold before 2012. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero emissions vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (EVs) in the 2018 to 2025 model years.

EO B-16-12

EO B-16-12 (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This executive order (EO) also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions-reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236

AB 1236 (2015) requires local land use jurisdictions to approve applications for the installation of electric vehicle (EV) charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provides for appeal of that decision to the planning commission, as specified. AB 1236 requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, which creates an expedited and streamlined permitting process for EV charging stations, as specified. The City added Section 86.0151, Electric Vehicle Parking Regulations, to its municipal code in August 2015 in response to the AB 1236 requirements.

SB 350

In 2015, SB 350—the Clean Energy and Pollution Reduction Act—was enacted into law. As one of its elements, SB 350 established a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code, Section 740.12).

EO B-48-18

EO B-48-18 (2018) launched an eight-year initiative to accelerate the sale of EVs through a mix of rebate programs and infrastructure improvements. The order also set a new EV target of 5 million EVs in California by 2030. EO B-48-18 included funding for multiple state agencies, including the CEC, to increase EV charging infrastructure and for CARB to provide rebates for the purchase of new EVs and purchase incentives for low-income customers.

Solid Waste

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the state's policy goal. The California Department of Resources Recycling and Recovery has conducted multiple workshops and published documents that identify priority strategies that it believes would assist the state in reaching the 75% goal by 2020 (CalRecycle 2015).

Water

EO B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Other State Regulations and Goals

SB 97

SB 97 (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resources Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, the CEQA Guidelines, Section 15064.4(a), state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or

methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009), and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

3.6.2.3 Local

SBCAPCD and SBCAG

The Santa Barbara County Air Pollution Control District (SBCAPCD) is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the County. The SBCAPCD operates monitoring stations in the County, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SBCAPCD's focus is on criteria air pollutants to achieve California Ambient Air Quality Standards and National Ambient Air Quality Standards. It does not generally regulate sources of GHG emissions, except in its role as a reviewing agency for projects subject to CEQA.

SBCAG prepared a 2040 Regional Transportation Plan-Sustainable Communities Strategy (RTP-SCS), adopted in August 2017, which shows how the region will achieve the required GHG per capita emission targets as well the co-benefits of reducing criteria pollutants. The 2040 RTP-SCS is based on a preferred land use and transportation scenario, which lays out one possible pattern of future growth and transportation investment for the region. The 2040 RTP-SCS preferred scenario emphasizes a transit-oriented development and infill approach to land use and housing, supported by complementary transportation and transit investments. The 2040 RTP-SCS meets the requirements of SB 375 and successfully achieves the region's GHG emission targets in 2020 and 2035, while accommodating forecast growth and regional housing needs. The 2040 RTP-SCS would meet the SBCAG region's GHG emission targets from passenger vehicles for 2020 and 2035, achieving reductions in per capita emissions of CO_2 from passenger vehicles of 13.3% in 2020 and 17.7% in 2035, better than the SBCAG target of zero net growth in per capita emissions (SBCAG 2017).

County of Santa Barbara

CEQA Guidelines Section 15183.5(a) states,

> Lead agencies may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in…a separate plan to reduce GHG emissions. Later project-specific environmental documents may tier from…that existing programmatic review…a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan.

The County of Santa Barbara Board of Supervisors adopted the Energy and Climate Action Plan (ECAP) in May 2015 and certified the accompanying EIR (County of Santa Barbara 2015). The ECAP meets the criteria in CEQA Guidelines Section 15183.5(b) for a "plan to reduce GHG emissions." The ECAP commits the County to reduce community-wide GHG emissions by 15% below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (Assembly Bill 32) and the related Climate Change Scoping Plan (CARB 2008). The ECAP is a qualified GHG emissions reduction plan for projects built prior to 2020.

The County of Santa Barbara developed a Climate Action Strategy, which is a two-phase project comprised of (1) a Climate Action Study, and (2) an Energy and Climate Action Plan (ECAP). The Climate Action Strategy covers the unincorporated areas of Santa Barbara County where the County of Santa Barbara retains land use permit authority, which includes a portion of the proposed project. The County of Santa Barbara Long-Range Planning Division completed Phase 1 of the Climate Action Strategy, the Climate Action Study, in September 2011. The Climate Action Study provides a summary of policies, programs, and projects that the County of Santa Barbara can implement to reduce GHG emissions in the unincorporated County (County of Santa Barbara 2011). Phase 2, the ECAP, which seeks to reduce the County's GHG emissions through implementation of selected emission reduction measures with the goal of achieving the selected GHG reduction target, was adopted in May 2015 (County of Santa Barbara 2015). The E-CAP is currently being updated to incorporate the longer term GHG goals of the County, which are to reduce its emissions by 50% below 2007 levels by 2030 (County of Santa Barbara 2020).

City of Carpinteria

The City has adopted measures within its Open Space, Recreation & Conservation element of its General Plan to reduce GHG emissions (City of Carpinteria 2003). Measures identified within Section 3.2.2.3 for protecting air quality would also help to reduce GHG emissions. The following policies within that element in addition are included to reduce GHG emissions:

CDS6-f To ensure the efficient utilization of energy resources, design measures shall be incorporated into project design that allow for development projects to exceed the minimum energy requirements of the city's Uniform Codes.

1. Building orientation shall be designed to maximize natural lighting, passive solar heating, and cooling;
2. Landscaping shall be designed to maximize the use of native drought tolerant species and deciduous trees to shade buildings in summer and allow for passive solar heating in winter;
3. Energy efficient street lighting shall be used, with consideration of safety, visual impacts, and impacts to wildlife and sensitive habitat;

4. Design of parking facilities shall take into consideration the layout of entrances and exits so as to avoid concentrations of cars or excessive idling.
5. Alternatively fueled vehicles are to be used in construction and as fleet vehicles, if feasible and available.

C-7a Ensure that major businesses prepare and implement Transportation Systems Management Plans to achieve a reduction in the number of trips generated by their employees and operations by encouraging private sector program elements similar to the following:

- Preferential employee carpool/vanpool parking
- Work-at-home (telecommuting)
- Designation of Company Transportation Coordinator
- The construction of Transit Passenger Shelters (if located along an existing or designed transit route)
- Bus subsidies
- Transit operating subsidies
- Transit pass subsidies
- Buspool or shuttle bus programs
- Vanpool program
- Parking fees
- Showers, lockers and preferred bicycle parking
- Non-peak period shift schedules
- Flexible work hours offered to employees who rideshare
- Provision of luncheon/lounge seating area with vending machines and food preparation facilities
- Other programs and incentives which can feasibly and significantly reduce potential peak period trips.

C-7b Develop safe and direct pedestrian accessibility between residential areas, schools, parks, and shopping areas in both new and existing urban areas.

C-7c Provide safe mobility for the physically handicapped through the design of street improvements and public facilities.

C-7d Practice signal timing that is designed for the safe movement of the aged and the handicapped at locations where such needs exist.

C-7e Provide continuous sidewalks, where appropriate, for safe pedestrian circulation and consider creative alternatives for such issues.

C-7f Earmark a larger portion of development impact fees for alternative transportation programs.

C-7g Create a citywide campaign of prolonged duration promoting alternative transportation.

C-8a	Integrate the development of bicycle routes and pedestrian pathways in additional areas of the city, and encourage the utilization of such routes for commuting as well as recreational purposes.
C-8b	Provide adequate right-of-way and improvements for bicycle lanes, when called for in future street dedications.
C-8c	Provide or require safe and adequate bicycle parking at transportation centers, public parks, recreation areas and other nonresidential locations.
C-8d	Encourage integration of the city's bicycle routes with state and countywide programs.
C-8e	Encourage educational programs on bicycle safety, and complement such programs through bicycle law enforcement.
C-8f	Encourage pedestrian movement by providing pedestrian facilities that are direct and convenient, particularly in the beach and downtown areas.
C-8g	Consider rerouting the Pacific Coast Bikeway to another location parallel to the coastline, such as adjacent to the railroad right of way throughout the city. [5-year]
C-8h	Encourage a bike trail link from Carpinteria to Summerland along the railroad right of way and a coastal link to Ventura paralleling U.S. 101.
C-8i	Inspect, provide, and maintain contiguous bike lanes for a one-half mile radius around each school site.
C-8j	Encourage the School Board to instruct the School District to include bicycle safety as part of the curriculum.
C-8k	Contact the Carpinteria Chapter of the AHA and ask them to include the benefits of bicycling as part of their workplace training program. [2-year]
C-8l	As a requirement of new development, significant attention must be paid to bicycle-friendly infrastructure and the maintenance of nearby old infrastructure.
C-8m	Add more bike lanes to arterial street cross-sections.
C-8n	Develop funding sources for new bicycle infrastructure including diversion of funds from sources currently applied to single occupant vehicle infrastructure.
C-8o	Correct bike lanes at intersections, allowing for straight through bike lanes adjacent to auto lanes, when a right-turn lane exists.
C-8p	Correct pressure sensitive signals to respond to weight of bicyclists.
C-8q	Encourage the placement of bicycle lockers at shopping centers and major traffic areas.
C-8r	Encourage large employers to place bicycle lockers in convenient locations on their premises.

C-9a	Continue cooperation with the Santa Barbara Metropolitan Transit District (SBMTD), Caltrans and other transportation agencies, in order to assure that all City residents have adequate access to public transit as an alternative to the automobile.
C-9b	Develop the circulation system in a manner that will maximize route efficiency for transit lines within the city.
C-9c	Coordinate with SBMTD, Caltrans and other transportation agencies in the development of route systems and transfer points.
C-9d	Promote efficient and attractive public transit which maintains acceptable personal safety, and minimizes the disruption of neighbors attributable to transportation facilities and operations.
C-9e	Encourage privately owned transit systems to interface with the public transit systems.
C-9f	Encourage SBMTD and others to develop a variety of public transit modes and schedules coordinated with those of adjacent cities, while meeting residential and seasonal transit needs. Further, support development of a Ventura/Santa Barbara express bus commuter line with stops in Carpinteria.
C-9g	Continue cooperation with SBMTD to ensure frequent, predictable, safe and reliable neighborhood shuttle bus service.
C-9h	Encourage MTD to promote use of Parking Lot 3 as a park and ride lot, and encourage Caltrans to establish and promote its parcel southwest of the Bailard/Highway 101 interchange for a park and ride lot.
C-9i	Work with MTD to promote increased bus use and explore providing expanded inner city/neighborhood shuttle service within the city. [2-year]
C-9j	Encourage the growth of low impact and non-polluting industry, and promote improved congestion management techniques. This may take the form of local business ordinances and might be applied through the permitting process.
C-9k	Provide incentives to businesses that offer flexible shift/start times, compressed work week opportunities, and telecommuting options.
C-9l	Design and place improved signage for parking lots, sites of interest, business districts and recreational areas.
C-9m	Work with SBCAG's Traffic Solutions program to promote and educate citizens and employers about alternative transportation including bicycling, carpooling, vanpooling, buses, telecommuting, staggered start/stop times, compressed work weeks, and other alternatives as they are developed.
C-9n	Require new development plans to include significant attention to alternative modes of transportation.
C-9o	Require well-designed walkways as a condition to new development approval.
C-9p	Establish a regulatory framework for siting antennas and telecommunication equipment that protects visual resources. [2-year]

C-9q	Participate in countywide planning for telecommunications.
C-9r	Encourage local businesses to participate in electronic commerce.

3.6.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to greenhouse gas emissions are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to greenhouse gas emissions would occur if the project would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). Additional guidance regarding assessment of GHGs is discussed below.

County of Santa Barbara

The County adopted the developing interim greenhouse gas (GHG) emissions thresholds to apply to new development projects while the County updates its Energy and Climate Action Plan (ECAP). The updated ECAP, now referred to as the 2030 Climate Action Plan (CAP), will identify reductions needed in both existing and new developments in the county to meet its 2030 GHG emissions reduction target. In July 2020, the County adopted a new target to reduce its emissions by 50% below 2007 levels by 2030 with direction from the Board of Supervisors (County of Santa Barbara 2020). The interim thresholds will help the County process discretionary projects under the California Environmental Quality Act (CEQA) and continue to achieve GHG emissions reductions from new development while it prepares the 2030 CAP.

The County Planning and Development Department developed the interim GHG emissions thresholds to assist project applicants to comply with the requirements of CEQA regarding potentially adverse impacts to climate change. The determination on whether or not a project may have a significant effect on the environment shall be based in part on the thresholds of significance. The proposed interim thresholds for GHG emissions are quantitative measures of environmental change. Thresholds of significance supplement provisions in the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) for the determination of significant environmental effects, including Sections 15064, 15065, 15382, and Appendix G incorporated herein. The primary purpose of the interim GHG emissions thresholds is to provide a means to identify proposed local plans and development projects that may have a significant adverse effect related to GHGs. Subsequent sections of this memorandum present the justifications for the recommended interim GHG emissions thresholds. These changes were incorporated into the County's Environmental Thresholds and Guidelines Manual as amended on October 27, 2020 (County of Santa Barbara 2020).

The CEQA Guidelines address GHG emissions as a cumulative impact due to the global nature of climate change (14 CCR 15064.4[b]). As the California Supreme Court explained, "because of the global scale of climate change,

any one project's contribution is unlikely to be significant by itself" (Cleveland National Forest Foundation v. San Diego Assn. of Governments [2017] 3 Cal.5th 497, 512.). A project's significant GHG impacts must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact (14 CCR 15064.4[b] and 15183.5). Therefore, the impacts analysis of GHG emissions is global in nature and should be considered in a broader context. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions (14 CCR 15064.4[b]). The interim GHG emissions thresholds are set at a level of impact that identifies either (1) a cumulatively considerable contribution to an existing adverse condition, or (2) a cumulatively significant impact in combination with other projects causing related impacts.

The interim thresholds that apply to land use development projects, which include both project level residential and non-residential development and plans (e.g., specific plans and community plans). These thresholds would not apply to GHG-emitting power plants, oil and gas facilities, or other industrial stationary sources as the County has an adopted bright line threshold of 1,000 MT CO_2e per year for industrial stationary sources. The interim thresholds will only apply to non-exempt discretionary projects under CEQA. Under Step 1, applicants first compare non-exempt project applications against a screening threshold. Applicants can either qualitatively compare the project size to project screening criteria, or, if the screening criteria are not applicable, quantitatively calculate project-specific emissions (see Table 3 of the GHG memorandum). Examples of projects that may not be able to use project screening criteria include (1) project types not included in Table 3 of the GHG memorandum, or (2) projects that include emissions sources not accounted for in the modeled assumptions for the proposed land use type shown in Table 3 of the GHG memorandum. The screening threshold shall be no greater than 300 MT CO_2e per year, based on the estimated effectiveness of mitigation measures for new development. This threshold would result in approximately 15% of all applicable future projects and 87% of all applicable future land use emissions being subject to the efficiency threshold under Step 2. Under Step 2, any project with 2030 estimated emissions exceeding the screening threshold will be subject to an efficiency GHG emissions threshold based on the project's estimated service population. For projects exceeding the screening threshold, an efficiency threshold of 3.8 MT CO_2e/year per service population (SP) in 2030 will apply. Projects subject to the efficiency threshold amortize any construction emissions over the lifetime of the project (e.g., 30 years). The efficiency threshold would apply to the sum of the amortized construction emissions and the estimated annual operational emissions. Furthermore, until the 2030 CAP is adopted, the County considers projects or plans that have emissions below interim thresholds to be consistent with County GHG emission reduction plans. The interim thresholds are part of the County's GHG emissions reduction strategy and were informed by the County's 2030 target. The interim thresholds provide a pathway for projects and plans to show compliance with County goals (County of Santa Barbara 2020).

City of Carpinteria

The City does not have an adopted GHG threshold or qualified GHG reduction plan for the project to tier off. Therefore, the County of Santa Barbara's Interim GHG Threshold of 300 MT CO_2e per year will be applied to the project.

3.6.4 Impact Analysis

a) Would the project Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction Emissions

Construction of the project would result in GHG emissions that are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The County's Interim GHG Thresholds (County of Santa Barbara 2020) recommends the use of a 300 MT CO_2e bright-line threshold for both construction and operation of development projects.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 3.2.4 and Appendix B. Construction of the proposed project is anticipated to commence in March 2022, lasting a total of approximately 24 months. On-site sources of GHG emissions include off-road equipment and off-site sources include on-road vehicles (haul trucks, vendor trucks, and worker vehicles). Table 3.6-4 below presents construction emissions for the project from on-site and off-site emissions sources.

Table 3.6-4. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2022	522.46	0.08	0.00	524.56
2023	182.66	0.04	0.00	183.56
			Total	708.12
			Amortized Emissions over 30 years	23.60

Source: Appendix B.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent

As shown in Table 3.6-4, the estimated total GHG emissions during construction would be approximately 708 MT CO_2e. When construction emissions are amortized over 30 years, the construction emissions would be approximately 24 MT CO_2e per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. As discussed in Section 3.6.3, Thresholds of Significance, the amortized construction emissions will be added to operational emissions and compared to the significance threshold.

Loss of Sequestered Carbon

The calculation methodology and default values provided in CalEEMod (CAPCOA 2017) were used to calculate potential CO_2 emissions associated with the one-time change in carbon sequestration capacity of a vegetation land use type. The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (vegetation community). The mass of sequestered carbon per unit area (expressed in units of MT of CO_2 per acre) is dependent on the specific land use type. Assuming that the

sequestered carbon is released as CO_2 after removal of the vegetation, annual CO_2 is calculated by multiplying total biomass (MT of dry matter per acre) from IPCC data by the carbon fraction in plant material, and then converting MT of carbon to MT of CO_2 based on the molecular weights of carbon and CO_2.

It is conservatively assumed that all sequestered carbon from the removed vegetation would be returned to the atmosphere; that is, the wood from the vegetation communities would not be re-used in a solid form or another form that would retain carbon. GHG emissions generated during construction activities, including clearing, vegetation removal, and grading, are estimated in the construction emissions analysis.

CalEEMod calculates GHG emissions resulting from land conversion and uses six[3] general IPCC land use classifications for assigning default carbon content values (in units of MT CO_2 per acre). CalEEMod default carbon content values were assumed to estimate the loss of sequestered carbon (release of CO_2) from the removal of the scrub (14.3 MT CO_2 per acre), forest (111 MT CO_2 per acre), and grassland (4.31 MT CO_2 per acre) vegetation categories, which are based on data and formulas provided in the IPCC reports. The project would permanently disturb 0.75 acres of scrub and temporarily disturb 9.95 acres of scrub as shown in Table 3.3-5 in Section 3.3, Biological Resources. As such, the project is estimated to result in 153.01 MT CO_2 through carbon loss.

When amortized over 30 years, this would result in annual carbon loss of 5.10 MT CO_2 per year. When added to the amortized construction emissions, the project would result in 28.70 MT CO_2e per year.

Operational Emissions

CalEEMod Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), mobile sources, solid waste, and water supply and wastewater treatment. Emissions from each category are discussed in the following text with respect to the project. See Section 3.2.4 for a discussion of operational emission calculation methodology and assumptions, specifically for area and mobile sources. Operational year 2024 was assumed as it is the first full year of operation following completion of construction.

Solid Waste

The project would generate solid waste and would, therefore, result in CO_2e emissions associated with landfill off-gassing. Solid waste generation was derived from the CalEEMod default rates for each land use type. Emission estimates associated with solid waste were estimated using CalEEMod. Trash and recycling cans would be provided in the existing dirt parking lot at the western trail terminus. Waste collection services would be provided by E. J. Harrison and Sons or other local service provider and would occur weekly. Existing trash and recycling cans located in Rincon Beach County Park at the eastern trail terminus would be available to serve the trail.

Water Supply and Wastewater

Water supplied to the project requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Annual water use for the project and GHG emissions associated with the electricity used for water supply were calculated based upon default water use estimates for each land-use type, as estimated by CalEEMod and Southern California

[3] Forest land (scrub), forest land (trees), cropland, grassland, wetlands, and other.

Edison factors. The water use would be associated with watering of landscaping around the trail. This is conservative as watering is only needed for the first couple of years to establish the plantings.

Emissions Estimates

CalEEMod was used to estimate potential project-generated operational GHG emissions from area sources (landscaping), mobile sources, solid waste, and water supply and wastewater treatment. Emissions from each category are discussed in the following text. Operational year 2024 was assumed as the first full year of operation upon construction completion. The projects estimated operational emissions are shown in Table 3.6-5.

Table 3.6-5. Estimated Annual Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	0.00	0.00	0.00	0.00
Mobile	0.17	0.00	0.00	0.17
Waste	0.03	0.00	0.00	0.06
Water	1.86	0.00	0.00	1.87
			Subtotal	*2.10*
			Amortized Construction Emissions over 30 Years	*23.60*
			Amortized Loss of Sequestered Carbon over 30 Years	*5.10*
			Total	**30.80**

Notes: CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; N_2O = nitrous oxide
See Appendix B for complete results.

As shown in Table 3.6-5, project GHG emissions generated from operational activities are estimated to be approximately 2 MT CO_2e per year in 2024. Total operational emissions combined with amortized construction emissions and vegetation removal would be 31 MT CO_2e per year, assuming a 30-year project life. As such, the total estimated emissions would be less than the County's bright-line significance threshold of 300 MT CO_2e per year. Therefore, impacts would be **less than significant**.

Consistency with GHG Reduction Plans

The Board adopted the ECAP in 2015 as the County's GHG emission reduction plan. The County has been implementing the ECAP since 2016 but is not projected to meet the plan's 2020 GHG emission reduction goals, according to the 2016 GHG Emissions Inventory Update and Forecast and the 2017 ECAP Progress Report. The final ECAP progress report will be released in 2021, using data through 2020. Until the 2030 CAP is adopted, the County considered projects or plans that have emissions below interim thresholds to be consistent with County GHG emission reduction plans. The interim thresholds are part of the County's GHG emissions reduction strategy and were informed by the County's 2030 target. The interim thresholds provide a pathway for projects and plans to show compliance with County goals and State GHG Reduction Plans, Policies, and Regulations. The Board's 2030 GHG emission reduction goal (50% reduction from 2007 levels by the year 2030) is consistent with the state's direction under Senate Bill 32 as codified in the California Health and Safety Code, Division 25.5, Part 4, Section 38566 (40% reduction below 1990 levels by 2030). CARB's 2017 Scoping Plan (CARB 2017) describes the state's strategy for achieving California's 2030 GHG emission reduction target. The 2017 Scoping Plan does not prescribe or require specific actions by local government agencies; rather, the Scoping Plan provides guidance to local agencies and CARB supports programs that assist local agencies. Local

government efforts to reduce emissions within their jurisdiction are critical to achieving the state's long term GHG goals, and can also provide important co-benefits, such as improved air quality, local economic benefits, more sustainable communities, and an improved quality of life. CARB recommends statewide targets of no more than 6 MT CO_2e per capita by 2030, and no more than 2 MT CO_2e per capita by 2050. The statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term state emissions reduction goal of 80% below 1990 levels by 2050. This limit represents California's and these other governments' recognition of their "fair share" to reduce GHG emissions to the scientifically based levels to limit global warming below 2°C.

CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the state's sustainable development objectives and develop plans to achieve the local goals. The County's interim GHG emission efficiency threshold is considerably lower than the state's 2030 per capita target. Therefore, analysts can apply the County's interim threshold with confidence that it aids the state in achieving its target, as well.

As shown, the emissions would be less than the County's bright-line threshold of 300 MT CO_2e per year. Therefore, the project would have a **less than significant** impact.

3.6.5 Mitigation

No mitigation measures would be required. However, **Mitigation Measure (MM) BIO-3** requires temporarily impacted vegetated areas shall be restored on site at a 1:1 ratio. Any remaining on-site mitigation potential (in disturbed land/disturbed areas or developed areas) shall be restored at a ratio of 2:1 for coastal sage scrub and coastal bluff scrub permanently removed on site. This mitigation would require additional plantings to offset the impacted species identified in Table 3.3-5.

3.6.6 Level of Significance After Mitigation

Sequestered Carbon

CalEEMod calculates GHG emissions resulting from land conversion and uses six[4] general IPCC land use classifications for assigning default carbon content values (in units of MT CO_2 per acre). CalEEMod default carbon content values were assumed to estimate the loss of sequestered carbon (release of CO_2) from the removal of the scrub (14.3 MT CO_2 per acre), forest (111 MT CO_2 per acre), and grassland (4.31 MT CO_2 per acre) vegetation categories, which are based on data and formulas provided in the IPCC reports. In accordance with **MM-BIO-3**, the project must restore temporarily vegetated areas at a 1:1 ratio and permanently removed scrub will be restored at a 2:1 ratio. This would result in a total of 11.45 acres of scrub to be replaced in accordance with **MM-BIO-3**. This would result in the sequestration of 163.74 MT CO_2, or 5.46 MT CO_2 per year when amortized over 30 years. The project's operational emissions plus amortized construction emissions, vegetation removal, and carbon sequestration would result in emissions of 25.34 MT CO_2e per year. This would still be less than the County's significance threshold. Impacts would remain less than significant.

[4] Forest land (scrub), forest land (trees), cropland, grassland, wetlands, and other.

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3.7 Hazards and Hazardous Materials

This section describes the hazards and hazardous materials conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.7.1 Existing Conditions

Hazardous materials occur in every community, in relation to residential, commercial, industry, medical practices, research, transportation, construction, and other uses. As a result of natural events, system failures, and accidents (spills), hazardous materials have the potential to pose a risk to the environment and human health. A multitude of local, state, and federals laws exist to regulate the storage, use, handling, transportation and disposal of hazardous materials. To ensure public safety and heighten awareness of hazardous materials exposure risk, businesses and other entities that handle, store, transport, or use hazardous materials are required to file reports with appropriate authorities and maintain emergency response plans in the event of a hazardous materials release.

Dudek performed a regulatory agency records search for the project site and vicinity using the State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2021) and the California Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC 2021). These lists are a compilation of information from various sources listing potential and confirmed hazardous waste and hazardous substances sites in California. There are no sites of potential concern listed on the DTSC EnviroStor database within 1 mile of the project site. There are also no potential sites with environmental concern listed on the SWRCB GeoTracker database within 0.25 miles of the project site; the only listed site within a quarter mile is a closed case on the opposite side of the freeway, approximately 850 feet north of the eastern terminus of the trail. Appendix F includes the EnviroStor and GeoTracker database maps of hazardous sites in the vicinity of the Study Area. The closest DTSC-listed sites include:

- Rincon del Mar Ranch – Bates Road (approximately 850 feet northeast of the eastern trail terminus). The case involved the spill of petroleum products, for which no remediation was required; case closed.
- Infrared Industries – 6307 Carpinteria Avenue (approximately 0.5 miles west of the western trail terminus) The case involved the release of TCE (solvent) to soil and shallow groundwater from an underground tank; the tank was removed along with contaminated soil, TCE concentrations in groundwater were below action levels; case closed.
- Vacant Lot – 6185 Carpinteria Avenue (approximately 0.75 miles west of the western trail terminus). There are no specifics provided for this case, but since it is a vacant lot it may have involved illegal dumping. No remediation was required for the incident, and the case was closed.
- Conoco Phillips Kittie Ballard Well Site (approximately 1 mile west of the western trail terminus). This case involved reported oil seeps from a previously abandoned oil well. The well was re-abandoned to current DOGGR standards in 2011, case closed.

As such, the project site has no known history of illicit dumping, oil well drilling, or release of hazardous materials, and has been highly engineered and extensively disturbed related to construction of US Highway 101 and the UPRR. Because the northern trail area (northward of the UPRR) is adjacent to US Highway 101, aerially deposited lead could occur in shallow soils, from the historic presence of lead as a gasoline additive affecting vehicle operations within the US Highway 101 alignment. No other hazardous waste or contaminants are anticipated to be present within the proposed Rincon Trail alignment.

3.7.2 Relevant Plans, Policies, and Ordinances

3.7.2.1 Federal

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA). These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended the CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. Sections 301 through 312 of the Act are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the SARA Title III Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention Program (CalARP). As the Certified Unified Program Agency (CUPA) for the majority of the County, the Santa Barbara County Public Health Department, Environmental Health Services implements the CalARP program.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations, the Hazardous Materials Transportation Act. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and Caltrans. These agencies also govern permitting for hazardous materials transportation. The Hazardous Materials Transportation Act reflects laws passed by Congress as of January 2, 2006.

EPA Regional Screening Levels

The federal EPA provides regional screening levels for chemical contaminants to provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water). Residential Screening Levels (RSLs) are available on the EPA's website and provide a screening level calculation tool to assist risk assessors, remediation project managers, and others involved with risk assessment and decision making. RSLs are also used when a site is initially investigated to determine if potentially significant levels of contamination are present to warrant further investigation. In California, the Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. HERO created Human Health Risk Assessment (HHRA) Note 3, which incorporates HERO recommendations and DTSC-modified screening levels (DTSC-SLs) based on review of the EPA RSLs. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended, and Related Authorities

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended (42 USC 5121–5206), and implementing regulations (Code of Federal Regulations, Title 44, Sections 206.31–206.48) provide the statutory framework for a presidential declaration of an emergency or a declaration of a major disaster. Such declarations open the way for a wide range of federal resources to be made available to assist in dealing with an emergency or major disaster. The Stafford Act structure for the declaration process reflects the fact that federal resources under this act supplement state and local resources for disaster relief and recovery. Except in the case of an emergency involving a subject area that is exclusively or preeminently in the federal purview, the governor of an affected state, or acting governor if the governor is not available, must request such a declaration by the president.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Stafford Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

3.7.2.2 State

Government Code Section 65962.5(a), Cortese List

The Hazardous Waste and Substance Sites Cortese List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the CalEPA to develop at least annually an updated Cortese List. DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

California Unified Program for Management of Hazardous Waste and Materials

California Health and Safety Code (HSC), Division 20, Chapter 6.11, Sections 25404- 25404.9 Sections– Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Under the California Environmental Protection Agency (CalEPA), the Department of Toxic Substances Control (DTSC) and Enforcement and Emergency Response Program (EERP) administer the technical implementation of California's Unified Program, which consolidates the administration, permit, inspection, and enforcement activities of several environmental and emergency management programs at the local level (CalEPA 2021). Certified Unified Program Agencies (CUPAs) implement the hazardous waste and materials standards. This program was established under the amendments to the California HSC made by SB 1082 in 1994. The CUPA for the project area is the Santa Barbara County Public Health Department, Environmental Health Services.

Hazardous Waste Control Law

The DTSC regulates the generation, transportation, treatment, storage and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law (22 CCR 6.5). Both laws impose "cradle to grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other CUPAs.

Aboveground and Underground Petroleum Storage Tanks

Title 22 California HSC, Division 20, Chapter 6.67, Sections 25270 to 25270.13 – Aboveground Petroleum Storage Act

This law applies if a facility is subject to Spill Prevention, Control and Countermeasure (SPCC) regulations under Title 40 U.S.C. Part 112, or if the facility has 10,000 gallons or more of petroleum in any or combination of Aboveground Storage Tanks (ASTs) and connecting pipes. If a facility exceeds these criteria, it must prepare a SPCC plan.

Low-Threat Underground Storage Tank (UST) Case Closure Policy

This policy applies to petroleum Underground Storage Tank (UST) sites subject to Chapter 6.7 of the Health and Safety Code. This policy establishes both general and media-specific criteria. If both the general and applicable media-specific criteria are satisfied, then the leaking UST case is generally considered to present a low threat to human health, safety and the environment. This policy recognizes, however, that even if all of the specified criteria in the policy are met, there may be unique attributes of the case or site-specific conditions that increase the risk associated with the residual petroleum constituents. In these cases, the regulatory agency overseeing corrective action at the site must identify the conditions that make case closure under the policy inappropriate.

Regional Water Boards and local agencies have been directed to review all cases in the petroleum UST Cleanup Program using the framework provided in this policy. These case reviews shall, at a minimum, include the following for each UST case:

1. Determination of whether or not each UST case meets the criteria in this policy or is otherwise appropriate for closure based on a site-specific analysis.
2. If the case does not satisfy the criteria in this policy or does not present a low-risk based upon a site-specific analysis, impediments to closure shall be identified.
3. Each case review shall be made publicly available on the State Water Resources Control Board's GeoTracker web site in a format acceptable to the Executive Director.

Title 27 of the California Code of Regulations, Solid Waste

Title 27 of the California Code of Regulations contains a waste classification system that applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to waste management sites for treatment, storage, or disposal (27 CCR 2).

Human Health Risk Assessment Note 3 –DTSC-Modified Screening Levels (DTSC-SLs)

Human Health Risk Assessment (HHRA) Note Number 3 presents recommended screening levels (derived from the EPA RSLs using DTSC-modified exposure and toxicity factors) for constituents in soil, tap water, and ambient air. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

Environmental Cleanup Levels

Environmental Screening Levels (ESLs) provide conservative screening levels for over 100 chemicals found at sites with contaminated soil and groundwater. They are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites. The ESLs were developed by staff at the San Francisco Bay Regional Water Quality Control Board; however, they are used throughout the state. While ESLs are not intended to establish policy or regulation, they can be used as a conservative screening level for sites with contamination. Other agencies in California currently use the ESLs (as opposed to RSLs). In general, the ESLs could be used at any site in the State of California, provided all stakeholders agree (SFBRWQCB 2020). In recent experience, regulatory agencies in various regions use ESLs as regulatory cleanup levels. The ESLs are not generally used at sites where the contamination is solely related to a leaking underground storage tank (LUST); those sites are instead subject to the Low-Threat Underground Storage Tank Closure Policy.

Senate Bill 1889, Accidental Release Prevention Law/CalARP Program

Senate Bill 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1, 1997, CalARP replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities that contain specified hazardous materials, known as “regulated substances” that, if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

Emergency Response to Hazardous Materials Incidents

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The plan is administered by Governor’s Office of Emergency Services (CalOES) and includes response to hazardous materials incidents. The CalOES coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, and Regional Water Quality Control Board.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations. It is created by the California Building Standards Commission and it is based on the International Fire Code (IFC) created by the

International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

California Emergency Services Act

This Act was adopted to establish the state's roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. This Act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The act is activated after the following occurs: (1) a local declaration of emergency; or (2) the CalEMA gives concurrence with the local declaration, or the Governor issues a Proclamation of a State Emergency. Once the Natural Disaster Assistance Act is activated, local government is eligible for certain types of assistance, depending upon the specific declaration or proclamation issued.

Title 14, Division 1.5 of the California Code of Regulations

California Code of Regulations, Title 14, Division 1.5 establishes the regulations for the California Department of Forestry and Fire Protection (CAL FIRE) and is applicable in all State Responsibility Areas (SRAs)—areas where CAL FIRE is responsible for wildfire protection. Any development in SRAs must comply with these regulations. Among other things, Title 14 establishes minimum standards for emergency access, fuel modification, setbacks to property line, signage, and water supply.

California Public Resources Code Sections 4201–4204

These sections of the California Public Resources Code require the California Department of Forestry to classify all SRAs into Fire Hazard Severity Zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

3.7.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The Safety Element of the General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) addresses physical hazards related to earthquakes, fire, flooding, hazardous material uses and transportation, soil and slope stability hazards.

Objective S-6 Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from hazardous materials accidents at large industrial facilities, at facilities handling acutely hazardous materials, and along transportation corridors.

S-6a The City should maintain lists of facilities in the planning area that involve the use, storage, and/or transportation of hazardous materials.

S-6b City policies concerning the use, storage, transportation and disposal of hazardous materials, and regarding underground or above-ground storage tanks shall reflect the County of Santa Barbara and the State Regional Water Quality Control Board policies and requirements and shall ensure that the use, storage, transportation and disposal of hazardous materials does not result in hazardous discharge or runoff.

S-6c The City should consider the presence of large industrial facilities, facilities that handle acutely hazardous materials or pesticides, and railroad and utilities right-of-ways in land use planning.

S-6d The City shall support protective measures against the spillage of hazardous materials, including crude oil, gas and petroleum products, and shall support effective containment and cleanup facilities and procedures for accidental spills that occur.

S-6e Where feasible, new hazardous industrial development shall be located away from existing developed areas.

Santa Barbara County Comprehensive Plan – Hazardous Waste Element

The Hazardous Waste Element of the Santa Barbara County Comprehensive Plan (County of Santa Barbara 2009) provides goals and policies for hazardous waste generated within the County. Goals and policies that could be considered applicable to the proposed project include materials storage and contaminated sites, as presented below.

Goal 9-1 To protect the public health and safety and the environment from risks posed by improper storage of hazardous materials and hazardous waste.

Policies **9-1** The County and cities shall encourage the proper storage of hazardous materials and hazardous waste through continued inspection efforts and public education regarding proper storage methods and regulations.

Goal 10-1 To protect public health and safety and the environment from risks due to the presence of abandoned or contaminated sites.

Policies **10-1** The County and cities should work with other involved agencies to establish a coordinated interagency effort for identification, regulation, mitigation, and notification of contaminated sites.

10-2 The County and cities in conjunction with the State Department of Health Services shall encourage on-site treatment and remediation to reduce the transport of hazardous waste from contaminated sites.

3.7.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous materials would occur if the project would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material.
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
g) Result in cumulatively considerable impacts to hazards and hazardous materials.
h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

3.7.4 Impact Analysis

The following analysis of potential project impacts is provided, based upon each of the above identified significance thresholds.

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material?

The use/operation of the proposed shared-use path and trail amenities would not involve the use of, nor generate, hazardous materials. Therefore, no impacts with regard to the transport, use, accidental release or disposal of hazardous materials would occur. **No impact** would occur*.*

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction of the proposed project would require heavy construction equipment, which involves the use of hydrocarbon fuels and lubricants that are considered hazardous materials, Concrete is considered a hazardous material until it cures, and is included in the project construction. Paint or other surface coatings are also considered hazardous materials, until they are fully dried; the bridge and certain fencing elements may involve paint application on site. During construction, hydrocarbon fuels and lubricants, paints and concrete may inadvertently enter the stormwater drainage system. A Storm Water Pollution Prevention Plan (SWPPP) covering

water quality protection during the construction phase of the project would be required to be prepared and implemented by the applicant pursuant to the National Pollutant Discharge Elimination System (NPDES) State Construction Activities Storm Water General Permit.. Accordingly, project hazardous materials impacts upon water quality from accidental releases during construction could be potentially significant. **Mitigation Measure (MM) WAT-2** would reduce impacts to **less than significant with mitigation.**

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No existing or proposed public schools are located within a quarter mile of the project site. Additionally, no hazardous materials would be kept on site once the proposed project is operational. Therefore, there would be no impact to adjacent schools from the use or handling of any hazardous materials on the project site. **No impact** would occur.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not included on a list of hazardous materials sites (refer to Section 3.7.1, Existing Conditions). Therefore, the project does not have the potential to expose people to a significant risk as a result of a known hazardous materials site. However, the northern portion of the trail alignment is immediately adjacent to the US Highway 101 alignment, and therefore aerially deposited lead (ADL) could occur in shallow soils, from the historic presence of lead as a gasoline additive affecting vehicle operations within the US Highway 101 alignment. Because of proposed grading for the trail, surface soils that could potentially contain ADL are likely to be removed, and transported off the site. However, some soils containing ADL could be used as fill for the project, or could be used off site as fill in areas where the public could have exposure to the soils. Consequently, impacts from ADL containing soil could be potentially significant. **MM-HAZ-1** would reduce impacts to **less than significant with mitigation**.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not located within the airport land use plan for any public use airport and is also not within two miles of a public airport. The closest public airport to the project site is the Santa Barbara municipal airport, located approximately 30 miles to the northwest. **No impact** would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Access to the proposed trail would be provided via the existing unimproved parking lot at the western end of the trail that connects to Carpinteria Avenue and also at Rincon Beach County Park from Bates Road, both of which are public streets that could be accessed by emergency vehicles and personnel. The Carpinteria-Summerland Fire Protection District will review the proposed project to ensure no interference with emergency response or evacuation would occur during construction, as potentially related to truck traffic on area roadways. The proposed project is designed to correct unsafe conditions such

as those that exist in the current alignment of the Pacific Coast Bikeway along US Highway 101 and the common practice of trespassing along the railroad corridor to access Rincon Beach County Park from the City of Carpinteria, thereby, reducing potential emergency events. Consequently, **no impact** would occur.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

According to the City of Carpinteria's General Plan/Coastal Plan Fire Hazards Zones Map, the project alignment is located within a moderate fire hazard area (City of Carpinteria 2003). According to the Santa Barbara County's Fire Protection Districts, High Fire Hazard Areas and Flood Hazard Areas Map, the proposed project is not located within a fire hazard area (County of Santa Barbara 2017. The proposed project would not involve the construction of buildings or introduce substantial numbers of people into the area. The proposed project is designed to prevent unwarranted fire hazards to the land and public safety through vegetation control and use of native plant species along the alignment and within the proposed parking area. **No impact** would occur.

h) Would the project result in cumulatively considerable impacts to hazards and hazardous materials?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to hazardous materials/safety impacts. However, based on the analysis above, and with adherence to applicable Objectives and Policies found in the City and County's General Plan/Local Coastal Land Use Plans, the project with required mitigation incorporated is not expected to result in any site-specific public health risk or hazard. The project's contribution to cumulative hazards impacts would not be considerable.

3.7.5 Mitigation

The project would require the implementation of **Mitigation Measure (MM) HAZ-1** to reduce impacts from the potential exposure of the public to soils containing aerially deposited lead. The project would also require the implementation of **MM-WAT-2** (refer to Section 3.8, Hydrology and Water Quality) to reduce impacts upon surface water quality from accidental release of hazardous materials during construction.

Required Mitigation Measures

MM-HAZ-1 Aerially Deposited Lead (ADL). Surface soils within the trail alignment segment north of the UPRR corridor shall be tested for potential ADL presence to determine if such soils may be used as fill, or must be disposed in a properly licensed landfill. Using the risk based screening levels developed by California Office of Environmental Health Hazard Assessment (OEHHA), excavated soils with a lead concentration less than or equal to 80 mg/kg total lead (analyzed by USEPA Method 6010 or 6020) would be acceptable for reuse without restrictions, including as fill material within the Rincon Trail project. Excavated soils that are considered a California hazardous waste (total lead concentration greater than or equal to 1,000 mg/kg or a soluble lead concentration greater than or equal to 5 milligrams per liter [mg/L] as determined by the California Waste Extraction Test [CAWet]) or are a RCRA hazardous waste and must be disposed of in a Class I hazardous waste landfill. Excavated soils with lead concentrations below 1,000 mg/kg but above 80 mg/kg total lead may be eligible for reuse with specific restrictions to reduce or eliminate exposure, with prior written approval from DTSC, or may be disposed of at an appropriately permitted landfill.

Plan Requirements: ADL testing requirements and soil re-use restrictions according to identified ADL concentration shall be shown on grading and building plans. Since excess soil material would be generated through proposed grading activities, soils containing greater than 80 mg/kg total lead shall

not be used as fill material for the project but shall be exported off site. Soil containing total lead greater than 1,000 mg/kg shall be disposed in a Class I hazardous waste landfill. ***Timing***: Condition shall be adhered to throughout all grading and construction activities. ***Monitoring***: City of Carpinteria and County staff shall ensure measures are on plans. City and County Grading Inspectors shall spot check and ensure compliance on site.

3.7.6 Level of Significance After Mitigation

With incorporation of **MM-HAZ-1** to address the potential for ADL to be present in shallow soils, and incorporation of **MM-WAT-2** (refer to Section 3.8) to reduce impacts upon surface water quality from accidental release of hazardous materials during construction, residual impacts related to hazardous materials would be less than significant.

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3.8 Hydrology and Water Quality

This section describes the hydrology and water quality conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. This section is based partially upon a drainage analysis prepared by Bengal Engineers, Drainage System Feasibility Discussion: The Rincon Multi-Use Trail, City of Carpinteria, which is included as Appendix G of this Environmental Impact Report.

3.8.1 Existing Conditions

Surface Drainage / Storm Water Run-off

The proposed trail route is located along areas that have been subject to fill placement, abandoned roadways, or old terraced road and rail cuts; the trail would be exclusively located within area that has been subject to artificial landform modification over the years. Please refer to Section 3.5 (Geology & Soils) for a detailed description of landform modification that has occurred within the trail alignment. A small unsanctioned trail exists in some areas of the proposed trail, including the portion of the proposed trail from the railroad crossing to the Rincon Beach County Park parking lot. At both ends of the trail are pre-existing parking areas; Rincon Beach County Park has a paved lot and at Carpinteria Avenue there is an existing dirt lot which would continue to provide informal parking for the proposed project.

The proposed Carpinteria Avenue trail head and parking lot is currently unimproved with an area crowned in the approximate center of the lot for drainage purposes. It is anticipated that the majority of the storm water runoff from the lot enters Highway 150, and then drains onto the southbound freeway on ramp and ultimately collects into the freeway drainage system; drainage from this freeway sub-area is currently conveyed by a storm drain which outlets at the beach. The remaining runoff likely enters Carpinteria Avenue and drains to the southern edge curb line, then west until it enters at a drop inlet located within the curb.

The Rincon Beach County Park parking lot has three visible drainage points. An infiltration area is located along the south side of the parking lot and serves the westernmost portion of the parking area, although most of the runoff from this area enters a drop inlet located at the western terminus of the parking area, which continues draining to the beach below. The eastern portion of the parking area drains from the County property onto Bates Road, where it enters a drop inlet located just north of the park entrance on the west side of the road, and likely into Rincon Creek through the existing storm drain system.

The majority of the length of proposed trail is outside of the City of Carpinteria's and Santa Barbara County's respective 2013 Statewide Phase II Small Municipal Separate Storm Sewer (MS4) General Permit (2013 General Permit) boundaries, and thus the majority of the project is exempt from the Post Construction Requirements (PCRs) of the 2013 General Permit. Because the project is not regulated by the 2013 General Permit and PCRs therein, the project may not fully avoid potential water quality impacts unless it achieves compliance with active construction and post-construction requirements of the Statewide Construction General Permit (CGP).

Flooding

The proposed alignment is not located within a 100-year flood hazard zone (FEMA 2019), nor is it within a Tsunami Inundation Zone (CDOC 2009).

Sea Level Rise (SLR)

Sea level rise is anticipated to occur because of an increase in the average oceanic temperatures globally, leading to the melting of polar ice caps. Some of the negative effects of sea level rise include flooding of low elevation areas that are currently above mean sea level, and increased erosion rates within areas along the ocean. The release of greenhouse gas (GHG) emissions is a key factor in the potential warming of the atmosphere and ocean temperature increases, and therefore projections of sea level rise rely heavily upon the predicted GHG emissions in the coming decades, on a world-wide basis. This methodology has led to the identification of a range for the possible elevation increases of sea levels at future reference time periods. For the local region, the issue of sea level rise has been addressed in several studies including *2017 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan* and *City of Carpinteria's Sea Level Rise Vulnerability Assessment* (SLRVA) (Carpinteria 2019).

The above studies of local sea rise potential identify a low, medium, high and extreme (worst-case highest) increase in sea level for the planning year horizons of 2030, 2060, and 2100, which are based upon the range for global GHG emissions in the same target years. Table 3.8-1 summarizes the sea level elevation increases using the "high GHG emissions" scenario for each target year.

Table 3.8-1. Sea Level Rise Projections for Carpinteria Coastline

Projected Horizon Year/Time	Sea Level Rise (inches/feet)	Probability of Occurring in Projected Year [1]
2030	10.2 inches/ ~1 foot	<0.5%
2060	27.2 inches/ ~2 feet	~2%
2100	60.2 inches/ ~5 feet	~2%

Source: City of Carpinteria 2019.

[1] The range of probabilities relate to scenarios in future greenhouse gas (GHG) emissions as well as sea level rise uncertainties largely associated with the rate of global ice sheet melt.

The range in predicted sea level rise for Year 2100 is a low of 2 feet up to an extreme (worst-case) of 10 feet (Carpinteria 2019). Using the "high GHG emissions" scenario, the Carpinteria SLRVA mapped the extent of sea level rise hazard for each of the target assessment years. The portion of the proposed Carpinteria Rincon Trail on the north side of the UPRR alignment is located outside of the sea level rise hazard zone through Year 2100. The portion of the proposed Carpinteria Rincon Trail on the south side of the UPRR alignment is located right at the boundary of the Year 2030 / Year 2060 hazard zones (Carpinteria 2019). The County of Santa Barbara sea level rise mapping is not as detailed but indicates that the Rincon Beach County Park facilities could be inundated by approximately Year 2060 (Santa Barbara County 2017). The 2100 hazard zone boundary extends up from the ocean to the western edge of US Highway 101 at the Wave Overhead crossing of the UPRR alignment and expands further east to include the entire US Highway 101 corridor at approximately the western end of the Rincon Beach County Park parking lot (Carpinteria 2019). The location of the southern portion of the trail within the sea level rise hazard zone indicates there would be the potential for accelerated erosion and increased sea cliff retreat to affect the southern trail segments. US Highway 101 and the coastal bike route southward from Rincon Point Road/Bates Road could become permanently inundated by 2100 absent engineering solutions, according to this mapping (Carpinteria 2019).

3.8.2 Relevant Plans, Policies, and Ordinances

3.8.2.1 Federal

Clean Water Act

The federal CWA is the primary surface water protection legislation throughout the country. By employing a variety of regulatory and nonregulatory tools, including establishing water quality standards, issuing permits, monitoring discharges, and managing polluted runoff, the CWA aims to restore and maintain the chemical, physical, and biological integrity of surface waters to support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water." The CWA regulates both the pollutant content of point-source discharges, as well as addressing polluted runoff (nonpoint-sources).

Section 401

CWA Section 401 requires that state water quality standards be met and that construction, dredging, and disposal activities not cause concentrations of chemicals in the water column that exceed state standards. CWA Section 401 requires a water quality certification from the SWRCB (as delegated to RWQCBs).

Section 402

CWA Section 402 states that discharge of pollutants to waters of the United States is unlawful unless the discharge is authorized and in compliance with an NPDES permit. The USEPA has granted the state primacy in administering and enforcing the provisions of the CWA and the NPDES Program. The NPDES permit program is the primary federal program that regulates point-source and non-point-source discharges to the waters of the United States (see also NPDES Program below).

National Flood Insurance Program

FEMA's National Flood Insurance Program includes a flood hazard mapping program, in which FEMA identifies flood hazards and assesses flood risks. Under this program, FEMA produces Flood Insurance Rate Maps (FIRMs) which delineates flood risk areas and risk levels. Areas identified as at risk for flooding on the FIRMs are referred to as Special Flood Hazard Areas, which are those areas at risk of the 100-year flood (1% annual chance of flooding). It also delineates areas that are in moderate flood hazard areas, or those areas between a 0.2% annual chance of flooding (500-year flood) and 1.0% chance of flooding (a Special Flood Hazard Area). Special Flood Hazard Areas are further divided into zones, which provide information on the degree of flooding within the risk area, including average depth of flooding.

3.8.2.2 State

Porter-Cologne Act

The Porter-Cologne Act) (California Water Code section 13000 et seq.) is the primary law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of

water. The Porter-Cologne Act applies to surface waters, wetlands, groundwater, and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act, the policy of the state is as follows:

- That the quality of all the waters of the State shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine RWQCBs (based on hydrogeologic barriers) and the SWRCB, who are charged with implementing its provisions, have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions in each of nine hydrologic regions.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB and RWQCBs are responsible for preserving, enhancing, and restoring "the quality of California's water resources and ensuring their proper allocation and efficient use for the benefit of present and future generations." The SWRCB develops statewide regulations governing water use and point-source and nonpoint-source pollutant discharge, while the RWQCBs work in smaller regions throughout the state to implement SWRCB policies and regulations. RWQCBs also establish additional region- and area-specific regulations and policies to achieve water quality goals under the CWA and the Porter-Cologne Act.

California Ocean Plan

The SWRCB adopted the California Ocean Plan in 1972 and amended it recently in 2015 and again in 2019 (SWRCB 2019). The Ocean Plan provides control for the discharge of waste to ocean waters and ensures the protection of beneficial uses of ocean waters. The Ocean Plan sets forth water quality objectives (WQOs) for protection of marine aquatic life and sets forth objectives for bacterial, physical, chemical, and biological characteristics for ocean waters. Compliance is determined from samples collected within the waste field where initial dilution is completed. In cases where there is conflict between limitations set forth in the Ocean Plan and those set forth in other federal or state legislation, the more stringent limitations apply. The 2019 update of the Ocean Plan includes an amendment to address issues associated with desalination facilities (Desalination Amendment).

Water Quality Control Plan for the Central Coast Basin

The City of Carpinteria and County of Santa Barbara are within the jurisdiction of the Central Coast RWQCB. This region's Water Quality Control Plan for the Central Coast Basin (Basin Plan) (RWQCB 2017) details the existing and potential beneficial surface and groundwater uses in the region, as well as water quality objectives and implementation measures throughout the basin. The Basin Plan includes water quality objectives and implementation measures for water quality parameters, including the following:

Ocean Waters

- Dissolved Oxygen
- pH
- Radioactivity

National Pollutant Discharge Elimination System Program

General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities

In California, the SWRCB administers regulations promulgated by the USEPA (55 CFR 47990) requiring the permitting of stormwater-generated discharges under the NPDES. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009 DWQ amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES Permit CAS000002). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the submittal of a Notice of Intent) and the development and implementation of an SWPPP. The SWPPP should contain a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

3.8.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City of Carpinteria's General Plan/Local Coastal Land Use Plan Safety Element includes the following objectives and policies relevant to flood hazards and the proposed project (City of Carpinteria 2003):

Objective S-4 Minimize the potential risks and reduce the loss of life, property and the economic and social dislocations resulting from flooding.

Policy S-4a All new development proposed in the 100-year floodplain must adhere to the County of Santa Barbara Floodplain Management Ordinance, Chapter 15-A of the County Code.

Policy S-4b The development of critical facilities within the 100-year floodplain should be discouraged.

Policy S-4c Setbacks from flood control channels, as determined by the Santa Barbara County Flood Control District, will be required to allow access to maintain and enable proper operation of the channels.

Policy S4-e The City shall establish setback guidelines for land use planning purposes along natural creek, river, or stream floodplains, and identify and pursue opportunities to eliminate existing concrete channels and/or banking from creeks, rivers, or streams

The General Plan/Local Coastal Land Use Plan Open Space, Recreation and Conservation Element includes the following objectives and policies relevant to hydrology and water quality:

Objective OSC-6 Preserve the natural environmental qualities of creekways and protect riparian habitat.

Policy OSC-6d Carry out and maintain all permitted construction and grading within stream corridors in such a manner so as to minimize impacts on biological resources and water quality such as increased runoff, creek bank erosion, sedimentation, biochemical degradation, or thermal pollution.

Policy OSC-6e Natural drainage patterns and runoff rates and volumes shall be preserved to the greatest degree feasible by minimizing changes to natural topography, and minimizing the areas of impervious surfaces created by new development.

Policy OSC-6f All development shall be evaluated for potential adverse impacts to water quality and shall consider Site Design, Source Control and Treatment Control BMPs in order to minimize polluted runoff and water quality impacts resulting from the development. In order to maximize the reduction of water quality impacts, BMPs should be incorporated into the project design in the following progression: (1) Site Design BMPs, (2) Source Control BMPs, and (3) Treatment Control BMPs.

Objective OSC-10 Conserve all water resources, and protect the quality of water

Policy OSC-10a Minimize the erosion and contamination of beaches. Minimize the sedimentation, channelization and contamination of surface water bodies.

Policy OSC-10c Degradation of the water quality of groundwater basins, nearby streams or wetlands, or any other waterbody shall not result from development. Pollutants such as sediments, litter, metals, nutrients, chemicals, fuels or other petroleum hydrocarbons, lubricants, raw sewage, organic matter and other harmful waste shall not be discharged into or alongside any waterbody during or after construction.

Santa Barbara County Coastal Land Use Plan

The County's Coastal Land Use Plan applies to the coastal areas of the County, including the project site. The following policy of the Coastal Land Use Plan is relevant to the Proposed Project related to hydrology and water quality (County of Santa Barbara 2019):

Policy 3-12 Permitted development shall not cause or contribute to flood hazards or lead to expenditure of public funds for flood control works, i.e., dams, stream channelizations, etc.

3.8.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to hydrology and water quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the project would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on or off-site.

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

   iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

   iv. impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

f) Result in cumulatively considerable hydrological or water quality impacts.

3.8.3.1 Local Significance Thresholds

The City of Carpinteria's Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (1997), states that the following conditions or impacts shall be considered significant:

Hydrology

Flooding

a) Significant impacts result if the project would impose flood hazards on other properties.

b) The Municipal Code prohibits development within areas of special flood hazard except under certain circumstances. The policy requires approval by the Floodplain Administrator before construction, development or alteration begins within any area of special flood hazard.

If the project would result in increased runoff:

a) Impacts on hydrologic conditions may be significant because the area available for aquifer recharge is reduced. This may impact well water supplies.

b) There may be significant impacts on stream hydrology if uncontrolled runoff results in erosion and subsequent sedimentation of downstream water bodies.

   Threshold:

   - moderate to large-scale projects where grading would occur during rainy season; or
   - projects proximate to bodies of water or drainageways.

If project would result in modifications to existing drainage patterns:

a) There may be significant impacts on biological communities if drainage patterns are changed.
Threshold:

- Projects where drainage patterns are influenced such that existing vegetation would decline because long-or short-term soil-plant-water relationships would no longer meet habitat requirements.
- Projects which would result in substantial changes to streamflow velocities.

Water Quality

Pollution/Contamination

a) Impacts on water quality may result in significant human health and safety impacts.
Threshold:

- Projects which would generate any amount of highly noxious substance.
- Projects which would generate large amounts of substances which in small amounts are insignificant but are cumulatively hazardous.
- Projects that would result in the deterioration of the quality of a drinking water source.

b) Impacts on water quality may have significant impacts on biological communities.
Threshold:

- Projects which would generate, or result in the accumulation of substances which affect health, or cause genetic defects of wildlife either by direct physical contact with contaminated water, or by water quality changes which cause decline in riparian or lacustrine vegetation which provide wildlife habitat.

c) Project would be significant if it would result in erosion and subsequent sedimentation of water bodies:
Threshold:

- moderate to large-scale grading project (>2,000 cubic yards per graded acre)
- projects that results in loss of vegetation on slopes (e.g., brush management measures).

3.8.4 Impact Analysis

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Because the majority of the length of proposed trail is outside of the City of Carpinteria's and Santa Barbara County's respective 2013 Statewide Phase II Small Municipal Separate Storm Sewer (MS4) General Permit (2013 General Permit) boundaries, the majority of the project is exempt from the Post Construction Requirements (PCRs) of the 2013 General Permit. Nonetheless, the proposed project has been designed to reduce or minimize the potential for adverse impacts on stormwater quality. The proposed trail would result in approximately 2,800 linear feet (or 1.0 acre) of impermeable surfaces (concrete) but would also include native restoration plantings or hydro-seed application at graded areas along the alignment. Native plantings or the

application of hydro-seed would stabilize slope areas to minimize soil erosion and avoid sediment-related water quality impacts. The re-contouring of existing manufactured slopes to employ a shallower slope angle, revegetation of project slopes, and bench-work to intercept sheet flow across extensive slope faces are the principal project design components intended to ensure the avoidance of water quality impacts. In addition, trail use would be limited to pedestrians and cyclists, motor vehicles would be prohibited except for emergency response or infrequent maintenance activities. Consequently, petroleum distillate contaminants associated with many transportation facilities would not be associated with the proposed mixed-use trail. The use of the trail by pets may lead to pet waste contamination of water runoff. Dog feces, if left behind, can contribute to high bacteria counts in runoff water. However, pet waste receptacles with bags will be provided at the trailheads within the parking areas to encourage clean-up by pet owners and trail users. Because of the potential for sediment and other impurities to affect stormwater quality, the project's long-term impacts to water quality would be potentially significant. **Mitigation Measure (MM) WAT-4**, **MM-WAT-5**, and **MM-WAT-6** are intended to address these long-term water quality impacts and are required to be incorporated.

The proposed project must also meet the construction-related standards set out in the County's and City's Storm Water Management Plans. During construction, soil, dust, paints and concrete may inadvertently enter the stormwater drainage system. A Stormwater Pollution Prevention Plan (SWPPP) covering water quality protection during the construction phase of the project would be required to be prepared and implemented by the applicant pursuant to the National Pollutant Discharge Elimination System (NPDES) State Construction Activities Storm Water General Permit. The General Permit, which is implemented by the State Water Resources Control Board, is required for projects disturbing one acre or more of soil. The SWPPP is required to include BMPs to be implemented during construction to control the discharge of materials from the site, and may include temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets or soil stabilizers. Standard erosion control measures, as identified below, would ensure that the project does not have the potential to result in substantial soil erosion affecting water resources. Accordingly, the project would result in water quality impacts that are significant without mitigation. **MM-WAT-1, MM-WAT-2** and **MM-WAT-3** are intended to reduce these short-term water quality impacts to less than significant levels and are required to be incorporated. **Impacts would be less than significant with mitigation incorporated.**

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

The project would not significantly deplete groundwater supplies or interfere substantially with groundwater recharge. Given the relatively small size of the alignment (approximately 1.0 acre of trail surface) and the use of native vegetation restoration where feasible, the project would not significantly interfere with natural groundwater recharge. With respect to groundwater depletion, no new water supply would be required to serve the proposed trail use; native vegetation employed for biological restoration and project landscaping would not require irrigation following an initial grow-in period. Cut and fill areas are typically well drained with a very rapid surface runoff (USDA 2019) which will be addressed through project design features and standard stormwater and erosion control measures to ensure no adverse effects on existing groundwater supplies will occur from project implementation. The project's impact on groundwater supplies would be **less than significant**

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on or off-site?

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

iv. impede or redirect flood flows?

The project would moderately alter the existing drainage patterns of the site, via regrading of project slopes and short-term removal of vegetation, as well as through introduction of the impervious trail surface (approximately 1 acre of new impervious surface). Increased stormwater runoff and erosion potential during construction and until new vegetation is established are addressed under **MM-WAT-1, MM-WAT-2,** and **MM-WAT-3**. Long-term stormwater runoff from the trail surface would be collected by a concrete v-ditch adjacent to the trail, and released through a series of short length storm drains with discharge along the adjacent beach. The provision of project-specific storm drains would accommodate the storm runoff volumes anticipated from the project's impervious surfaces, and also avoid directing stormwater to existing public storm drain systems in the project vicinity that could lack surplus capacity to accommodate the project. Release of project storm drainage along the beach would not result in substantial erosion, as the introduction of impervious surface would be minimal compared to the overall project drainage area and the trail drainage will be divided into 6 separate outlets to minimize the discharge volume from any of the outlets. Illustration 3.8-1 illustrates these 6 outlets, three exist (blue color) and three would be new (magenta).

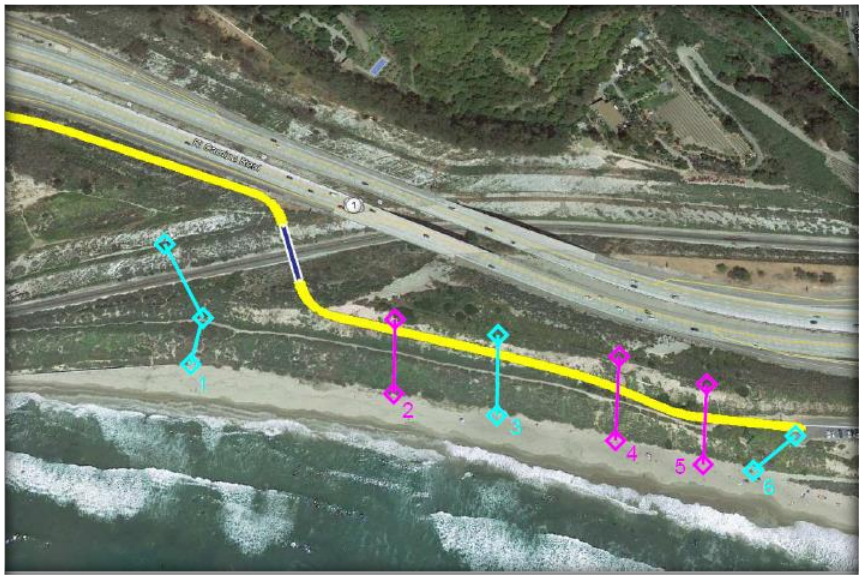
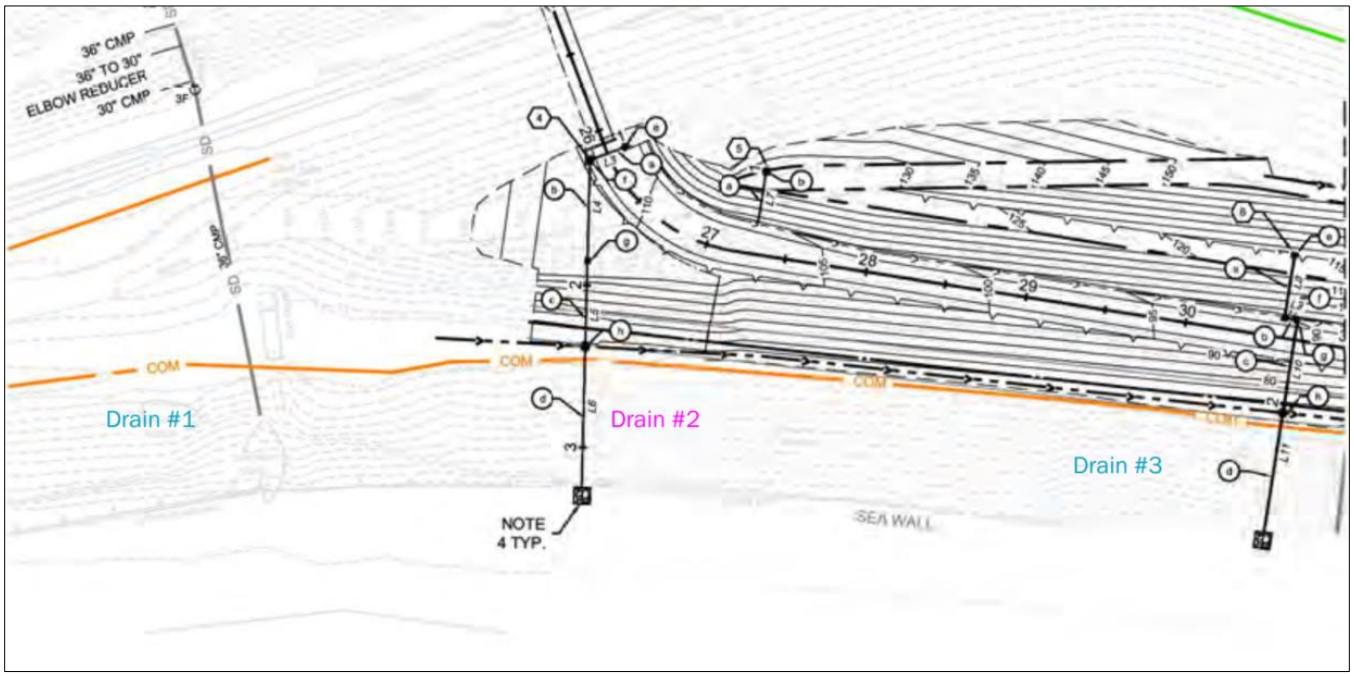


Illustration 3.8-1 Major Storm Drainage Components of the Project

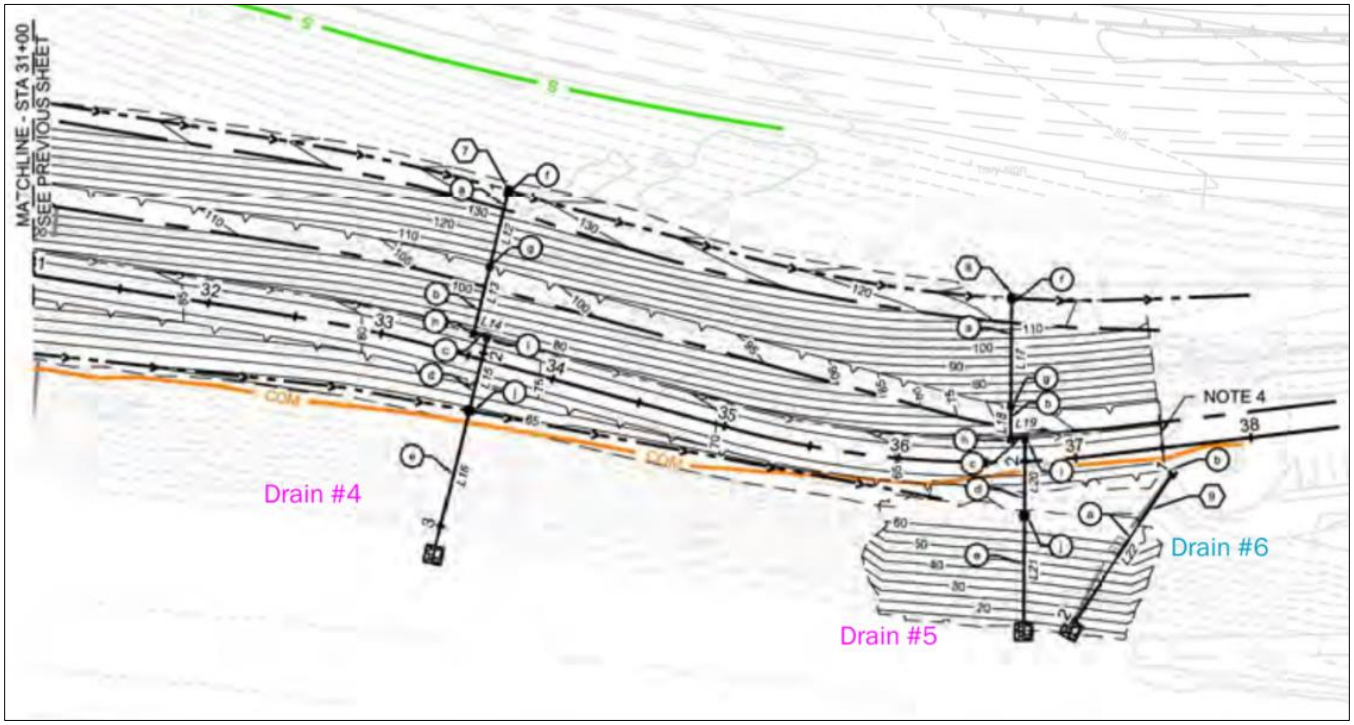
SOURCE: Bengal Engineering

Illustrations 3.8-2 and 3.8-3 provide plan sheet excerpts of the proposed drainage system outlets, with connection to other drainage conveyance elements.



SOURCE: Bengal Engineering

Illustration 3.8-2 Design Details for Storm Drain Outlets #1 - #3



SOURCE: Bengal Engineering

Illustration 3.8-3 Design Details for Storm Drain Outlets #4 - #6

The proposed storm drain system includes concrete v-ditch for collection and conveyance of runoff water, drop inlets connecting to vertical drainpipes, and outlets at the beach elevation. The concrete v-ditch components would be durable, and not prone to weathering or failure over time. The vertical drains are proposed to be composed of a 12-inch diameter corrugated metal pipe. The pipe would be buried to cross beneath the trail section and would descend partly down the bluff face. However, in order to allow visual access for inspection of the pipe integrity, the lower portion of the storm drainpipe would be mounted on the surface of the slope/bluff face. The corrugated metal material was selected for weight consideration and as a superior material to PVC for withstanding damage from fire or sun exposure. However, the metal is prone to rust or corrosion, with the potential for collapse or failure over time. Leaks from the vertical drains would contribute to erosion of the bluff face, failure of a vertical storm drain could lead to significant erosion of the bluff face. The storm drains would be installed by the project, **MM-WAT-5** requires periodic inspection and maintenance of the storm drains in perpetuity to prevent failure of such facilities. Accordingly, the project's impacts on existing drainage patterns and storm drain systems would be potentially significant. Incorporation of **MM-WAT-5** would reduce impacts to **less than significant with mitigation**.

The proposed project does not include housing units or habitable structures other than minor trail amenities and ancillary support features, such as the proposed pedestrian bridge over the UPRR corridor. Furthermore, according to the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the area (Panel 06083C1438H), the project is not located within a 100-year or a 500-year flood boundary (FEMA 2019). According to the Santa Barbara County's Fire Protection Districts, High Fire Hazard Areas and Flood Hazard Areas Map, the proposed project is not located within a 100-year flood hazard overlay (County of Santa Barbara 2017). The project alignment would not be located in the vicinity of a levee or dam.

The bluff face portion of the project south of the UPRR corridor is identified in both the City of Carpinteria's Sea Level Rise Vulnerability Assessment and the County of Santa Barbara's Vulnerability Assessment as being an area expected to be susceptible to erosional impacts as a result of sea level rise, which could reach up to a worst-case maximum of 10 feet by year 2100 (City of Carpinteria 2019). In fact, the erosion hazard limits associated with sea level rise in year 2100 extend to US Highway 101, in the areas just east of the UPRR undercrossing of US Highway 101 (City of Carpinteria 2019). Using the "high GHG emissions" scenario, the alignment of the trail south of the UPRR crossing generally follows the boundary between the Year 2030 hazard area and the Year 2060 hazard area. The drainage system outlets infrastructure would be located within the Year 2030 hazard area, on the ocean side of the trail. Based upon the "high GHG emissions:" the probability that sea level rise would reach 1 foot by the year 2030 is 0.5%; the probability it will reach 2 feet by 2060 is 2%. With sea level one to two feet higher, the bottom of the storm drain outlets could be submerged at times, and the face of the bluff adjacent to the drains could experience accelerated erosion. Some additional maintenance may be required to replace corroded elements at the bottom of the drain outlets or to re-anchor the lower end of the drain outlets to the bluff face. However, wholesale replacement of the bluff-face vertical down drain portions of the storm drain system because of sea level rise damage is not anticipated to be required even by the Year 2060, and based on the "high GHG emissions" estimate. Similarly, the trail itself would not be directly threatened by the 2-foot sea level rise predicted by 2060, which has only a 2% calculated probability of occurrence.

By the Year 2100, there is a 2% probability of a 5-foot rise in sea level elevation along the coast adjacent to Carpinteria Bluffs and Rincon Point using the "high GHG emissions" scenario (City of Carpinteria 2019). With this magnitude of sea level rise, the erosion hazard zone would extend from the ocean up

to the US Highway 101 corridor, east (or south) of the UPRR crossing, which would envelop the entire southern portion of the trail alignment and the Rincon Beach County Park facilities. Accelerated erosion would primarily result from wave action superimposed on the higher elevation sea level surface, jeopardizing the base area of the existing coastal bluff/sea cliff. Bluff retreat/erosion rates for the Monterey formation in southern Santa Barbara County average approximately ½ foot per year (Santa Barbara County 2017); however, the anticipated acceleration of bluff retreat rates from sea level rise have not been quantified.

The proposed trail is set back from the base of the bluffs by a distance ranging between 60 and 100 feet horizontally. Even if the bluff retreat rates were to double from the influence of sea level rise (i.e., 1 foot per year), the closest portion of the trail to the base of the existing sea cliff would represent a horizontal distance equivalent to 60 years of erosion. While storm drain outlets on the bluff face may need to be periodically repaired or replaced in this 60-year period, the trail itself likely would not be threatened within this timeframe. For transportation infrastructure, a useful life of 50-75 years is typically employed (50 years for pavement, 75 years for bridges, Caltrans 2018). Thus, even with accelerated erosion of the bluff face caused by coastal flooding (i.e., greater wave uprush or more frequent inundation of the bluff base), the alignment of the trail south of the UPRR corridor is not anticipated to be impacted by sea level rise or exacerbated coastal flooding over the useful life of the project. In addition, recommendations prescribed in the geotechnical report (Bengal 2019) for the slope created above and below the trail bench would increase the stability of these slopes and reduce the existing erosion rates for the bluff faces along the southern trail alignment, which could partially offset the predicted acceleration of erosion rates associated with sea level rise. **No flood hazard impacts** would occur.

The City of Carpinteria's Sea Level Rise Vulnerability Assessment indicates that the Rincon Beach County Park could be at risk for inundation by 2060 (Carpinteria 2019). To protect similar recreation facilities, the City of Santa Barbara and City of Carpinteria have a long-standing practice of building a winter sand dune or berm along their respective beaches. Creation of a winter sand berm might be one feasible approach used by the County in the future to protect the Rincon Beach County Park facilities. Extending the creation of such an annual winter berm eastward along the base of the bluffs also could be one method contemplated for slowing overall bluff retreat rates that have been accelerated by sea level rise.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Inundation by seiche, tsunami, or mudflow can result from strong seismic activity, and such inundation is especially of concern where it could affect development involving pollutant sources potentially released to the environment. According to the City of Carpinteria's General Plan/Coastal Plan Fault Map, the Rincon Creek fault is located to the north of the proposed project and the Carpinteria Fault is located to the south (City of Carpinteria 2003). Although the Pacific Ocean is located to the south of the proposed project site, the proposed trail is located at elevations ranging from 40 feet above sea level to 185 feet above sea level. Where the trail is aligned along the bluffs, the elevation ranges from approximately 65 to 75 feet above sea level. According to the California Department of Conservation Tsunami Inundation Map For Emergency Planning - Carpinteria Quadrangle, the project site is not located within an area of potential tsunami inundation (CDOC 2009). The proposed project is not located near an enclosed or partially enclosed body of water; therefore, there would not be subject to inundation by seiche. Areas susceptible to debris and mud flows correspond to the areas with a high potential for earthquake-induced landslides. The City of Carpinteria's General Plan Slope Stability Hazards Map indicates that the project

is not located within a high landslide potential area or a high rock fall potential area (City of Carpinteria 2003). Finally, the project does not involve any hazardous materials or other pollutants that could be released in the event of inundation of the project site. Impacts relating to inundation by seiche, tsunami or mudflow would be **less than significant.**

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Because the majority of the length of proposed trail is outside of the City of Carpinteria's and Santa Barbara County's respective 2013 Statewide Phase II Small Municipal Separate Storm Sewer (MS4) General Permit (2013 General Permit) boundaries, the majority of the project is exempt from the Post Construction Requirements (PCRs) of the 2013 General Permit. The project proposes drought-tolerant native landscaping with no permanent irrigation source, and therefore groundwater extraction to support the project would be temporary during plant establishment and would not conflict with any adopted sustainable groundwater management plan. Temporary irrigation during the plant establishment period (first year) would be provided via small-scale water trucks. **No impacts** would occur to a water quality control plan or sustainable groundwater management plan.

f) Would the project result in cumulatively considerable hydrological or water quality impacts?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to hydrology and water quality impacts. However, based on the analysis above, and with adherence to applicable Objectives and Policies found in the City and County's General Plan/Local Coastal Land Use Plans, the project's contribution to cumulative water resource impacts would not be considerable and would be further reduced through the implementation of the project specific measures below.

3.8.5 Mitigation

The project would require the implementation of **MM-WAT-1** through **MM-WAT-5** to reduce potential project impacts to surface water quality.

MM-WAT-1 **Obtain Coverage Under Construction General Permit**. The project shall obtain coverage under a Construction General Permit via the State Water Resources Control Board (SWRCB) (Water Quality Order 99-08-DWQ).

Plan Requirements: The requirement to obtain coverage from the SWRCB under a Construction General Permit shall be indicated on grading plans. ***Timing***: Evidence of coverage under a Construction General Permit shall be provided to the City of Carpinteria Public Works Department and County of Santa Barbara Public Works Division prior to the initiation of grading. ***Monitoring***: City and County Public Works staff shall confirm evidence of the Construction General Permit issuance prior to issuance of grading permits.

MM-WAT-2 **Stormwater Pollution Prevention Plan.** The construction contractor shall prepare a Stormwater Pollution Prevention Plan that includes Best Management Practices (BMPs) to be implemented and monitored prior to and during construction. The following BMPs shall be incorporated into the SWPPP to minimize potential construction-related water quality impacts:

1. Disturbed areas shall be stabilized or re-vegetated prior to the start of the rainy season. The work area shall be flagged to identify its limits. Vegetation shall not be removed or intentionally damaged beyond these limits.
2. Construction materials shall be placed in designated areas where they could not enter water bodies or storm drains due to spillage or erosion.
3. Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from watercourses and shall be disposed of regularly.
4. During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. The concrete washout area shall be isolated from water bodies, and wash water and waste shall be removed from the project site. The location of the washout area shall be clearly noted at the construction site with signs.
5. All fueling of heavy equipment shall occur in a designated area removed from water bodies and other drainages, such that any spillage would not enter surface waters. The designated refueling area shall include a drain pan or drop cloth and absorbent materials to clean up spills. The location of the fueling area shall be clearly noted at the construction site with signs.
6. Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant and shall be examined for leaks on a daily basis. All maintenance shall occur in a designated off-site area. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.
7. Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned up immediately. Absorbent materials shall be maintained on the construction site for this purpose.
8. Special considerations for work during the rainy season: stockpiled soils should be covered at the end of the work day, and concrete pouring shall be avoided within 15 days of a forecasted rain event to allow full curing, due to its toxic nature until it has fully cured.

Plan Requirements: A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented prior to construction and shall include the above elements. The SWPPP shall be submitted to City and County Public Works for review and approval prior to the issuance of grading permits for the project. ***Timing***: The stormwater features and BMPs shall be installed and operational prior to initiation of grading. ***Monitoring***: City and County Public Works staff shall site inspect for installation and maintenance in accordance with the approved plan and periodically thereafter to ensure proper maintenance over the duration of construction activities.

MM-WAT-3 **Erosion and Sediment Control Plan.** Best available erosion and sediment control measures shall be implemented and maintained during grading and construction. Best available erosion and sediment control measures may include, but are not limited to use of sediment basins, gravel bags, silt fences, geo-bags or gravel and geotextile fabric berms, erosion control blankets, coir rolls, jute

net and straw bales. Construction access points shall be stabilized using gravel beds, rumble plates or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.

Plan Requirements and Timing: An erosion and sediment control plan shall be submitted to and approved by City and County Public Works prior to issuance of grading permits. The plan shall be designed and implemented to address erosion and sediment control during all phases of development of the site. ***Monitoring***: City and County Public Works shall perform site inspections throughout construction.

MM-WAT-4 **Planting of Vegetation.** As soon as practicable following the completion of trail construction, the contractor shall install native plantings for biological restoration and hydro-seed slope areas with an appropriate native plant seed mix, in order to provide long-term stabilization of soils disturbed during construction. Periodic watering and re-application of hydro-seed shall occur as necessary until vegetation on slope surfaces has been successfully established.

Plan Requirements and Timing: Landscaping plans including biological restoration areas and hydro-seeding of manufactured slope areas submitted to Community Development Department/Planning & Development (CDD/P&D) for review prior to approval of a coastal development permit. ***Monitoring***: CDD/P&D shall site inspect vegetation plantings and hydro-seed application before issuing final clearance and acceptance of the trail project.

MM-WAT-5 **Periodic Inspection and Maintenance of Storm Drain Components.** Staff from City and County Parks/Public Works departments shall perform an annual inspection of stormwater components annually, prior to the on-set of the rainy season (November 1) to ensure all components are in good repair and are not blocked by debris or sediment. Any materials found to be obstructing flow in the drainage system shall be removed prior to November 1 each year. The exposed vertical portion of each of the corrugated metal pipe drains shall be examined annually for signs of corrosion, damage or openings in the drain pipe wall. Corrosion visible on the exterior pipe wall shall be treated and sealed promptly, any holes through the pipe wall shall be patched, or the damaged/affected segment shall be replaced or modified.

Plan Requirements and Timing: The applicant shall include these inspection and maintenance requirements in the final drainage system design plans. The plans shall be submitted to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review prior to approval of a grading permit. ***Monitoring***: A memo with the annual inspection notes and corrective maintenance performed shall be prepared and submitted to the City and County Public Works Departments.

MM-WAT-6 To minimize pollutants impacting the ocean, storm drain filters/inserts shall be installed in the project area storm drain inlets. The filters/inserts shall be maintained in working order.

Plan Requirements: Prior to approval of Grading or Building Permits, the applicant shall submit plans identifying the type and location of filters/inserts to Community Development Department/Planning & Development (CDD/P&D) and City and County Public Works for review and approval. The location of such filters/inserts shall be noted on grading and building plans

Filters/inserts shall be installed prior final clearance and shall be cleaned using approved methods at least twice a year, once immediately prior to November 1 (before the start of the rainy season) and once in January. **Monitoring:** CDD/P&D and City and County Public Works shall site inspect periodically throughout the construction phase to ensure proper installation. Records of maintenance shall be maintained by City/County and shall be submitted to CDD/P&D and City and County Public Works on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year, the records shall be maintained by the City/County. CDD/P&D and Public Works shall review the maintenance records and site inspect as needed following completion of construction to ensure periodic cleanout

3.8.6 Level of Significance After Mitigation

After implementation of **MM-WAT-1** through **MM-WAT-6**, residual impacts to hydrology and water quality resulting from potential uncontained stormwater runoff or soil erosion and sedimentation during construction and operation of the project would be less than significant.

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3.9 Land Use and Planning

This section describes the existing land uses within the Carpinteria Rincon Trail Project (project or proposed project) site and vicinity, identifies the land use and zoning designations applicable to the project site, provides associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.9.1 Existing Conditions

The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue to Rincon Beach County Park along abandoned roadways or old terraced road and rail cuts. The current alignment for the Union Pacific Railroad (UPRR) is oriented east/west within the project site, and roughly bisects the proposed trail near the center of its alignment. A small unsanctioned trail exists in some areas of the proposed trail, including the portion of the proposed trail from the UPRR crossing to the Rincon Beach County Park parking lot.

The Land Use Elements in the City General Plan/Local Coastal Land Use Plan and County Comprehensive Plan establish the types and intensities of land uses within these communities and guide growth and development within Carpinteria and unincorporated County lands within the Carpinteria Valley. The Land Use Element is the heart of the Land Use Plan of the two certified Local Coastal Programs (California Coastal Act of 1976 Section 30108.5); however, other elements of the General Plan are also included as components of the Land Use Plan for the purposes of the respective Local Coastal Programs.

The vision for the City includes qualities the community would like to retain and aspects that could benefit from change. The City and surrounding area enjoy a variety of attractive natural resources including safe, clean beaches, coastal bluffs, a salt marsh, several creeks, a narrow valley and a coastal mountain range. These same features contribute to the environmental qualities of the surrounding County lands.

U.S. Highway 101 is located to the north of the proposed trail alignment, with the Pacific Ocean to the south below the Carpinteria bluffs; the UPRR rail corridor bisects the central portion of the trail alignment. Undeveloped bluff open space is located adjacent to the western terminus of the trail and existing informal dirt parking lot, while Rincon Beach County Park and the Rincon Point residential community are located adjacent to the eastern terminus of the trail.

The portion of the project site within the City has a General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (City of Carpinteria 2003) and has been zoned for Resort Zone District use (City of Carpinteria 2021). The portion of the project within the County of Santa Barbara is designated as Other Recreation/Open Space (County of Santa Barbara 2019) and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2020). The proposed public multi-use trail would conform to the allowed uses under the existing land use designations of the City and County, and would also be consistent with the zoning designations of both jurisdictions.

3.9.2 Relevant Plans, Policies, and Ordinances

3.9.2.1 Federal

There are no federal plans, policies, or ordinances applicable to the land use considerations of the proposed project.

3.9.2.2 State

California Coastal Act of 1976

The California Coastal Act of 1976 (Coastal Act) establishes goals and provisions for a designated Coastal Zone along the entire California coastline. Within the City of Carpinteria, the Coastal Zone is coterminous with the City Boundary. In August 2003, the California Coastal Commission certified the latest update of the City's Coastal Land Use Program, further discussed below. In the Carpinteria Valley outside of the City, the Coastal Zone generally extends inland to State Route 192/150. The California Coastal Commission certified the latest update of the County's Coastal Land Use Program in 1981 (County of Santa Barbara 2019).

Senate Bill 375

The adoption of California's Sustainable Communities and Climate Protection Act, Senate Bill (SB) 375 on September 30, 2008, aligns with the goals of regional transportation planning efforts, regional greenhouse gas (GHG) reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations such as the Santa Barbara County Association of Governments (SBCAG) to adopt a Sustainable Communities Strategy (SCS) within their regional transportation plan to demonstrate achievement of GHG reduction targets. In compliance with SB 375, SBCAG has adopted an SCS that covers all of the City of Carpinteria, as well as other cities and unincorporated portions of Santa Barbara County (SBCAG 2013).

3.9.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

California State Government Code Section 65300 requires that every city adopt a General Plan, sometimes referred to as a City's blueprint for growth and development. The City's General Plan, originally adopted in 1986 and updated in 2003, contains the seven mandatory elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise and Safety. The City's General Plan combined several of these required elements with an optional element, resulting in the Open Space, Recreation & Conservation Element. The Carpinteria General Plan also included several additional desired optional elements: The Community Design Element and Public Facilities and Services Element (City of Carpinteria 2003). The Land Use Element is described in further detail below, including applicable objectives and policies. The remaining elements of the Carpinteria General Plan are described within the EIR sections to which they pertain. This document also serves as the City's Local Coastal Land Use Plan, which ensures that the local government's land use plans, zoning ordinances, zoning maps, and implementation actions meet the requirements, provisions and polices of the California Coastal Act.

City of Carpinteria General Plan – Land Use Element

The Land Use Element designates various land uses in the city and specifies the development and land uses which are allowed within each land use district (City of Carpinteria 2003). The Land Use Element is intended to establish and maintain an organized and balanced set of land uses within the City to offer economic, housing, and recreation opportunities while avoiding conflict between land uses. Objectives and polices from the Land Use element which are applicable to the proposed project are presented below.

Objective LU-1 Establish the basis for orderly, well planned urban development while protecting coastal resources and providing for greater access and recreational opportunities for the public.

LU-1d Ensure that the type, location and intensity of land uses planned adjacent to any parcel designated open space/recreation or agriculture (as shown on Figure LU-1) are compatible with these public resources and will not be detrimental to the resource.

Objective LU-3 Preserve the small beach town character of the built environment of Carpinteria, encouraging compatible revitalization and avoiding sprawl development at the city's edge.

LU-3b The Community Design Element shall guide the character of development, and represent a comprehensive statement of the community's visual objectives.

LU-3h Develop land uses that encourage the thoughtful layout of transportation networks, minimize the impacts of vehicles in the community, and encourage alternative means of transportation.

Santa Barbara County Comprehensive Plan

As indicated above, California State Government Code Section 65300 requires all cities and counties adopt a comprehensive, long-term general plan that outlines physical development of the county or city. The County of Santa Barbara refers to theirs as a Comprehensive Plan, to avoid confusion with the City of Santa Barbara General Plan. The comprehensive plan must cover a local jurisdiction's entire planning area so that it can adequately address the broad range of issues associated with the city or county's development. Ultimately, the comprehensive plan expresses the community's development goals and embodies public policy relative to the distribution of future public and private land uses. The Santa Barbara County Comprehensive Plan contains the following Elements: Agriculture, Circulation, Coastal Land use Plan, Conservation, Energy, Environmental Resources Management, Hazardous Waste, Housing, Land Use, Noise, Open Space, Scenic Highways, Seismic Safety & Safety. The Coastal Land Use Plan is described in further detail below, including applicable objectives and policies. The remaining elements of the County Comprehensive Plan are described within the EIR sections to which they pertain.

Santa Barbara County Comprehensive Plan – Coastal Land Use Plan

The Coastal Land Use Plan lays out the general patterns of development throughout areas officially designated within the coastal zone of the unincorporated County. The following policies could be applicable to planning and implementation of the project (County of Santa Barbara 2019).

Policy 7-1 The County shall take all necessary steps to protect and defend the public's constitutionally guaranteed rights of access to and along the shoreline. At a minimum, County actions shall include:

a. Initiating legal action to acquire easements to beaches and access corridors for which prescriptive rights exist consistent with the availability of staff and funds.

b. Accepting offers of dedication which will increase opportunities for public access and recreation consistent with the County's ability to assume liability and maintenance costs.

c. Actively seeking other public or private agencies to accept offers of dedications, having them assume liability and maintenance

responsibilities, and allowing such agencies to initiate legal action to pursue beach access.

Policy 7-2 For all development between the first public road and the ocean granting of an easement to allow vertical access to the mean high tide line shall be mandatory unless:

a. Another more suitable public access corridor is available or proposed by the land use plan within a reasonable distance of the site measured along the shoreline, or

b. Access at the site would result in unmitigable adverse impacts on areas designated as "Habitat Areas" by the land use plan, or

c. Findings are made, consistent with Section 30212 of the Act, that access is inconsistent with public safety, military security needs, or that agriculture would be adversely affected, or

d. The parcel is too narrow to allow for an adequate vertical access corridor without adversely affecting the privacy of the property owner. In no case, however, shall development interfere with the public's right of access to the sea where acquired through use unless an equivalent access to the same beach area is guaranteed.

Policy 7-5 For areas controlled by Federal, State, County, or District agencies, in a zone extending approximately 250 feet inland from the mean high tide line, priority shall be given to coastal dependent and related recreational activities and support facilities. However, camping facilities should be set back from the beach and bluffs and nearshore areas reserved for day use activities. Recreational activities that are not coastal dependent may be located within this 250-foot zone if the less desirable coastal dependent support facilities (parking, restrooms, etc.) are located inland. In no case shall facilities, except for required structures (i.e., lifeguard towers, volleyball nets, etc.), be located directly on the dry sandy beach.

Policy 7-6 Recreational uses on oceanfront lands, both public and private, that do not require extensive alteration of the natural environment (i.e., tent campgrounds) shall have priority over uses requiring substantial alteration (i.e., recreational vehicle campgrounds).

Policy 7-8 Increased opportunities for beach access shall be provided in the Carpinteria planning area.

Policy 7-26 All proposed trails for the coastal zone shall be incorporated into the County's Master Plans89 for hiking, biking, and equestrian trails.

3.9.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to land use and planning are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the project would:

a) Physically divide an established community.
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
c) Result in cumulatively considerable impacts to land use and planning.

3.9.4 Impact Analysis

a) Would the project physically divide an established community?

The proposed project consists of a shared use path that would provide safe access from the existing eastern terminus of pedestrian and cyclist paths associated with Carpinteria Avenue to Rincon Beach County Park and the Ventura County line. The project site has been extensively graded over time to accommodate the alignment of former and current transportation facilities, including the previous alignment for the State Highway 2 (abandoned), the former location for the Southern Pacific Railroad (abandoned), and the UPRR tracks (active). Topographic benches remnant from these former and current transportation alignments are in some portions of the project site used for unsanctioned trails. The proposed project would not traverse an established community; instead, the project would provide safe, non-vehicular access and connections between neighborhoods in the City of Carpinteria and the Rincon Beach County Park, as well as connecting to other segments of the coastal trail system, benefiting residents, visitors, and land uses near the project site. **No impact would occur.**

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site within the City of Carpinteria has a Carpinteria General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (2003) and has been zoned for Resort Zone District use. The portion of the project within the County of Santa Barbara is designated as Other Open Land and Recreation and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2010). The proposed trail is an apt use for the City's and County's vision for the properties within each jurisdiction. While the proposed trail in some areas would traverse areas designated as environmentally sensitive habitat area (ESHA), mitigation measures require the restoration of areas outside the trail to fully offset the removal of native plants to accommodate trail construction (refer to Section 3.3, Biological Resources). With the incorporation of mitigation measures identified in this document to reduce environmental impacts to less than significant levels, the proposed project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project. In addition, no habitat conservation plans or natural community conservation plans apply to the project site. Overall, the proposed project would achieve the goal of enhanced coastal access. In addition, with respect to consideration of parking related to coastal access, construction is not anticipated to reduce parking availability. No parking spaces would be removed by the proposed project. However, absent mitigation, impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. **Mitigation Measures (MM) AES-1; MM-BIO-1** through **MM-**

BIO-6; MM-CR-1 through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** would reduce impacts to conflicts with any land use plan, policy, or regulations to **less than significant with mitigation.**

c) Would the project result in cumulatively considerable impacts to land use and planning?

The proposed project would be consistent with the land use and zoning designations that have been assigned to the project site parcels. It would also implement a number of policies aimed at increasing public access to the beach as well as providing transportation alternatives for non-vehicle travel. While portions of the proposed trail would traverse designated ESHA, **MM-BIO-1** through **MM-BIO-4** would be required to fully offset the project's reduction in habitat area (refer to Section 3.3). In addition, impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. Therefore, **Mitigation Measures (MM) AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** would reduce impacts to conflicts with any land use plan, policy, or regulations to less than significant with mitigation. Therefore, with implementation of all mitigation included in the EIR, the proposed project would not have a considerable contribution to any cumulative land use or planning impact.

3.9.5 Mitigation Measures

The project would require the implementation of **MM-AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** to reduce impacts conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect to a less than significant level.

3.9.6 Level of Significance After Mitigation

As discussed above, portions of the trail would traverse areas designated ESHA, which could result in a conflict with resource protection policies related to ESHA, unless appropriate mitigation is incorporated. MM-BIO-1 through MM-BIO-4 (see Section 3.3) prescribes required mitigation measures to satisfy requirements found in City and County policies governing ESHA. In addition, impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. Therefore, **MM AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1** through **MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** would reduce impacts to conflicts with any land use plan, policy, or regulations. The residual impact to land use and planning would be **less than significant.**

3.10 Noise and Vibration

This section defines terminology used in the discussion of noise and vibration, describes the noise and vibration conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.10.1 Existing Conditions

The assessment of sound and vibration involves terminology that may be unfamiliar to the general public. In order to assist the reader, the following discussion is presented on the fundamentals of sound and vibration. A description of existing noise levels is also provided.

3.10.1.1 Fundamentals of Sound

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called “A” weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the “noise level” and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (Caltrans 2013). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual’s noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening hours when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed “community noise equivalent level” (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL and other terminology used to describe noise is provided in Table 3.9-1.

Table 3.9-1. Definitions of Acoustical Terminology

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of two like quantities
Sound Pressure Level (SPL)	10 times the logarithm to the base 10 of the ratio between the square of the sound to the square of the reference sound pressure of 20 µPascals. Sound pressure level is the quantity that is measured by a sound level meter, expressed in dB.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz.
A-Weighted Sound Level (dBA)	SPL in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de- emphasizes low and high frequency components of frequency components of sound in a manner similar to the frequency response of the human ear and correlates well with subjective response to sound. All sound levels in this report are A-weighted.
Noise	Unwanted sound.
Equivalent Sound Level (L_{eq})	The average A-weighted sound level during the measurement period. For this CEQA evaluation, Leq refers to a one-hour period unless otherwise stated.
Lmax, Lmin	The maximum and minimum A-weighted sound level during the measurement period.
L01, L10, L50, L90	The A-weighted sound levels that are exceeded l%, l0%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured during the night between 10:00 p.m. and 7:00 a.m.
Community Noise Equivalent Level (CNEL)	The average A-weighted sound level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Impulsive Noise	Noise loud enough to disrupt normal activities and usually lasting less than one second.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically “soft” sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a “hard” or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically “soft” or absorptive site is characteristic of unpaved loose soil or vegetated ground.

3.10.1.2 Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. The response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration. It is also common for ground-borne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

When evaluating human response, ground-borne vibration is usually expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels defined as:

$$L_v = 20 \log \left(\frac{v_{rms}}{v_{ref}} \right)$$

Where vrms is the RMS vibration velocity amplitude in inches/second and vref is the decibel reference of 1x10-6 inches/second.

To avoid confusion with sound decibels, the abbreviation VdB is used for vibration decibels. The vibration threshold of perception for most people is around 65 VdB (which is equivalent to 0.0018 in/sec RMS). Vibration levels in the 70 to 75 VdB range are often noticeable, but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable (FTA 2018).

Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass, expressed as inches/second or in/sec). Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving and soil compacting, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used. A conservative maximum vibration level standard is 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings (Caltrans 2020).

3.10.1.3 Existing Noise Conditions

Project Site Noise Levels

Existing noise levels in the City of Carpinteria and surrounding County of Santa Barbara area are affected by several different sources of noise, including automobile and rail traffic, agricultural and industrial activity, and periodic sources such as construction. The major noise sources in Carpinteria are transportation related noise sources, including US Highway 101, freight and passenger railroad service and major arterial roads.

The City of Carpinteria General Plan/Local Coastal Land Use Plan Noise Contour Maps and County of Santa Barbara Noise Element Noise Contour Maps indicate that the proposed project is located within the boundaries for the 65 - 70 dBA noise contour for existing and future conditions (City of Carpinteria 2003; County of Santa Barbara 2009). US Highway 101 and the UPRR are the predominant noise sources in the project area. See Appendix H of this Environmental Impact Report (EIR) for the contour maps described.

3.10.2 Relevant Plans, Policies, and Ordinances

3.10.2.1 Federal

The following federal regulations pertaining to noise would apply to the proposed project.

Federal Highway Administration (FHWA) Standards

CFR Title 23, Part 772 sets procedures for the abatement of highway traffic noise and construction noise. Title 23 is implemented by the U.S. Department of Transportation (DOT) Highway Administration (FHWA). The purpose of this regulation is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the DOT-FHWA Noise Standards. Title 23 establishes a 67 dBA $L_{eq}(h)$ standard applicable to federal highway projects for evaluating impacts to land uses including residences, recreational uses, hotels, hospitals, and libraries [23 CFR Chapter 1, Part 772, Section 772.19].

Federal Transit Administration (FTA) and Federal Railroad Administration (FRA) Standards

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2018) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration (FRA) have published guidelines for assessing the impacts of ground-borne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for conventional wood-frame construction (i.e., most residences) is 0.2 inch/second peak particle velocity (PPV).

3.10.2.2 State

The following state regulations pertaining to noise would apply to the proposed project.

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multifamily residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multifamily residential building or structure is proposed to be located in an

area with CNEL (or L_{dn}) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35). The City of Sacramento applies the interior noise criterion of CNEL 45 dBA for single-family residences, in addition to multifamily residential structures.

3.10.2.3 Local

The following local/regional regulations pertaining to noise would apply to the proposed project.

City of Carpinteria General Plan/Local Coastal Land Use Plan 2003

The Noise Element of the *City of Carpinteria General Plan/Local Coastal Land Use Plan* provides objectives, policies, and programs regarding Noise, including the following:

Objective N-5: The City will minimize the effects of nuisance noise effects on sensitive land uses.

N-5a. The City will address nuisance on a case-by-case basis and develop appropriate mitigation measures such as scheduling of events or activities during hours when effects would be minimal.

N-5b. The City will require that construction activities adjacent to sensitive noise receptors be limited as necessary to prevent adverse noise impacts.

N-5c. The City will require that construction activities employ techniques that minimize the noise impacts on adjacent uses.

The *City of Carpinteria General Plan/Local Coastal Land Use Plan* provides guidelines for determining whether or not ambient noise levels are compatible with certain land uses in the City. The guidelines indicate the compatibility of noise-sensitive land uses in areas subject to noise levels of 55 to 80 dB CNEL or L_{dn}. Residential uses are normally unacceptable in areas exceeding 70 dB CNEL; and conditionally acceptable between 60 - 70 dB CNEL for multifamily units. Schools, libraries, hospitals, and nursing homes are treated as noise-sensitive land uses, with normally acceptable levels up 60 dB CNEL, and conditionally acceptable levels up to 70 dB CNEL. Commercial/professional office buildings and recreational uses such as golf courses and water recreation have normally acceptable levels up 75 dB CNEL (City of Carpinteria 2003).

City of Carpinteria Municipal Code

The *City of Carpinteria Municipal Code Title 12 – Streets, Sidewalks, and Public Places,* including *Chapter 12.04 – Street Construction and Excavation, Section 12.04.410 – Noise, dust, and debris requirements,* describes the noise standards that are applicable public works construction activity within the City. In addition, *Section 15.16.170 – Hours during which construction may occur, and Section 15.16.180 Exemption — after-hours or emergency permits,* apply to any construction for which a permit is required by the City. The following excerpts from the municipal code are applicable to the project (City of Carpinteria 2020):

> **12.04.410 – Noise, dust, and debris requirements**
>
> Each permittee shall conduct and carry out work permitted under this chapter in such manner as to avoid unnecessary inconvenience and annoyance to the general public and occupants of

neighboring property. The permittee shall take appropriate measures to reduce to the fullest extent practicable in the performance of the work, noise, dust and unsightly debris. During the hours of ten p.m. to seven a.m. the permittee shall not use, except with the express written permission of the engineer, or in case of an emergency as otherwise provided in this chapter, any tool, appliance or equipment producing noise of sufficient volume to disturb the sleep or repose of occupants of the neighboring property.

15.16.170 - Hours during which construction may occur.

Any person conducting construction work for which a permit is required pursuant to Titles 14 and 15 shall comply with the following:

A. Construction activities shall be allowed Mondays through Fridays from 7:00 a.m. to 8:00 p.m.;

B. Construction activities shall be allowed on Saturdays from 8:00 a.m. to 8:00 p.m.;

C. Construction activities shall be allowed on Sundays from 10:00 a.m. to 8:00 p.m.

15.16.180 - Exemption; after-hours or emergency permits.

A. The community development director or designee may issue an after-hours construction permit authorizing work, if the director determines that the public interest will be served by such a permit or in the case of an emergency. An after-hours construction permit may be revoked or suspended by the director, or his designee, if it is determined that the activity detrimentally affects the public health, safety, and welfare.

B. The planning commission, or community development director, may impose more restrictive hours of construction as a condition of approval in its action on permits issued pursuant to Titles 14 and 15 hereof.

Santa Barbara County Comprehensive Plan Noise Element

The Noise Element of the Comprehensive Plan establishes maximum long-term exterior noise exposure levels for noise sensitive uses, and also identifies the land uses considered to be noise sensitive. The following Noise Element Policies are considered applicable to the Project.

1) In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.
2) Noise-sensitive land uses should be considered to include:
   a) Residential, including single and multifamily dwellings, mobile home parks, dormitories, and similar uses.
   b) Transient lodging, including hotels, motels, and similar uses.
   c) Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.
   d) Public or private educational facilities, libraries, churches, and places of public assembly.
6) Residential uses proposed in areas where the Day-Night Average Sound Level is 65 dB or more should be designed so that noise levels in exterior living spaces will be less than 65 dB LDN. An analysis of

proposed projects should be required, indicating the feasibility of noise barriers, site design, building orientation, etc., to meet the prescribed exterior noise standard.

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to noise are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to noise would occur if the project would:

a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
b) Result in generation of excessive groundborne vibration or groundborne noise levels.
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.
d) Result in cumulatively considerable noise impacts.

3.10.3.1 Local Significance Thresholds

The *Santa Barbara County Environmental Thresholds and Guidelines Manual* provides noise thresholds for assisting in the determination of significant noise impacts. The following excerpts from the guidelines manual are applicable to the project:

a) A proposed development that would generate noise levels in excess of 65 dB(A) CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.
b) A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a., this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dB(A) CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dB(A) CNEL, as determined on a case-by-case level.
c) Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines, average construction noise is 95 dB(A) at a 50' distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dB(A). To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 AM to 5 PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional mitigation.

3.10.4 Impact Analysis

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

On-Site Construction Noise (Temporary)

Construction of the proposed project would generate noise that could expose nearby receptors (i.e., residences and commercial uses) to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. Noise from construction equipment generally exhibits point source acoustical characteristics. A point source sound is attenuated (or reduced) at a rate of 6 decibels per doubling of distance from the source for "hard site" conditions and at 7.5 decibels per doubling of distance for "soft site" conditions. These rules apply to the propagation of sound waves with no obstacles between source and receivers, such as topography (ridges or berms) or structures. The range of maximum noise levels for various types of construction equipment is provided in Table 3.9-2. Typical operating cycles may involve two minutes of full power, followed by three or four minutes at lower levels.

Table 3.9-2. Construction Equipment Noise Emission Levels

Equipment	Typical Maximum Sound Level - 50 feet from Source(L_{max} dB)
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Roller	74
Saw	76
Scraper	89
Truck	88

Source: FTA 2018

The nearest point of construction activities to the closest noise-sensitive receivers would be approximately 775 feet south of the project site, at the Rincon Point residential neighborhood.. Although construction of the trail elements would largely occur at greater distances from this closest residence, this distance was used as the worst-case scenario to conservatively model construction noise impacts at the nearest residential receptors at Rincon Point.

Noise-sensitive receivers proximate to the project, but north of US Highway 101 (i.e., commercial and residential), will not experience significant noise impacts from construction activities as these residences

and commercial businesses are located within the 70 dBA noise contour, as indicated in the City of Carpinteria General Plan/Coastal Land Use Plan Noise Contour Maps and County of Santa Barbara Noise Element Contour Map. Potential project-generated construction noise would not be audible over US Highway 101 traffic noise. Nonetheless, construction-related noise levels were modeled at these closest residential and commercial receivers to the north of the project; construction activity noise levels are summarized in Table 3.9-3, with the modeling input and results contained in Appendix H of this EIR.

The Federal Highway Administration's Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at these noise-sensitive land uses. Although the model was developed by the FHWA, RCNM is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are also used to construct other project types. Input variables for RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of each hour the equipment typically works per day), and the distance between the construction activity and noise-sensitive receivers. No topographical or structural shielding was assumed in the modeling of construction noise (i.e., the receivers are modelled with no obstacles to the travel of sound between the construction activity and receiver location, a worst-case assumption). The noise levels from the proposed construction activities are summarized in Table 3.9-3. The complete set of RCNM input and output data for construction noise is provided in Appendix H of this EIR.

As shown, at the nearest residences at Rincon Point, noise levels would range from approximately 54 dBA Leq to 60 dBA Leq when construction is taking place at or near the project site boundary (i.e., easternmost part of proposed trail). At the nearest residences to the north of the project, noise levels would range from approximately 56 dBA Leq to 62 dBA Leq when construction is taking place at or near the northern project site boundary; these levels would range from approximately 56 dBA Leq to 62 dBA Leq at the commercial properties to the north of the project. These heavy construction equipment noise levels are based on surveys, conducted by the U.S. Environmental Protection Agency in 1971. Mostly because of more stringent recent air quality emissions standards, newer, cleaner, and quieter equipment is used on most construction projects in California. Thus, construction phase noise levels indicated in Table 3.9-3 represent "worst-case" conditions. As the table shows, the highest noise levels are expected to occur during the site prep, grading, and paving phases of construction.

Table 3.9-3. Outdoor Construction Noise Levels by Phase at Nearest Receptors

Construction Phase	Residences South (dB L_{eq})	Residences North (dB L_{eq})	Commercial North (dB L_{eq})
Site Prep	60	62	61
Grading	60	62	61
Trail Construction	57	59	58
Bridge Construction	54	56	56
Paving	57	60	59

Source: Appendix H.

The County of Santa Barbara exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific limited daytime hours. The guideline requires noise generating construction activities (including site prep, grading, and construction), be restricted to the weekday hours between 8:00 a.m. and 5:00 p.m. (County of Santa Barbara 2008); construction is prohibited on weekends and State Holidays.. This ensures that sensitive receptors are not disturbed by early morning or late night activities, or by activities

on the weekends or during State holidays. The noise from construction activities incident upon Rincon Point residences is subject to these thresholds as the residences are located in Santa Barbara County.

As discussed, ambient and future noise levels affecting noise-sensitive land uses adjacent to the project are characterized by a 70 dBA roadway noise contour. Based on the noise level values at the nearest sensitive receptor, which represent "worst-case" scenario noise exposure over the construction cycle, daytime construction noise levels would average approximately 12 dBA lower than ambient noise levels. However, construction noise levels in the evening or overnight period could be plainly audible above background levels and could also result in sleep disturbance for residential occupants. Therefore, temporary construction noise impacts are potentially significant. **Mitigation Measure (MM) NOI-1** and **MM-NOI-2** are required in order to reduce construction noise impacts. Impacts would be **less than significant with implementation of mitigation**.

Off-Site Construction Traffic Noise (Temporary)

Construction of the proposed project would generate haul truck trips and construction employee vehicle trips to and from the project site. Fill would be accomplished with on-site cut material. Haul trucks with an approximately 16 cubic yard capacity would export excess cut to the closest disposal site. Heavy truck traffic is anticipated to be approximately 20 heavy truck trips (10 truckloads, each with a round-trip to/from the site) a day during the grading and excavation phase of the project. This averages to 2.5 trips per hour over an 8-hour workday, with 3 trips per hour a reasonable worst-case scenario. Within the northern half of the project, north of the UPRR alignment, haul trucks would access the site via the SR150 interchange from US Highway 101 northbound or southbound. The closest residence to the SR150 northbound off-ramp from US Highway 101 is located at approximately 180 feet (off Camino Carreta). For the southern half of the project, haul trucks would navigate through the Rincon Beach County Park parking lot and use the Bates Road interchange with US Highway 101. Haul trucks traveling through Rincon Beach County Park would pass within 125 feet of the closest Rincon Point residences.

From data presented in Table 3.9.2, a heavy dump truck generates a maximum sound level of 88 dBA at 50 feet. This maximum would be reduced to 80 dBA at 125 feet and 77 dBA at 180 feet. Assuming a truck is at the minimum identified distance from the Rincon Point neighborhood home for approximately 1 minute while driving by, and three trucks pass during the busiest hour, the average noise at this home from haul truck operations would be 67 dBA Leq. Assuming a truck is at the minimum identified distance from the Camino Carreta home for approximately 1 minute while driving by, and three trucks pass during the busiest hour, the average noise at this home from haul truck operations would be 64 dBA Leq. These noise levels are very similar, and slightly below, the daytime noise levels at these residences associated with traffic along US Highway 101. Thus, daytime operations of heavy haul trucks to export material from the site would not be anticipated to result in substantial temporary noise increases at the closest sensitive receptors to the local portions of the haul route. However, haul trucks operating in the evening or overnight period could be plainly audible above background levels and could also result in sleep disturbance for residential occupants. Therefore, temporary off-site construction traffic noise impacts related to haul truck operations are potentially significant. **MM-NOI-1** is required in order to reduce construction traffic noise impacts from haul truck operations that could potentially occur in the evening or overnight periods. Impacts would be **less than significant with implementation of mitigation**.

Permanent Noise Increases – Landform Modification and Trail Operations

Members of the public have expressed concerns in responses to the Notice of Preparation (NOP) that noise levels associated with US Highway 101 and UPRR operations could increase in the Rincon Point neighborhood

as a result of the proposed project grading. The effectiveness of a noise barrier, including a solid ridge, depends upon the height of the top of the barrier, relative to the elevation of the noise source (on one side of the barrier) and the noise receiver (on the other side of the barrier). The proposed grading for the trail project would alter the angle of the slope face along the trail alignment, but it would not decrease the elevation of the top of the ridge along the trail. The proposal would also have no effect upon the elevation of the US Highway 101 travel lanes, the elevation of the UPRR tracks, or the elevation of the homes within the Rincon Point residential neighborhood. Consequently, the proposed project grading would have **no impact** on the transportation-related ambient noise levels in the Rincon Point residential neighborhood or along Rincon Beach County Park.

Operation of the project would involve pedestrian and cyclist use of the trail and related amenities; neither hiking nor cycling generate substantial noise, and the closest noise-sensitive receivers (residents within Rincon Point) already experience similar noise sources from use of Rincon Beach County Park. Consequently, trail users are expected to generate an incremental increase in the noise levels adjacent to proximate residences, resulting in permanent noise level increases that are **less than significant.**

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction (Short-Term) Vibration

For construction vibration, this analysis used the FTA threshold for structural damage (vibration-peak-particle velocities greater than 0.2 inches per second for residences, which equates to the Caltrans standard for sensitive structures) and FTA's threshold for human annoyance within residences (80 vibration velocity level in decibels (VdB) at residences where people normally sleep).

During grading, construction, and paving activities for the proposed project ground-borne vibration would be produced by heavy-duty construction equipment. The most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, are illustrated in Table 3.9-4.

Table 3.9-4. Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)	Approximate Ground Vibration Level 25 feet (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Drill Rig / Auger	0.089	58
Jackhammer	0.035	87
Small Bulldozer	0.003	79

Source: FTA 2018; Caltrans 2020.

As shown in Table 3.9-4, use of heavy equipment (e.g., a large bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The nearest residences to construction activity for the eastern trail portion would be at Rincon Point, approximately 775 feet south. Additionally, haul trucks traveling through Rincon Beach County Park would pass within 125 feet of the closest Rincon Point residences. The nearest residences to the trail construction activity could experience vibration levels of 0.0004 inches per second PPV during bulldozer operations. The closest residence to the haul route for loaded trucks traveling through Rincon Beach County Park could experience vibration levels of 0.007 inches per second PPV during loaded truck pass-by. Vibration levels at these receptors would not begin to approach the FTA or Caltrans building damage threshold of 0.2 inches per second PPV (the FTA uses this value for standard construction residences, Caltrans uses it for fragile or sensitive structures).

At 125 feet (the closest residences to the truck haul route), vibration levels from a loaded truck would be reduced to approximately 66 VdB; as such the vibration levels would also be well below the level considered barely perceptible to persons (80 VdB), and therefore should generally not be discernible to area residents. While some persons particularly sensitive to vibration may perceive some vibration episodes during certain construction activities, vibration levels would not be anticipated to reach annoyance levels for residents along the project alignment. Ground-borne vibration would not be associated with the proposed project following construction activities. Therefore, impacts related to ground-borne vibration would be **less than significant**.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project would not expose people residing or visiting in the project area to excessive noise levels from aircraft. The nearest public airport is Santa Barbara Airport, located approximately 30 miles northwest of the project site. There are no private airports in the vicinity of the project site. As such, **no impacts** from airport/aircraft noise would occur.

d) Would the project result in cumulatively considerable noise impacts?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to noise impacts. However, noise analysis for the project indicates that future noise conditions will not exceed the City's or County's established parameters with the identified mitigation. In addition, the measures identified to reduce short term construction noise impacts would reduce the project's contribution to cumulative noise impacts on nearby sensitive receptors. Therefore, the project would not have considerable contributions toward any cumulative noise impacts.

3.10.5 Mitigation

To reduce potential noise impacts, the following mitigation measures shall be implemented:

MM-NOI-1 **Construction Hours.** Construction activity for site preparation and for future development shall be limited to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on state holidays (e.g., Thanksgiving, Labor Day) or weekends. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities are not subject to these restrictions.

Plan Requirements*:** Two signs stating these restrictions shall be posted on site at each end of the proposed trail. ***Timing: Signs shall be in place prior to the beginning of and throughout all grading and construction activities. ***Monitoring***: City and County Grading Inspectors shall spot check and respond to complaints.

MM-NOI-2 **Construction Equipment**. All construction equipment with engines must have original manufacturer's approved muffling devices. All stationary equipment shall be physically buffered from nearby sensitive receptors.

Plan Requirements: Plans shall indicate the requirement of OEM muffled equipment. ***Timing***: This condition applies when any engine driven equipment is in use at the project site during construction. ***Monitoring***: City and County Grading Inspectors shall spot check and respond to complaints.

3.10.6 Level of Significance After Mitigation

After implementation of **MM-NOI-1** and **MM-NOI-2**, impacts to nearby noise- sensitive receptors during construction activity would be less than significant.

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3.11 Recreation

This section describes the recreational conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

3.11.1 Existing Conditions

The City of Carpinteria Parks and Recreation Department's recent history of park and trail development dates back to 1985. In 2009, the City completed a Project Study Report (PSR) on a Rincon Trail project (City of Carpinteria 2009a). In January 2010, the Carpinteria City Council approved the 2010 Parks Department Work Plan, which includes plans to complete the Rincon segment of the Carpinteria Coastal Vista Trail. As of December 2017, five miles of the Carpinteria Coastal Vista Trail have been constructed (California Coastal Conservancy 2017). The proposed trail would link the City's trail and an existing Rincon Beach County Park.. The Rincon Beach County Park's parking lot can be very crowded on summer weekends when beach use is high, or during the winter when surfing conditions are favorable. The proposed trail would provide a safe route for alternative transportation between the City and the Rincon Beach County Park; a current unsanctioned trail between these two points is interrupted by the Union Pacific Railroad (UPRR) rail corridor that bisects the central portion of the trail alignment, and which poses a significant safety hazard for pedestrians that trespass across the UPRR tracks. Establishment of the proposed trail would remove the attractive nuisance of illicit crossing of the tracks by pedestrians.

There are several types of recreation-oriented open space in the project vicinity, including areas that are located in and maintained by the City, private entities, and state or county agencies.

- Public parks: state, county and local
- Natural areas publicly owned or privately owned with public access easements
- Undeveloped vacant lots, privately owned
- Privately owned recreational facilities
- School playgrounds and ball fields
- Trails: equestrian, bicycle, jogging and walking, and
- Coastal access and beaches.

Carpinteria is a city of approximately 13,000 people, with close to two million visitors a year due to the popularity of the area's beaches, parks, and campground. Carpinteria has approximately 97.96 acres of City parks within the City boundary. Carpinteria State Beach is also within the City boundary. Carpinteria offers a variety of opportunities for coastal recreation. Downtown shops and restaurants draw visitors, as well as opportunities for surfing, fishing, bird watching, wildlife viewing, and walking on nearby beaches. A number of special events take place in Carpinteria each year, including the California Avocado Festival and the Rincon Classic Surf Competition. The State Beach facilities are primarily used by out-of-town campers and local residents share the beachfront picnicking, restrooms, and beach day use area (City of Carpinteria 2003). Additional nearby recreational facilities outside of the City and within the County of Santa Barbara (County) include Rincon Beach County Park, located to the south of the project site and within the County of Santa Barbara, and Rincon Point State Beach, located 0.4 miles southeast of the project site.

The City of Carpinteria has a total of 6.75 bikeway miles, including 6.25 miles of formal street bikeway facilities and 0.5 miles of off-street bikeway facilities. Cycling and walking to recreational sites promotes direct interface with the physical environment and benefits the community ecologically. Class I bikeways are trails or paths that have entirely separate rights of way from automobile roadways for the use of bicycles and pedestrians. The paths minimize crossflow with vehicle traffic and can be located in parks, recreational areas, or road rights-of-way if such width permits (City of Carpinteria 2003). The proposed shared use path would be designed as a Class I bikeway for use by cyclists and pedestrians.

In 2009, the City completed a Coastal Access Feasibility Study to analyze the feasibility of new sanctioned access points to connect Carpinteria's beaches and coastal resources with the rest of the community, determine potential railroad crossing alternatives, refine and prioritize alternatives based on public input, and create an implementation plan (City of Carpinteria 2009b). The study was needed because of the "barrier effect" of the rail corridor on the City, the increased public use of the coast, the level of current and predicted passenger and freight train traffic with increased potential risk of conflict at uncontrolled crossings, the limited number of sanctioned crossings, and the hazardous practice of trespassing over railroad tracks to reach coastal destinations. The study has resulted in a number of specific recommendations and preliminary designs for crossings, including the proposed crossing in the Coastal Vista Trail Rincon segment.

In 2010, the City completed an Open Space Management Plan for the City-owned Carpinteria Bluffs Nature Preserve and Tar Pits Park properties (California Coastal Conservancy 2010). The Open Space Management Plan includes a public access element and lays out the City's vision for completion of the larger Carpinteria Coastal Vista Trail. In the meantime, the City has pursued completion of other segments of the Carpinteria Coastal Vista Trail, all of which have undergone extensive public hearings to receive Coastal Development Permits. Notable recent accomplishments with respect to regional bike circulation include the completion of the Class I bike path from Rincon Beach County Park to Mobil Pier in Ventura County and the extension of a new all-weather bike path from the Casitas Pass Road/Via Real intersection to Carpinteria Avenue along Carpinteria Creek (as part of the Linden Avenue and Casitas Pass Road Interchanges and Via Real Extension project). Both of these bike paths would connect to the proposed Rincon Trail project. In conjunction with the US 101 South Coast High Occupancy Vehicle project, the Santa Claus Lane bike path connecting Santa Claus Lane to the west end of Carpinteria Avenue will be constructed. A trail easement also has been acquired by the City along the S&S Seeds property (6155 Carpinteria Avenue) and anticipates acquiring an easement across the adjacent vacant commercial property (6175 Carpinteria Avenue) as part of a currently proposed development project, and the Land Trust for Santa Barbara County has acquired the former Carpinteria Bluffs III 21.65-acre parcel at the eastern Carpinteria Avenue terminus, which has been transferred to the City of Carpinteria as permanent public open space to be known as Rincon Bluffs Preserve.

The proposed Carpinteria Rincon trail segment of the Carpinteria Coastal Vista Trail will ultimately connect with the Carpinteria Bluffs Nature Preserve (Preserve) portion of the trail constructed in 2004. This segment was constructed as a condition of the Coastal Development Permit for the Preserve allowing development of a parking area, baseball fields, and restroom building (California Coastal Conservancy 2010). The Carpinteria Bluffs Nature Preserve trail segment was planned and built to connect to the subject Carpinteria Rincon Trail segment, which provides a dedicated bridge across UPRR and a contiguous trail to Rincon Beach County Park.

The portion of the project site within the City has a General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (City of Carpinteria 2003) and has been zoned for Resort Zone District use (City of Carpinteria 2016). A public multi-use trail would be an allowed use under the visitor serving land use designation. The portion of the project within the County of Santa Barbara is designated as Other Recreation/Open Space and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2009). The County transportation

corridor zoning reflects the presence of current and former transportation facilities within the project site, while open space and recreation land use designations reflect the desire to accommodate coastal oriented recreation on the project site and vicinity.

A number of comments were submitted by members of the paragliding and hang-gliding community (or more simply the soaring community) indicating that wind uplift conditions associated with the ocean bluffs along the project trail alignment provide opportunities above the proposed trail properties for paragliding and hang gliding. Comment letters assert that such soaring activities have been carried out in the air space over the trail alignment property for several decades, and that the air space is one of a limited number of opportunities for soaring within the coastal environment in Santa Barbara County. While paragliders and hang-gliders have capitalized on bluff-related uplift during favorable wind conditions to launch from private properties along the bluff faces above the proposed bicycle and pedestrian path alignment, the proposed trail corridor has been dedicated to transportation uses since its construction in the late 1800s (railroad then state highway). Therefore, while the soaring community has taken advantage of favorable wind and uplift phenomena associated with the existing topography within the trail corridor, neither launching nor landing areas within the trail corridor have been contemplated or formalized in recreation plans adopted by the City of Carpinteria or County of Santa Barbara. It should be noted that the steep slopes in the southern trail alignment are the result of former landform modification carried out for the railroad alignment and former state highway, and do not represent natural conditions resulting from natural weathering of the involved earth materials and geologic formation. Please refer to Section 3.5 (Geology & Soils) for a detailed description of landform modification that has occurred within the trail alignment. One reason for not proposing formal launching or landing areas for soaring activities is the presence of U.S. Highway 101 and the UPRR alignment in close proximity to the wind uplift zone associated with the bluff face. Paragliders and hang-gliders launching from an elevation not much greater than these transportation facilities have little time to react if wind conditions are not as expected or change, representing possible safety hazards for paragliders and hang-gliders that find themselves forced to land within the freeway or railroad corridors. With respect to the presence of these major transportation corridors, the area is not ideal for ensuring the safety of low altitude paragliders and hang-gliders taking advantage of the bluff-related wind uplift conditions.

It should be noted that Rincon County Beach Park prohibits the take-off or landing of any type of gliders. In addition, UPRR prohibits pedestrian access across their alignment (precluding direct access to the bluff area that generates the best uplift). Thus, the typical launch area for paragliding and hang gliding to gain access to the air space over the trail alignment is currently from private property adjacent to the trail alignment, not from a sanctioned use public property. The private property owner also retains the option of prohibiting paragliders and hang gliders from using the property as a launch area at any time.

Fundamentals of Paragliding or Hang-Gliding

Because members of the soaring community have indicated the air space above the trail alignment has been used extensively for paragliding and hang-gliding, the following fundamental discussion is provided to assist the general public in understanding this issue.

Many people not involved in soaring tend to make the assumption that a lot of wind is needed in order for successful paragliding or hang-gliding to occur. Wind is not essential for this type of soaring but can extend the length of time aloft for an individual flight (BHPA 2021). The presence of wind also can facilitate launch, much the same as for kite flying. With less or no wind present, a paraglider or hang-glider will have to run in order to establish enough relative air speed over the “wing” of the glider to produce lift (BHPA 2021). Launch areas for paragliders and hang-gliders often incorporate a long unobstructed slope that both allows the pilot to build up the needed air speed above

the wing, but also increases the elevation of the craft above the ground elevation as the pilot advances. At the top of ridges, cliffs, or bluffs, when the wind direction is against these features, launch can often be accomplished from a stationary position, if the wind speed is already sufficient over the wing to create lift (BHPA 2021).

After takeoff, a glider maintains its airspeed by flying on a descending path through the air, using gravity to propel it. The glide ratio is a measure of a glider's performance. It expresses the relationship between the distance that a glider can travel horizontally (in still air) and the height loss involved. For instance, a glider that has a glide ratio of 10:1 will travel 100 feet horizontally for every ten feet of elevation (height above the ground) lost in still air (BHPA 2021). Wind that has a vertical component in the upward direction, which can be caused when wind strikes a landform, such as a ridge or cliff, can carry a glider to a greater elevation; following the ridge back and forth where a vertical wind component exists a glider can remain in the air longer than under still air conditions.

According to a number of comments received on the notice of preparation by members of the soaring community, the presence of the existing steep ocean bluffs within the trail alignment result in the creation of a favorable vertical wind component above the bluff face. This vertical wind component, or updraft, facilitates the launching of gliders and supports extended flight times by gliders.

3.11.2 Relevant Plans, Policies, and Ordinances

3.11.2.1 Federal

Federal Aviation Regulation Part 103

Hang gliding, paragliding, and mini-wing flights in the United States are governed by the Federal Aviation Regulation (FAR) Part 103, Federal Aviation Regulation, Ultralight Vehicles. FAR Part 103 was adopted July 30, 1982, and formally establishes what is recreational flight. FAR Part 103 does not apply to flights by Federal Aviation Administration (FAA) licensed pilots in FAA registered aircraft, which are governed by FAR Part 61 and FAR Part 91 and may be governed in addition by other civil laws and regulations. Persons participating in hang gliding, paragliding, and mini-wing operations under FAR Part 103 are required by law to fly in accordance with FAR Part 103, and in accordance with any other applicable civil laws. FAR Part 103 outlines inspection requirements, certification and registration, and operating rules for recreational flight. The following sub-sections of Part 103 are pertinent to soaring activities above the project site.

§ 103.9 Hazardous operations.

(a) No person may operate any ultralight vehicle in a manner that creates a hazard to other persons or property.

(b) No person may allow an object to be dropped from an ultralight vehicle if such action creates a hazard to other persons or property.

§ 103.15 Operations over congested areas.

No person may operate an ultralight vehicle over any congested area of a city, town, or settlement, or over any open air assembly of persons.

3.11.2.2 State

State Water Resources Control Board California Ocean Plan

The State Water Resources Control Board (SWRCB) has the responsibility for regulating and enforcing standard related to surface waters throughout California, including ocean waters within the 3-mile state limit. SWRCB adopted the most recent California Ocean Plan, the state's water quality control plan for California ocean waters, in October 2012. The purpose of the California Ocean Plan is to protect the quality of the ocean water for use and enjoyment by the people of the state by requiring control of the discharge of waste to ocean waters. The California Ocean Plan identifies both water contact and non-contact recreation as a beneficial use for all ocean waters of the state. As a result, it established water quality objectives for bacteria for contact recreation areas, including coastal waters adjacent to public beaches such as Carpinteria State Beach and Rincon Beach County Park. Bacterial standards for water contact apply to a zone that extends 1,000 feet from the shoreline or the 30-foot depth contour.

3.11.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The Open Space, Recreation, and Conservation Element of the City of Carpinteria General Plan/Local Coastal Land Use Plan provides objectives and policies related to parks and recreation needs of the community, including the following (City of Carpinteria 2003):

Objective OSC-14 Provide for adequate park and recreation facilities to meet the needs of the community and visitors.

OSC-14a Increase coastal and recreational access for all segments of the population, including the disabled and elderly, while protecting natural resources, particularly environmentally sensitive habitat areas.

OSC-14b Provide for passive recreation uses of natural open space areas, such as along creeks and the Bluffs 1 areas, where such uses would not damage the resources being protected.

OSC-14c Increase opportunities for ocean recreation programs including: kayaking, sailing, snorkeling, and scuba diving through the city Parks and Recreation Department, and by encouraging private development of these activities.

OSC-14d In a zone extending approximately 250 feet inland from the mean high tide line, priority shall be given to coastal dependent and related recreational activities and support facilities. However, camping facilities should be set back from the beach and bluffs and near-shore areas reserved for day use activities. Recreational activities that are not coastal dependent may be located within this 250-foot zone if the less desirable coastal dependent support facilities (parking, restrooms, etc.) are located inland. In no case shall facilities, except for required structures (i.e. lifeguard towers, volleyball nets, etc.) be located directly on the sandy beach.

OSC-14e Recreational uses on ocean front land, both public and private, that do not require extensive alteration of the natural environment shall have priority over uses requiring substantial alteration.

OSC-14f No unrelated development shall be permitted in publicly owned recreational areas except pipelines to serve coastal dependent industrial uses when no alternative route is feasible.

OSC-14g In implementing all proposals made in the General Plan/Land Use Plan for expanding opportunities for coastal access and recreation, utilize purchase in fee (simple) only after all other less costly alternatives have been studied and rejected as infeasible. Other alternatives may include: purchase of easements, recreation preserve contracts, and mandatory dedication in connection with development.

OSC-14h Support habitat preservation by establishing habitat preserves and open space for passive and active recreation by developing programs including, but not limited to: transfer of development rights; conservation easements; land acquisition grants; partnership agreements between private developers, the City, school districts, State Park, and the National Forest; overlay performance zoning; development impact fees for recreational resources and services; and use fees and fines.

Santa Barbara County Comprehensive Plan Coastal Land Use Plan

The County of Santa Barbara's Coastal Land Use Plan, which addresses land use in the coastal zone (including the project site and surrounding properties), emphasizes access to the County's beaches, among other planning and land use policies. Section 3.7, Coastal Access and Recreation, of the Coastal Land Use Plan includes policies aimed at protecting the public's right to access the beach and enjoy recreational opportunities at and along the shoreline. Policies specifically applicable to the project area are listed below (County of Santa Barbara 2019):

Policy 7-5: For areas controlled by Federal, State, County, or District agencies, in a zone extending approximately 250 feet inland from the mean high tide line, priority shall be given to coastal dependent and related recreational activities and support facilities. However, camping facilities should be set back from the beach and bluffs and nearshore areas reserved for day use activities. Recreational activities that are not coastal dependent may be located within this 250-foot zone if the less desirable coastal dependent support facilities (parking, restrooms, etc.) are located inland. In no case shall facilities, except for required structures (i.e., lifeguard towers, volleyball nets, etc.), be located directly on the dry sandy beach.

Policy 7-6 Recreational uses on oceanfront lands, both public and private, that do not require extensive alteration of the natural environment (i.e., tent campgrounds) shall have priority over uses requiring substantial alteration (i.e., recreational vehicle campgrounds).

Policy 7-8 Increased opportunities for beach access shall be provided in the Carpinteria planning area.

Policy 7-25 Easements for trails shall be required as a condition of project approval for that portion of the trail crossing the parcel upon which the project is proposed.

Policy 7-26 All proposed trails for the coastal zone shall be incorporated into the County's Master Plans for hiking, biking, and equestrian trails.

Policy 7-32 When reviewing a Coastal Development Permit(s) associated with the Highway 101: Carpinteria to Santa Barbara project and other highway improvement projects to the South Coast Highway 101, the County of Santa Barbara shall require coastal access improvements in addition to those required by Policy 7-31 within the corridor with the goals of providing alternative transportation

modes and establishing connectivity of the California Coastal Trail. Projects shall be designed to eliminate gaps for non-motorized travel and enhance coastal access, and shall be completed and open to the public no later than the completion of the adjacent phase of construction for the Highway 101: Carpinteria to Santa Barbara project.

Policy 7-33: To encourage walking and biking as alternatives to travel by automobile, the County shall strongly encourage development of new pedestrian and/or bicycle-friendly paths along the highway corridor. Improvements to Highway 101 shall not remove existing bikeways or pedestrian paths or preclude the development of proposed bikeways or pedestrian paths that are identified in the County's Comprehensive Plan, Coastal Land Use Plan and community plans, without providing comparable or better replacement facilities

Santa Barbara County Comprehensive Plan Open Space Element

The Open Space Element (Santa Barbara County 2009) is intended to manage and preserve land area in the County that is not suitable for urban development. Broadly there are four criteria or classifications that are employed in designating land that should remain as open or undeveloped. One of the criteria is Open Space for Outdoor Recreation. The Open Space Element indicates that the importance of open spaces for parks and recreation and recreation trails can hardly be overstated. The portion of the trail in Santa Barbara County has been designated as open space – recreation.

3.11.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to recreation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to recreation would occur if the project would:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.
c) Result in cumulatively considerable recreation impacts.

3.11.4 Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project includes a shared-use path for walking and biking. The proposed trail would fill in an existing segment of the California Coastal Trail between the Carpinteria Bluffs Nature Preserve, which includes several miles of interconnected coastal bluff open space trails, and Rincon Beach County Park with 1 mile of the trail along the bluff. As the Rincon segment will expand the Carpinteria Coastal Trail System and would connect the City of Carpinteria with Rincon Beach County Park and points east and west along the Pacific Coast Bikeway and California Coastal Trail, it would provide additional recreation and access opportunities along the

Santa Barbara County and Ventura County coastline. The proposed trail also would serve to fill in missing segments in the California Missions Trail and the Juan Bautista de Anza National Historic Trail. The project would provide a safe, direct and scenic coastal pedestrian and bike trail link to Ventura County paralleling U.S. Highway 101 and would formalize one railroad overcrossing along this segment, providing for safe access to the coast.

Although the air space above the proposed trail is not a public recreational facility for the purposes of the CEQA Guidelines, the proposed trail also is not expected to significantly impair the ability of paragliders and hang-gliders. Members of the paragliding and hang-gliding community have expressed concern that the proposed regrading of slopes along the trail alignment could adversely impact wind uplift conditions, such that paragliding and hang-gliding opportunities in the air space above the property could be eliminated, or substantially reduced.

The portion of the bluff face that would be regraded for the proposed trail was previously altered to create a bench for the UPRR alignment, and this steep manufactured slope is not considered to be stable in the long term with or without the project (the railroad was previously re-aligned away from this slope). Reducing the steepness of the slope face (making it less vertical) is necessary to avoid it collapsing over time and ensuring the longevity of the proposed new trail. Comments from the soaring community indicate a belief the proposed lessening of the bluff face slope angle could reduce or eliminate wind uplift patterns along the re-graded bluff slope area.

In order to evaluate the change in wind uplift patterns above the bluff face from the proposed regrading for the project, Dudek commissioned an Airflow Analysis for the Proposed Regrading of the Rincon Bluffs study (Airflow Study) by an expert in fluid dynamics; the Airflow Study is included as Appendix I of this Environmental Impact Report. Several different approaches were used, based upon published literature including wind tunnel experiments and direct field measurements of the amplification effects of a slope or vertical face on horizontal wind vectors perpendicular to the slope face. In the published literature reviewed for this Airflow Study, certain investigators compared the average slope angle of the entire slope or bluff face to determine the wind amplification effect, while others compared the angle of just the upper portion of the slope. The analysis of the effects of the proposed regrading of the bluff face for the project concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to soaring activities, the reduction is expected to be closer to 30% (Appendix I). Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (on the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet (Appendix I).

Published records of wind speeds favorable to paragliding and hang-gliding above the bluffs along the trail alignment do not exist. However, the Torrey Pines Gliderport is a dedicated soaring facility adjacent to the ocean bluffs in San Diego County, that exhibit similar characteristics to the bluffs along the Rincon Trail alignment. At Torrey Pines, about 7-15 mph of wind coming from the west (perpendicular to the bluffs) is generally needed for paragliding tandems; hang gliding tandems generally need 10-18 mph, also from the west (Torrey Pines Gliderport 2021). This evidences a wind regime that is successful in supporting soaring operations with an approximately 50% range of wind speeds (lowest viable wind speed representing 50% of the top speed). Consequently, the maximum predicted reduction in vertical wind velocity (30%) caused by the proposed regrading of bluffs along the trail segment south of the UPRR alignment should not eliminate favorable wind uplift patterns above the bluff face for soaring activities. The existing 20% of the upper portion of wind speeds successful for soaring should continue to provide acceptable uplift conditions; thus the proposed trail alignment would not cause paragliders and hang-gliders to use other air space, such that substantial physical deterioration of those facilities would occur or be accelerated. The upper end of the wind speed regime considered acceptable for soaring activities also may be extended somewhat by reduced updraft

velocities, which may create additional opportunities for soaring activities during conditions with high wind velocities. In addition, the bluff west of where the proposed trail would cross the UPRR alignment would not be altered in any way by the proposed trail. Therefore, while the proposed regrading of the ocean bluffs will cause some modification of vertical wind velocities supporting soaring activities, it is unknown what the net effect will be on the number of days annually in which the wind conditions within the project alignment are favorable for soaring. Given the uncertainty above and the Airflow Study analysis that the maximum predicted reduction in vertical wind velocity will be 30%, the proposed project would have a **less than significant impact on recreational resources**.

Also, it must be noted that CEQA does not require analyses of "social and economic changes" alone. (See Cal. Code Regs., tit 23, § 15131, subd. (a).) Social and economic impacts, such as a decrease in usability of air space for hang gliders and paragliders, are analyzed as an indirect impact only if it leads to a significant direct physical impact to the environment, such as heavy traffic in another area that would cause an environmental impact. The Airflow Study demonstrates that any potential adverse impacts on the usability of air space above the proposed trail alignment are unlikely to cause significant physical impacts on other recreation facilities from redirected paragliding and parasailing recreation. (See, e.g. *Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839 (reasoning that loss of convenience is merely an example of a social problem, and without an accompanying physical change to the environment, CEQA does not require its analysis).

The use of air space above the trail alignment by paragliders and hang gliders has not been formalized in recreation plans adopted by the City of Carpinteria or County of Santa Barbara, whereas a multi-use trail through this area has been proposed for decades to connect to the coastal trail system in both Santa Barbara and Ventura counties. While adverse impacts on the usability of airspace above the proposed trail alignment as a result of the proposed regrading to construct the trail may occur and cause paragliders and hang-gliders to soar at other locations, the benefits delivered recreationally by a multi-use trail accessible for the entire population of the Central Coast would more than balance out a reduction in the frequency of recreational opportunities associated with soaring activities above the bluffs within the project alignment. Therefore, overall and in balance, the proposed project would have **less than significant impacts upon recreation resources**.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project consists of a recreational facility: a multi-use trail to accommodate pedestrians and cyclists, and which would close an important gap in the regional coastal trail system. As proposed, construction of the proposed trail would involve regrading of existing terrain within the trail alignment. The proposed project addresses potential adverse physical effects on the environment associated with this "*construction or expansion of recreational facilities*" through appropriate mitigation measures in the areas of aesthetics, biological resources, cultural resources, geology and soils, hazardous materials, hydrology, noise, and tribal cultural resources, such that the project would not create a residually significant adverse physical effect on the environment for the purposes of CEQA. Further, the Airflow Study identifies a reduction of 10-30% of vertical airflow velocities, which is not anticipated to generate an adverse physical effect on the environment or on local recreational soaring opportunities. Therefore, the proposed trail would have **less than a significant impact.**

c) Would the project result in cumulatively considerable recreation impacts?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to recreation impacts. However, the proposed project would result in a beneficial impact to recreational resources and therefore, would not have a considerable contribution to cumulative impacts on recreation resources.

3.11.5 Mitigation

As discussed above, the proposed project would result in less than significant impacts on recreation resources, and therefore mitigation would be neither required nor recommended.

3.11.6 Level of Significance After Mitigation

As discussed above, the proposed project would result in less than significant impacts on recreation resources without mitigation.

3.12 Transportation

This section describes the transportation conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.12.1 Existing Conditions

The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue to Rincon Beach County Park along abandoned roadways or old terraced road and rail cuts. A small unsanctioned trail exists in some areas of the proposed trail, including the portion of the proposed trail from the railroad crossing to the Rincon Beach County Park parking lot. At both ends of the trail are pre-existing parking areas; Rincon Beach County Park has a paved lot and at Carpinteria Avenue there is an existing dirt lot used as an informal parking area. Neither of these parking areas are proposed to be modified under the Rincon Trail project.

The City of Carpinteria is situated along the California coast where the Santa Ynez Mountains meet the Pacific Ocean; Highway 150, US Highway 101 and Union Pacific Railroad (UPRR) all intersect in the southeastern entrance to the Carpinteria Valley near the Ventura County/Santa Barbara County line. The intensive transportation infrastructure improvements in this location included planning a bicycle route along the highway shoulder south of Bates Road, but there is no other alternative access route between the City of Carpinteria and the Ventura County line for pedestrians and cyclists. The proposed Carpinteria Rincon Trail will provide an important connection in this area and will link the two regions of Ventura County and Santa Barbara County, particularly now that the Class I Bikeway along the southbound US Highway 101 shoulder is completed between Rincon State Beach Park and Mussel Shoals in Ventura County.

Access between the City of Carpinteria and Rincon Beach County Park has primarily been provided by US Highway 101, though the distance between the two destinations is less than two miles. US Highway 101 was designed, and operates, primarily to accommodate passenger vehicles, trucks, and busses; bicycle traffic is restricted to the highway shoulder that provides no safety elements such as a barrier to separate cyclists from the adjacent vehicle travel lane. Many bicyclists and pedestrians use the railroad corridor as an alternative route, as evidenced by the well-worn, unsanctioned trail that is currently present along the railroad tracks connecting Carpinteria residents and Carpinteria State Beach visitors with Rincon Beach County Park. The railroad corridor, however, presents a public access and safety concern equal to or greater than travel along the highway shoulder, and involves unsanctioned trespass on UPRR property.

With regard to vehicular access available to either end of the proposed trail segment, Carpinteria Avenue connects to the location of the western trail terminus. The US Highway 101 interchange at State Route 150 (that also connects to Carpinteria Avenue) is within 500 feet of the western trail terminus; construction workers and haul trucks would use this interchange for access to the western or northern segment of the trail. According to Caltrans (2014), all legs of the SR 150 / US Highway interchange intersections currently operate at level of service (LOS) B during the morning peak hour; all legs except the Carpinteria Avenue/SR 150 leg also operate at LOS B during the evening peak; the Carpinteria Avenue/SR 150 leg currently operates at LOS E in the evening peak hour. Bates Road provides vehicular access to the Rincon Beach County Park, the eastern end of the proposed trail terminus. Bates Road is also developed as a full interchange for US Highway 101 construction workers and haul trucks would use this interchange for access to the eastern or southern segment of the trail. According to Caltrans (2014), all legs of the Bates Road US Highway interchange intersections currently operate at level of service (LOS) A during the morning and evening peak hours.

3.12.2 Relevant Plans, Policies, and Ordinances

3.12.2.1 Federal

There are no federal regulations associated with transportation that are relevant to the proposed project.

3.12.2.2 State

There are no state regulations associated with transportation that are relevant to the proposed project.

3.12.2.3 Local

Regional Transportation Plan (RTP)

Regional transportation planning encompassing incorporated and unincorporated communities across Santa Barbara County is the responsibility of the Santa Barbara County Association of Governments (SBCAG). The most recent regional transportation plan adopted by SBCAG is *Fast Forward 2040: Regional Transportation Plan and Sustainable Communities Strategy,* or simply the RTP (SBCAG 2017). The RTP is a long-range planning document that defines the investment and implementation program in regional transportation systems over a 20-year period based on regional goals, multimodal transportation needs for people and goods, and estimates of available funding to provide a balanced approach to addressing long-term regional needs. The RTP includes a Sustainable Communities Strategy, as required by SB 375, which sets forth a forecasted development pattern for the region and is integrated with the transportation network and other transportation measures and policies to reduce GHG emissions from passenger vehicles and light trucks to achieve the GHG reduction targets set by the California Air Resources Board (CARB). The goals and objectives of the RTP include:

- Environment: Foster patterns of growth, development, and transportation that protect natural resources and lead to a healthy environment.
  - Reduce GHG emissions in compliance with CARB Regional Targets
  - Reduce criteria pollutant emissions
- Mobility and System Reliability: Optimize the transportation system to improve accessibility to jobs, schools, and services, allow the unimpeded movement of people and goods, and ensure the reliability of travel by all modes.
  - Reduce travel times for all modes
  - Reduce congestion — Work cooperatively with schools and school districts to reduce congestion surrounding schools
- Equity: Ensure that the transportation and housing needs of all socio-economic groups are adequately served.
- Health and Safety: Improve public health and ensure the safety of the regional transportation system.
  - Reduce the frequency and severity of collisions on the transportation network
  - Increase public outreach and education
- A Prosperous Economy: Achieve economically efficient transportation patterns and promote regional prosperity and economic growth.
  - Reduce congestion
  - Optimize network performance to reduce time lost to commuting

Carpinteria General Plan/Local Coastal Land Use Plan

The Circulation Element of the General Plan/Local Coastal Land Use Plan includes goals, objectives, and policies related to providing efficient and comprehensive means for the delivery of goods, and the movement of people throughout the community, including provisions to accommodate modes of transportation beyond simply passenger vehicles and freight trucks. Objectives and policies regarding alternative modes of transportation and facilities to support pedestrian and cyclist activities are particularly relevant to the proposed project and include (City of Carpinteria 2003):

Objective C-6 Provide adequate safe railroad crossings and to effectuate community design of buffers that will attenuate rail-related noise.

C-6a Seek funding sources for grade-separated crossings of the rail line to resolve conflicts with urban linkages, where such structures are considered feasible.

C-6c Encourage development of available railroad rights-of-way for alternative transportation, bicycle, recreation, trail, parking related, and other appropriate uses.

C-6d Put programs for developing crossing improvements with the State Public Utilities Commission and railroad operators into effect.

Objective C-7 Build demand for alternative transportation use by increasing ease, effectiveness, and social acceptability, and through foresighted planning.

C-7c Provide safe mobility for the physically handicapped through the design of street improvements and public facilities.

Objective C-8 Support and develop safe, direct and well-maintained bicycle and pedestrian systems and recreational boating facilities that serve all segments of the public

C-8a Integrate the development of bicycle routes and pedestrian pathways in additional areas of the city, and encourage the utilization of such routes for commuting as well as recreational purposes.

C-8c Provide or require safe and adequate bicycle parking at transportation centers, public parks, recreation areas and other nonresidential locations.

C-8d Encourage integration of the city's bicycle routes with state and countywide programs.

C-8e Encourage educational programs on bicycle safety, and complement such programs through bicycle law enforcement.

C-8f Encourage pedestrian movement by providing pedestrian facilities that are direct and convenient, particularly in the beach and downtown areas.

C-8g Consider rerouting the Pacific Coast Bikeway to another location parallel to the coastline, such as adjacent to the railroad right of way throughout the city. [5-year]

C-8h Encourage a bike trail link from Carpinteria to Summerland along the railroad right of way and a coastal link to Ventura paralleling U.S. 101.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) includes goals, objectives, and policies related to ensuring adequate access to the beach for all members of the public. Policies specifically related to the proposed project include:

Policy 7-8 Increased opportunities for beach access shall be provided in the Carpinteria planning area.

b. Dedication of a vertical access easement and construction of a trail to the beach shall be required of any development on the easterly end of the Carpinteria bluffs.

Santa Barbara County Comprehensive Plan – Circulation Element

The Circulation Element identifies key roadway links throughout the unincorporated areas of the County, and along with the other elements, guides decisions regarding new development and provides clear traffic capacity guidelines that are intended to maintain acceptable levels of service on the County's roadways and intersections, while allowing reasonable growth within the communities of the unincorporated area (County of Santa Barbara 2009). Consistency with the County's Circulation Element requires that projects do not contribute ADTs where estimated future volume exceeds the policy capacity. If estimated future volume exceeds policy capacity, but the project contributes ADTs less than or equal to 2% of remaining capacity or 40 ADTs, whichever is greater, the project would be consistent with the *Comprehensive Plan*.

3.12.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to transportation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to transportation would occur if the project would:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
d) Result in inadequate emergency access.
e) Result in cumulatively considerable transportation impacts.

Recently Adopted Vehicle Miles Travelled Threshold for CEQA Transportation Impacts

On December 28, 2018, the California Natural Resources Agency certified and adopted proposed revisions to CEQA Guidelines Section 15064.3 and Appendix G: Environmental Checklist Form, Section XVII, Transportation. Section 15064.3 includes new criteria for determining the significance of a project's transportation impacts. Specifically, Section 15064.3(a) states "vehicle miles traveled is the most appropriate measure of transportation impacts." The revisions to Appendix G Section XVII removed references to circulation, traffic levels, and LOS. The revisions also added a new threshold question (i.e., "b") that considers whether a project would conflict or be inconsistent with the VMT criteria for analyzing transportation impacts in CEQA Guidelines Section 15064.3(b).

3.12.3.1 Local Significance Thresholds

Consistent with CEQA Guidelines Section 15064.7, the County of Santa Barbara developed and adopted the following thresholds for determining the significance of a project's transportation impacts, included in the September 2020 revision to the *Environmental Thresholds and Guidelines* (Santa Barbara County 2020).

Threshold "a" – Potential Conflict with a Program, Plan, Ordinance, or Policy

The SBCAG's 2040 Regional Transportation Plan and Sustainable Communities Strategy (SBCAG, 2013) and the County's Comprehensive Plan, zoning ordinances, capital improvement programs, and other planning documents contain transportation and circulation programs, plans, ordinances, and policies. Threshold question "a" considers a project in relation to those programs, plans, ordinances, and policies that specifically address multimodal transportation, complete streets, transportation demand management (TDM), and other VMT-related topics. The County and CEQA Guidelines Section 15064.3(a) no longer consider automobile delay or congestion an environmental impact. Therefore, threshold question "a" does not apply to provisions that address LOS or similar measures of vehicular capacity or traffic congestion. A transportation impact occurs if a project conflicts with the overall purpose of an applicable transportation and circulation program, plan, ordinance, or policy, including impacts to existing transit systems and bicycle and pedestrian networks pursuant to Public Resources Code Section 21099(b)(1).

Threshold "b" – Potential Impact to VMT Threshold question

Threshold "b" establishes VMT as the metric to determine transportation impacts. The Governor's Office of Planning and Research's (OPR) "Technical Advisory on Evaluating Transportation Impacts in CEQA" (OPR Technical Advisory) (OPR, 2018) contains principals, guidelines, recommendations and mandatory criteria for analyzing a project's transportation impacts, as an implementation guide for CEQA Guidelines Section 15064.3 (Determining the Significance of Transportation Impacts). The OPR Technical advisory identifies certain types or classes of projects that are deemed to have **less than significant VMT impacts**, including the following example:

- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve nonmotorized travel.

Threshold "c" – Design Features and Hazards

Threshold "c" considers whether a project would increase roadway hazards. An increase could result from existing or proposed uses or geometric design features. In part, the analysis should review these and other relevant factors and identify results that conflict with the County's Engineering Design Standards or other applicable roadway standards. For example, the analysis may consider the following criteria:

- Project requires a driveway that would not meet site distance requirements, including vehicle queueing and visibility of pedestrians and bicyclists.
- Project adds a new traffic signal or results in a major revision to an existing intersection that would not meet the County's Engineering Design Standards.
- Project adds substantial traffic to a roadway with poor design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure).
- Project introduces a new use and substantial traffic that would create potential safety problems on an existing road network (e.g., rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use).

Threshold "d" – Emergency Access

Threshold "d" considers any changes to emergency access resulting from a project. To identify potential impacts, the analysis must review any proposed roadway design changes and determine if they would potentially impede emergency access vehicles.

3.12.4 Impact Analysis

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Rincon Trail segment would reduce vehicle trips and encourage bicycle and pedestrian modes of transportation to access popular coastal destinations. The project would provide a safe, direct and well-maintained coastal pedestrian and bike trail link from the existing eastern terminus of Carpinteria Avenue to the Rincon Beach County Park parking lot, and would formalize one railroad crossing along this segment, providing for safe access to the coast. The northern terminus of the Class I bikeway paralleling US Highway 101 is a short distance from the Rincon Beach County Park, connected by Rincon Point Road/Bates Road. Positive benefits would include a reduction in vehicle trips from Carpinteria residents and visitors who travel between the City of Carpinteria and Rincon Beach County Park. Since no dedicated pedestrian or bicycle amenities exist currently between these two destinations, many residents employ vehicles even for short trips. The proposed project would encourage non-vehicle travel between these two locations, thus reducing vehicle trips and minimizing the impacts of vehicles in the community and parking at Rincon Beach County Park. Impacts would be **less than significant.**

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The proposed Carpinteria Rincon Trail meets the definition of "*multi-use paths, or other off-road facilities that serve nonmotorized travel*" as identified in OPR's "Technical Advisory on Evaluating Transportation Impacts in CEQA"(OPR 2018). According to the OPR advisory, this type of multi-use trail for non-motorized use is deemed to have **less than significant VMT impacts.**

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed shared-use path is intended to provide a safe connection for cyclists and pedestrians between the existing terminus of the east end of Carpinteria Avenue and the upper Rincon Beach County Park parking lot.. In this gap area, pedestrians and cyclists currently unsanctioned use trails along the UPRR alignment, or the shoulder of US Highway 101, both of which present safety hazards. Further, the unsanctioned trails through and across the UPRR alignment require trespass on UPRR-owned property. The proposed trail would therefore reduce existing hazards for pedestrians and cyclists and provide a legal public access path across the UPRR alignment.

As currently designed, the eastern end of the Rincon Trail would terminate at the western end of the Rincon Beach County Park parking lot. At this point, cyclists and pedestrians would need to traverse through the parking lot to reach the connection with the Class I bikeway along US Highway 101 that continues toward Ventura and vice versa for those heading west from Ventura. Pedestrians and cyclists within the Rincon Point residential neighborhood and those traveling from Ventura along the Class I bikeway also would need to traverse the parking lot (in the opposite direction) to gain access to the southern end of the Rincon Trail. Cyclists making this parking lot traverse in either direction will increase pedestrian and cyclist traffic in the parking lot. Several respondents

to the NOP indicated a concern that terminating the Carpinteria Rincon Trail at the western end of the Rincon Beach County Park parking lot could create a hazard between cyclists or pedestrians and vehicles executing parking maneuvers. The City of Carpinteria requested their consulting traffic engineers to evaluate this potential for new hazards in the parking lot area. The traffic engineer concluded there would not be a conflict between cyclists and pedestrians, as this is a slow speed mixed vehicle environment currently, and cyclists, pedestrians, and parking vehicles should continue to mix safely with the new Carpinteria Rincon Trail connection (Interwest Consulting Group, 2021). Refer to Appendix J for a copy of the Interwest memorandum. Hazards associated with cyclist, pedestrian, and vehicle interactions in the Rincon Beach County Park parking lot would be a **less than significant impact.**

The County Parks Department and SBCAG have held several meetings to discuss the issue of a more direct connection between the proposed Carpinteria Rincon Trail and the Class I bikeway along US Highway 101. Because the proposed project results in a less than significant impact, such a connector trail is not required as a mitigation measure for the proposed project. However, the County Parks Department and SBCAG have planned a study to evaluate a connector trail, as a future and separate project, that would route cyclists and pedestrians to the perimeter of the Parking Lot to make connections with the adjacent bikeway and trail systems (Appendix K).

Slow moving over-size haul trucks associated with construction activity can present a hazard where lengthy portions of the haul route would involve narrow roads with sharp curves, thereby introducing a risk for motorists deciding to attempt a passing maneuver. With regard to haul truck operations during construction, fill would be accomplished with on-site cut material. Excess earth material would be exported from the site using haul trucks with an approximately 16 cubic yard capacity, transporting such earth material to the closest disposal sites. Heavy truck traffic is anticipated to be approximately 20 heavy truck trips (10 truckloads, each with a round-trip to/from the site) a day during the grading and excavation phase of the project, which has an anticipated duration of 11 – 13 months.. This averages to 2.5 trips per hour over an 8-hour workday, with 3 trips per hour a reasonable worst-case scenario. Within the northern half of the project, north of the UPRR alignment, haul trucks would access the site via the SR150 interchange from US Highway 101 northbound or southbound. For the southern half of the project, haul trucks would navigate through the Rincon Beach County Park parking lot and use the Bates Road interchange with US Highway 101. Haul truck travel on local roadways would be minimal since freeway interchanges exist within 500 feet of the construction access at either end of the trail alignment. Given the low frequency of daily haul truck trips, and the proximity of freeway interchanges for regional access, traffic hazard impacts associated with haul truck activities during construction would result in a **less than significant impact.**

It should be noted that project effects upon parking supply/resources are not considered an environmental impact under CEQA, as supported by recent case law (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 724-727.). As such, if the parking demands of a project would exceed the locally available supply of parking spaces, and/or if existing parking spaces would be removed as a direct result of the project, such effects relative to parking supplies could represent an inconvenience for community members, but would not be an environmental impact. For informational purposes, the following discussion is provided regarding construction-related parking demands. Construction of the proposed project would generate construction employee vehicle trips to and from the project site. The majority of the work would involve grading, accomplished with a few pieces of heavy equipment working at a time; typically, a bull-dozer would be used for creating the new slopes, with a front-end loader and tractor moving the material to stockpiles and loading haul trucks. The typical number of construction workers on site for grading operations would be approximately five (5). The southerly shoulder of Carpinteria Avenue from the SR 150 intersection to the eastern terminus is wide enough to accommodate vehicle parking without blocking the travel lanes. The shoulder available for parking is approximately 600 feet in length, which would accommodate approximately 24 vehicles parked parallel to the road.

This parking area would easily accommodate construction worker parking during the project construction, avoiding any inconvenience that could be associated with construction-worker parking on residential streets or in the Rincon Beach County Park parking lot. Impacts would be **less than significant.**

d) Would the project result in inadequate emergency access?

The project would connect to the existing eastern terminus of Carpinteria Avenue, providing emergency vehicle access throughout the 16-foot wide concrete trail located on the north/west side of the UPRR alignment. The project would also connect to the Rincon Beach County Park, providing emergency vehicle access throughout the 16-foot wide concrete trail located on the south/east side of the UPRR alignment. The UPRR bridge may not be rated for heavy emergency response vehicles, but the ability for emergency response vehicles to reach up to either end of the bridge would functionally provide emergency access coverage for the entire trail alignment. Development of the proposed project would therefore increase emergency access to the project area. Consequently, project impacts regarding emergency access would be **less than significant.**

e) Would the project result in cumulatively considerable transportation impacts?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to traffic impacts. However, the proposed project would reduce vehicle trips and encourage safe bicycle and pedestrian modes of transportation to access popular coastal destinations. Accordingly, the proposed project would not degrade the nearby intersections' levels of service by any significant level or affect roadway capacity. Therefore, the project's contribution to cumulative transportation and traffic impacts would not be considerable.

3.12.5 Mitigation

The proposed project would result in less than significant impacts to transportation. No mitigation would be required.

3.12.5 Level of Significance Prior to Mitigation

As discussed above, no significant direct or indirect impacts related to transportation would result from the proposed project.

3.13 Tribal Cultural Resources

This section describes the existing tribal cultural resources conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.13.1 Existing Conditions

A Phase 1 cultural resources investigation for the original Carpinteria Rincon Trail design was prepared by Dudek in March 2008; this study included an archaeological site records and literature search at the Central Coast Information Center and an intensive surface reconnaissance of the proposed project area. For the currently proposed trail design, Dudek performed a new Phase 1 Cultural Resources Survey of the entire alignment to document existing conditions and in order to assess impacts of the updated trail alignment on cultural resources. The updated Phase 1 Survey included an archaeological record search and walk-over survey of the trail alignment and area within earthwork limits and temporary impact areas delineated for the transportation and storage of construction equipment. As is customary for Phase 1 Cultural Resource Surveys, the document is not circulated with the associated CEQA document. The updated Dudek Phase 1 survey is on-file with the City of Carpinteria, Community Development Department, and with the County of Santa Barbara Planning & Development Department

3.3.1.1 Ethnohistoric Context

Immediately prior to the arrival of the Spanish in A.D. 1542, the people living in the Santa Barbara region collectively known today as the Chumash, consisted of a set of related ethnolinguistic groups occupying a territory that spanned from Morro Bay in the north, south to Malibu on the coast, and inland to encompass the interior South Coast Range and the northwest Transverse Range, including the Santa Ynez River Valley, the Carrizo Plain, the Cuyama Valley, and the San Emigdio Hills. The language these people spoke is considered an isolate (Goddard 1996), distinct from the languages spoken by their neighbors, the Salinan, Yokuts, Kitanemuk, Tataviam, and Tongva (Gabrielino-Fernandeño). Internally there was considerable diversity, such that not all of the regional dialects were mutually intelligible. Today, the names for these different ethnolinguistic groups come mainly from their associations with different Mission territories: the Obispeño in the north were notably distinct from a group called the Central Chumash, which consisted of the Purisimeño, Ynezeño, Barbareño, and Ventureño. Both of these groups (Obispeño and Central Chumash) spoke languages that were in turn distinct from those spoken on the northern Channel Islands, typically grouped together under the heading of Island Chumash. Even this linguistic taxonomy masks some of the historically documented internal diversity that would include regional dialectic differences such as the Emigdiano, Castec, Matilija, Mugu, and Malibu of the Central Chumash, and the Cruzeño, Roseño, and Migueleño of the Island Chumash (see Kroeber 1925; Grant 1978a, 1978b; Golla 2011). The current project area and the broader vicinity of the city of Carpinteria was occupied historically by speakers of both Barbareño and Ventureño Central Chumash, today represented by the Barbareño/Ventureño Band of Mission Indians, headquartered in Ojai.

What we know of these people comes, in part, from the rich written accounts of a variety of sources, the earliest of which are those of the Spanish explorers to the Santa Barbara Channel and mainland, namely Cabrillo in 1542 and Vizcaíno in 1602 (Wagner 1929; Brown 1967). These observations were expanded by the accounts written during early efforts to establish evangelical Missions (and therefore Royal territory) in Alta California, namely by Portolá in 1769, de Anza in 1776, and to a lesser degree, Garcés in 1776 (Coues 1900; Bolton 1927; Gamble 2008; Priestley 1937). These accounts were further expanded by the observations and managerial records of the Mission

administrators for a period of about 60 years (Geiger 1969; Geiger and Meighan 1976; Johnson 1988, 1982). After that, Euroamerican interest in Native American life made it possible for the Native views of their own history and culture to enter into the written record, primarily in this case through ethno-historic documentation of Chumash beliefs, folk tales, music, customs, and lifeways (e.g., Blackburn 1975; Hudson et al. 1981; Harrington 1942). This forms perhaps the richest body of information that we have about the Chumash; further development of this understanding continues today, incorporating contemporary Chumash identity, concerns, interpretations, research, and politics.

The written records and accounts of Chumash life reveal a variety of things that have been of paramount importance to archaeologists for many decades. This includes accounts of what people ate and how they acquired it, how they made various elements of material culture, and how they used it (e.g., Hudson and Blackburn 1983, 1979, 1985, 1986). It also includes ideas about the landscape, knowledge of the plants and animals that live in it, and of how to manage that landscape, as well as accounts of how social life was structured, and how hierarchy and power were perceived, imagined and negotiated by individuals. The ethnohistories also contain a rich account of the structure of hierarchy within Chumash life, including ideas about how money, exchange, and territory, along with the management and manipulation of those elements, fed into the structures of social power.

It is this body of knowledge that commands the lion's-share of archaeological attention, certainly since the 1980s. Of particular importance to archaeologists of the Santa Barbara Channel has been the effort to explain the evolution of the kinds of social and political complexity revealed in the rich ethno-historic records of the Chumash (C.D. King 1976; L.B. King 1969). Attention paid to how people acquired and controlled resources, and how resources from different environments (namely the Islands, the mainland coast, and the interior) were moved across different boundaries and networks, has been extremely important. This involves a detailed understanding of how goods and services were transported not only between different aspects of the Chumash cultural sphere, but also between the Chumash and the people of the Central Valley, the Sierra Nevada, the South Coast, and the Desert Interior. Considerable ethnographic detail exists about the nature of market-based exchange, the use of shell-bead money, conscious control of inflation, the role of intermediaries in between-group exchange, trading parties from distant lands, and the kinds of goods transported from different areas, all of which play a significant role in both the interpretation of the archaeological record, and the design of archaeological research. Indeed, synthetic accounts of the ethnographic record occasionally offer insights about the archaeological patterns one might expect of the Chumash interaction sphere (Gamble 2008; C.D. King 1976; Johnson 1988, 1982).

Interests in the evolution of complex society in the Chumash world have therefore played a disproportionate role in the collective efforts of archaeologists over the past many decades. Therefore, it is not surprising that the majority of archaeological research has been focused mainly on the late prehistoric record and on understanding the evolution of the many things the Europeans were able to observe or record of Chumash life. However, as with any interpretation of the past informed by ethnohistoric observation, interpreters of the Chumash and their ancestors must be cautious about the ethnographer's interpretive agency, and the historical context of it (Haley and Wilcoxon 1997, 1999; Gill, Fauvelle, and Erlandson 2019). Contemporary re-analysis of historic observations may stimulate novel insights that engender novel directions in archaeological research.

3.3.1.2 Central Coast Information Center Records Search and Survey Results

The records search indicates that five previously recorded cultural resources exist within 0.5 mile of the proposed project site. Multiple loci of CA-SBA-1, the ethnohistoric/historic Chumash village of S*huku*, surround the proposed project site with the nearest locus (A) located immediately southeast of the proposed Project area, near the mouth

of Rincon Creek. Although limited weathered shell was observed in disturbed contexts, no cultural resources were observed in situ, or within intact soils, during the intensive field survey under generally good to excellent ground surface visibility. However, the project site is not only located partially within an archaeological site (CA-SBA-1168), it is also surrounded, in every direction, by archaeological sites with the closest loci of CA-SBA-1/CA-VEN-62 located immediately adjacent to the southeastern extent of the proposed project site. Based on the presence of a portion of the proposed project site overlapping a small portion of the archaeological site CA-SBA-1168, the close proximity of multiple archaeological sites to the proposed project site, as well as the general archaeological sensitivity of the area surrounding the proposed project site, there is substantial evidence for potential unknown significant prehistoric and historic archaeological resources to exist within the project site. Technical Reports and supporting documentation are available in Confidential Cultural Appendix D. These confidential appendices are archived at the City and are only accessible to eligible individuals as defined under applicable regulations governing cultural resources confidentiality.

3.3.1.3 Native American Coordination

Sacred Lands File Search and Tribal Outreach

A search of the Native American Heritage Commission's (NAHC's) Sacred Land File was requested on May 1, 2018, and was conducted on May 23, 2018 (received on May 25, 2018) (Frank Lienert, Associate Government Program Analyst) to determine the presence of any Native American cultural resources within the proposed project site (see Confidential Appendix L). The NAHC indicated that no known Native American heritage resources are identified within the proposed project site. The NAHC identified six Native American individuals who would potentially have specific knowledge as to whether or not other cultural resources are identified within the project site that could be at-risk. Informal outreach letters (not formal AB-52 notification) were sent via email and certified mail on May 25, 2018 to six Native Americans representatives identified by the NAHC who might have knowledge of previously undocumented cultural resources within the APE. Dudek made follow-up phone calls on June 4 and 11, 2018. Three responses were received on June 4, 2018, one response was received on June 11, 2018. As of September 28, 2018, two of the Native American representatives have not responded to Dudek's multiple and varied communication efforts.

The three responses to Dudek's outreach efforts included the following individuals all belonging to the Barbareño/Ventureño Band of Mission Indians: Julie Lynn Tumamait-Stenslie, Chair (June 11, 2018 phone call initiated by Dudek); Patrick Tumamait, Chair (June 4, 2018 phone call initiated by Dudek); and Eleanor Arrellanes (June 4, 2018 phone call initiated by Dudek). Each representative expressed concern about proposed disturbances, a desire to be contacted regarding any aspect of the proposed project, as well as the need for archaeological and Native American monitoring.

Assembly Bill (AB) 52

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is a project that may have a significant effect on the environment (PRC Section 21084.2). Under AB 52, a TCR must have tangible, geographically defined properties that can be impacted by project implementation. The proposed project is subject to compliance with AB 52.

On October 25, 2019, the City of Carpinteria sent AB-52 notification letters certified mail (letters provided via email to contacts that provided their email address), to each Native American contact provided by the NAHC on May 25, 2018 and to those tribal entities that have formally requested notification from the City. The NAHC provided an

updated contact list to the City on October 29, 2019, which included five new contacts; the City sent AB-52 notification letters to the five newly identified contacts on October 28 and 29, 2019. On November 16, 2020, the City sent out email reminders for the proposed project's EIR virtual scoping meeting, and one of the recipients of that email included some tribal representatives that the City typically communicates with on overall projects within City limits. As a result of that forwarded scoping email, Patrick Tumamait of the Barbareno/Ventureno Band of Mission Indians, responded on November 17, 2020. In his response, Mr. Tumamait stated that the proposed project site is sensitive, that he has been told of a recorded site nearby and that he recommends Native American monitoring and would like to take on that role for the project. It should be noted that Mr. Tumamait is not on the City's AB 52 contact list and this correspondence between the City and Mr. Tumamait is not part of the formal AB 52 consultation process. To date, no California Native American tribes have requested consultation with the City. Therefore, government-to-government consultation initiated by the City has not resulted, to date, in the identification of a TCR within or near the Project Site. Table 3.13-1 summarizes the results of the AB 52 process for the proposed project.

Table 3.13-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method of Notification/ Date of Delivery	Response to City Notification Letters
Gino Altamirano, Chairperson Coastal Band of the Chumash Nation	Certified Mail: October 29, 2019	None to date
Fred Collins, Spokesperson Northern Chumash Tribal Council	Certified Mail and email: October 29, 2019	Response received via email on October 30, 2019. Spokesperson Collins stated that the Tribe is engaged with San Luis Obispo County only and that the Tribe supports local tribal recommendations. The City responded to Spokesperson Collins' email on that same day stating that the City notified the Tribe at the recommendation of the NAHC and inquired as to whether the Tribe would like to be removed from the City's AB 52 contact list. Spokesperson Collins responded via email on November 11, 2019 stating that the Tribe will respond to any project that the City does not get a comment for and if help is needed, they would like to serve as a backup Tribe.
Kenneth Kahn, Chairperson Santa Ynez Band of Chumash Indians	Certified Mail: October 29, 2019	None to date
Julio Quair, Chairperson Chumash Council of Bakersfield	Certified Mail: October 29, 2019	None to date
Mona Tucker, Chairperson yak tityu tityu yak tilhini- Northern Chumash Tribe	Certified Mail and email: October 29, 2019	Response received via email on October 29, 2019. Chairperson Mona stated that the proposed project is not within the Tribe's territory and recommended that other tribes and families ancestrally affiliated to the proposed project site location be contacted.

Table 3.13-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method of Notification/ Date of Delivery	Response to City Notification Letters
Julie Lynn Tumamait-Stenslie, Chair Barbareno/Ventureno Band of Mission Indians	Certified Mail: October 25; Email October 28, 2019; Second Certified Mail: October 29, 2019	Response to City's notification email sent October 28, 2019 was received from Ms. Tumamait-Stenslie via email that same day acknowledging receipt of notification. The City has not received any additional information/responses from Ms. Tumamait-Stenslie as a result of the AB 52 notification letters or email.
Mark Vigil, Chief San Luis Obispo County Chumash Council	Certified Mail: October 29, 2019; no email address provided.	None to date

3.13.2 Relevant Plans, Policies, and Ordinances

3.13.2.1 State

The California Register of Historical Resources (CRHR) (Public Resources Code Section 5020 et seq.)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following Nation Register of Historic Places (NRHP) criteria (PRC Section 5024.1(c)):

- Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, Section 4852(d)(2)).

> The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed

on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

California Environmental Quality Act

The following California Environmental Quality Act (CEQA) statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources (TCRs):

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5(b)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5(b)(2)):

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2(g)):

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); 14 CCR 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

Assembly Bill 52

Assembly Bill (AB) 52 formalizes the consultation process between lead agencies and tribal representatives, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with a project area. This includes tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Tribal Cultural Resources (TCRs)

Section 4 of AB 52 adds Sections 21074 (a) and (b) to the PRC, addressing TCRs and cultural landscapes. Section 21074 (a) defines a "tribal cultural resource" as one of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
   a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
   b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

> In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Native American Historic Cultural Sites

The Native American Historic Resources Protection Act (PRC Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

California Health and Safety Code

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5b requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains. PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code Section 7050.5c). The NAHC will notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

3.13.2.2 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City's General Plan/Local Coastal Land Use Plan includes the following objectives and policies relevant to the proposed project and cultural resources:

- OSC-16 Preserve Carpinteria's Cultural Resources

Implementation Policies

74. Explore all available measures, including purchase, tax relief, purchase of development rights, etc. to avoid development on important archaeological sites. Where these measures are not feasible and development will adversely affect identified archaeological or paleontological resources, require adequate mitigation.

75. Prohibit activities, other than development, which could damage or destroy archaeological sites, including off-road vehicle use and unauthorized collecting of artifacts.

76. Review all proposals for development in or adjacent to cultural resource areas for their potential to impact the resource. Give special consideration to development of facilities that enhance the cooperation, enjoyment or maintenance of these areas.

77. Prior to the city granting a development permit, all archaeological sites (or areas near known archeological sites that have been determined though Phase 1 investigation to potentially include cultural or paleontological resources) must undergo a subsurface test to determine the integrity and significance of the site. Through the project environmental review process, the disposition and/or preservation of any archaeological sites deemed to have significance as a result of the subsurface testing shall be determined. Preservation of cultural/paleontological resource sites through avoidance shall be preferred, however, other methods of disposition may be approved through the environmental review process as identified in the city's Guidelines for the Implementation of CEQA.

78. A qualified archaeologist and Native American observer (acceptable to the city) shall be retained to monitor grading activities on identified archeological sites and in the vicinity of identified archaeological resources. If cultural artifacts or similar material of potential cultural or paleontological importance, are uncovered during grading or other excavation the following shall occur:

    a. The monitor or archaeologist shall halt the grading or excavation and notify the City.
    b. A qualified archaeologist shall prepare a report assessing the significance of the find and recommending any actions to be taken by the applicant(s) prior to the city granting permission for grading to resume.
    c. The removal of cultural artifacts or other materials shall only occur after preparation of the report and in conformance with the recommendations of the report as approved by the City.

Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to PRC Section 30500 of the California Coastal Act of 1976, Santa Barbara County was required to prepare a Local Coastal Plan (LCP) for portions of the unincorporated areas of Santa Barbara County within the coastal zone. Sections of the Santa Barbara County Article II Zoning Ordinance that may be relevant to the proposed project include standards for archaeological resources (Section 35-65).

Section 35-65. Archaeology

1. When developments are proposed for lots where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.
2. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.
3. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan was partially certified by the Coastal Commission on March 17, 1981 and is the Local Coastal Program for unincorporated Santa Barbara County. It details the rules and regulations of land use within Santa Barbara County's coastal areas. The following policies would apply to the proposed project.

- Policy 10-1: All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological, and other classes of cultural sites.
- Policy 10-2: When developments are proposed for parcels where archaeological or other cultural sites are located, Project design shall be required which avoids impacts to such cultural sites if possible.
- Policy 10-3: When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

3.13.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to tribal cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to tribal cultural resources would occur if the project would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
   i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

b) Result in cumulatively considerable impacts to tribal cultural resources.

3.13.4 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Based on the CHRIS and NAHC SLF records searches, including background research as summarized above, no previously recorded archaeological resources of Native American origin or TCRs listed in the CRHR or a local register or in any other of the records reviewed were identified within the Project Site. Further, no TCRs have been identified by California Native American tribes as part of the City's AB 52 notification process, and no California Native American tribes requested consultation with the City. However, there is still a potential for unknown subsurface TCRs to be impacted by the project, which could result in a potentially significant impact. Therefore, protocols for the inadvertent discovery of TCRs is included as **MM-TCR-1**. In coordination with the implementation of **MM-CR-1** through **MM-CR-4**, **MM-TCR-1** will reduce the potentially significant impact to unknown TCRs to a **less than significant level**.

b) Would the project result in cumulatively considerable impacts to tribal cultural resources?

Potentially significant project-specific impacts to tribal cultural resources would be reduced to less than significant with implementation of **MM-CR-1** through **MM-CR-4** and **MM-TCR-1**, avoiding the potential for the proposed project to contribute to cumulative impacts to cultural resources. The project would, therefore, result in a less than cumulatively considerable impact to cultural resources.

3.13.5 Mitigation

The potential exists for significant tribal cultural resources impacts. The project would require the implementation of **MM-CUL-1** through **MM-CUL-4** and **MM-TCR-1** to reduce such impacts.

MM-CR-1 through **MM-CR-4** (see Section 3.4, Cultural Resources)

MM-TCR-1 **Initial ground disturbing activities shall be monitored by a Native American observer in accordance with the following specifications:**

Temporary Impact Areas (equipment staging and materials storage outside trail alignment) - a Native American observer, ancestrally affiliated with the area, shall monitor transport and placement activities until such time that it is reasonable to ascertain that no additional prehistoric archaeological/cultural resources are located within areas of temporary disturbance of the proposed project site.

Permanent Impact Areas not including bridge piling installation (all areas of the trail alignment excepting the bridge approach areas on both sides of the UPRR alignment) – a Native American observer, ancestrally affiliated with the area, shall monitor project implementation during the initial grading and excavation activities until such time as sufficient subsurface soil has been uncovered/excavated to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.

Bridge piling installation – a Native American observer, ancestrally affiliated with the area, shall monitor the installation of bridge pilings within intact soils and/or any soils deeper than 10 feet below current ground surface to ascertain that no additional prehistoric archaeological/cultural resources are located on the proposed project improvement area.

The monitor/observer shall immediately inform equipment operators in the event archaeological resources are encountered, and shall be empowered to immediately halt construction activity in the area of the discovery until assessment can be completed, and materials recovered as appropriate (refer to CR-2 for additional detail). Monitor reports shall be provided to the City of Carpinteria/County of Santa Barbara on a monthly basis during construction, with a final monitoring report produced at the conclusion of construction activities and provided to the City and County.

Plan Requirements and Timing: Prior to issuance of a grading permit, the City of Carpinteria shall contract with a Native American observer, ancestrally affiliated with the area, to monitor initial ground disturbance activities in accordance with the above criteria. ***Monitoring***: City of Carpinteria/County of Santa Barbara staff shall ensure the Native American observer, ancestrally affiliated with the area, provide monitoring of initial ground disturbance activities in accordance with the above criteria through receipt of field documentation describing each day of monitoring, construction activity occurring during the monitoring, and observed soil profile conditions related to the potential for presence of archaeological resources.

3.13.6 Level of Significance After Mitigation

Potential impacts to tribal cultural resources would be reduced to less than significant with implementation of **MM-CR-1** through **MM-CR-4** and **MM-TCR-1**.

3.14 Utilities and Services Systems

This section describes the existing utilities and service systems of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

3.14.1 Existing Conditions

Water Service

Water is supplied by the Carpinteria Valley Water District (CVWD) through distribution line and storage facilities controlled by CVWD. CVWD connected to state water in November 1997 (City of Carpinteria 2003). There are no water lines adjacent to or underlying the project area. Domestic (potable) water service is currently provided at Rincon Beach County Park by CVWD.

Wastewater Service

Wastewater collection and treatment services in the Carpinteria Valley are managed by the Carpinteria Sanitary District (CSD). This community-wide service agency has the obligation of operating and maintaining this system for the transmission, treatment and disposal of sewage generated within this area. The CSD is also responsible for providing treatment to the level necessary to meet various discharge requirements set by the Regional Water Quality Control Board and other state and federal agencies. Currently, service is provided to areas both within and outside the limits of the City of Carpinteria. Sewage generated in this area is conveyed through district lines to the treatment facility located between Olive and Oak Avenues, south of 6th Street and adjacent to the UPRR (City of Carpinteria 2003). Wastewater collection service via CSD is currently provided at Rincon Beach County Park.

Solid Waste Collection and Disposal

Solid waste produced in the City of Carpinteria is collected by E.J. Harrison and Sons Inc., located in Ventura. E.J. Harrison and Sons Inc. provides solid waste collection and disposal for all residential, commercial, and industrial areas in the City. Once collected, the solid waste is transported to the Gold Coast Material Recovery Facility and the residual is ultimately deposited in the Toland landfill (City of Carpinteria 2003). Waste in the south coast of the County of Santa Barbara, which includes Rincon Beach County Park, is collected and hauled by MarBorg Industries (Santa Barbara County Resource Recovery & Waste Management Division 2021).

3.14.2 Relevant Plans, Policies, and Ordinances

3.14.2.1 Federal

Integrated Waste Management Act of 1989 (AB 341)

The Integrated Waste Management Act of 1989 requires each city, county, and regional agency to develop a source reduction and recycling element of an integrated waste management plan that includes source reduction, recycling, and composting components. A minimum of a 50% diversion rate of all solid waste from landfill disposal or transformation by January 1, 2000 was required and met. The current policy goal of the state is no less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020 to divert as much waste as possible from entering landfills.

3.14.2.2 State

Water Services

Urban Water Management Planning Act

In 1983, the Legislature enacted the Urban Water Management Planning Act (UWMP Act; California Water Code, Sections 10610–10656), which requires specified urban water suppliers within the state to prepare an Urban Water Management Plan (UWMP) and update it every 5 years. State and local agencies and the public frequently use UWMPs to determine if agencies are planning adequately to reliably meet water demands in various service areas. As such, UWMPs serve as an important element in documenting water supply availability and reliability for purposes of compliance with state laws, Senate Bills 610 and 221, which link water supply sufficiency to large land-use development project approvals. Urban water suppliers also must prepare UWMPs, pursuant to the UWMP Act, to be eligible for state funding and drought assistance.

The UWMP provides information on water usage, water supply sources, and water reliability planning within a specified water agency service area. It also may provide implementation schedules to meet projected demands over the planning horizon; a description of opportunities for new development of desalinated water; groundwater information (where groundwater is identified as an existing or planned water source); description of water quality over the planning horizon; and identification of water management tools that maximize local resources and minimize imported water supplies. Additionally, the UWMP evaluates the reliability of water supplies within the specified service area. This includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption of water supplies.

Senate Bills 610 and 221

On January 1, 2002, Senate Bill 610 took effect. Senate Bill 610, which was codified in the Water Code beginning with Section 10910, requires the preparation of a water supply assessment for projects within cities and counties that propose to construct 500 or more residential units or the equivalent. Senate Bill 610 stipulates that when environmental review of certain development projects is required, the water agency that is to serve the development must complete the water supply assessment to evaluate water supplies that are or will be available during normal, single-dry, and multiple-dry years during a 20-year projection to meet existing and planned future demands, including the demand associated with a proposed project.

Senate Bill 221, enacted in 2001 and codified in the Water Code, requires a city, county, or local agency to include a condition to any tentative subdivision map that a sufficient water supply shall be available to serve the subdivision. The term “sufficient water supply” is defined as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the proposed subdivision project’s projected water demand, in addition to existing and planned future water uses, including agricultural and industrial uses, within the specified service area. Senate Bill 221 further requires any verification of “projected” water supplies to be based on entitlement contracts, capital outlay programs and regulatory permits and approvals.

Executive Order B-29-15

In response to the ongoing drought in California, Executive Order (EO) B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency

standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

Title 14: Natural Resources – Division 7

Title 24 of the California Code of Regulations regarding Natural Resources sets minimum standards for solid waste handling and disposal, including specific regulations regarding waste tire storage and disposal, hazardous waste disposal facilities, construction and demolition and inert debris transfer/processing, construction and demolition waste and inert debris disposal, transfer/processing operations and facilities, siting and design, operation standards, record keeping, and additional operating requirements for facilities. Additional guidance and requirements for compostable materials handling operations and facilities, asbestos handling and disposal, resource conservation programs, farm and ranch solid waste cleanup and abatement, used oil recycling program, electronic waste recovery and recycling, solid waste cleanup among others are also addressed in Title 14.

Title 27: Environmental Protection – Division 2, Solid Waste

Title 27 of the California Code of Regulations regarding Environmental Protection and Solid Waste set the criteria for all waste management units, facilities, and disposal sites including regulations of the CIWMB and SWRCB. Waste classification, siting, construction standards, water quality monitoring and response programs, operating criteria, daily and immediate cover, handling and equipment, controls, gas monitoring and control, closure and post-closure standards, and financial assurances are all aspects covered in Title 27.

Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000, and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (Cal Recycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under California Integrated Waste Management Board regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, making a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. AB 341 requires that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. This bill requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place.

AB 1826 - Mandatory Commercial Organics Recycling

In 2014, the State of California adopted AB 1826, a mandatory commercial organics recycling law that took effect in 2016. "Organic waste" means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper that is mixed in with food waste. As of January 1, 2017, businesses (including public entities) and multifamily residential dwellings of five units or more units that generate 4 cubic yards of organic waste per week are mandated to recycle their organic waste.

3.14.2.3 Local

City of Carpinteria General Plan/Local Land Use Plan

Sanitary Sewer Services. Per the City's general plan, wastewater collection and treatment services are managed by the CSD. CSD has the obligation of operating and maintaining this system for the transmission, treatment, and disposal of sewage generated within their service area. The general plan states that the District is responsible for providing treatment to the level necessary to meet requirements set by the Regional Water Quality Control Board and other state and federal agencies (City of Carpinteria 2003).

Domestic Water Service. Per the City's general plan, domestic water service in Carpinteria is subordinate to two components: supply and distribution system. Water is supplied by CVWD through distribution line and storage facilities controlled by CVWD. CVWD connected to state water in November 1997 (City of Carpinteria 2003).

The City of Carpinteria General Plan/Local Land Use Plan Public Facilities & Services Element includes various goals, objectives, and policies related to ensuring the provision of adequate essential utilities and infrastructure systems for proposed development. Policies specifically related to the proposed project include:

Objective PF-1 To ensure the provision of adequate water supplies by minimizing consumption and investigating new sources either in existing supply or outside existing sources.

Policy PF-1d The City shall reevaluate existing water facility regulations and amend said codes to require new development to utilize water-efficient devices responsive to our water source area.

Objective PF-2 Ensure adequate service systems for the transmission, treatment and disposal of sewage and wastewater generated within this area as well as the disposal of trash, green waste and recyclable material.

Objective PF-6 To ensure that new development is adequately served by utilities and does not impact existing service areas in the community.

Policy PF-6a The ultimate responsibility to ensure that the facilities (including systemwide improvements) needed to support the project are available at the time that they are needed shall be that of the sponsor or development projects.

Policy PF-6c Development projects within Carpinteria shall be required to: 1. construct and/or pay for the new on-site capital improvements that are required to support the project; 2. ensure that all new off-site capital improvements that are required by the project are available prior to certificate of occupancy; 3. be phased so as to ensure that the capital facilities that will be used by the new development are available prior to certificates of occupancy; 4. ensure that, in

the event that public services or off-site capital facilities are impacted prior to development, the level of service provided to existing development will not be further impacted by the new development; and 5. provide for the provision of public services, and shall not increase the cost of public services provided to existing development.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) includes goals, objectives, and policies related to ensuring the provision of adequate essential utilities and infrastructure systems for proposed development, implementing regulations in the interest of the public health and safety, and providing for the general welfare of the community. Policies specifically related to the proposed project include:

Policy 2-4 Within designated urban areas, new development other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or an existing mutual water company, if such service is available.

Policy 2-5 Water-conserving devices shall be used in all new development.

Policy 2-6 Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer ads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan. Where an affordable housing project is proposed pursuant to the Affordable Housing Overlay regulations, special needs housing or other affordable housing projects which include at least 50% of the total number of units for affordable housing or 30% of the total number of units affordable at the very low income level are to be served by entities that require can-and-will-serve letters, such projects shall be presumed to be consistent with the water and sewer service requirements of this policy if the project has, or is conditioned to obtain all necessary can-and-will-serve letters at the time of final map recordation, or if no map prior to issuance of land use permits.

Policy 2-3 In the furtherance of better water management, the County may require applicants to install meters on private wells and to maintain records of well extractions for use by the appropriate water district.

Policy 2-4 Within designated urban areas, new development other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or an existing mutual water company, if such service is available.

Policy 2-5 Water-conserving devices shall be used in all new development.

Policy 2-9 The existing water supply of the Carpinteria County Water District (67,541 AFY) shall be divided between the County and the City of Carpinteria on the basis of historical use; 30 percent (2,262 AFY) shall be allocated for use with the City and

70 percent shall be allocated for use within the County. The uncommitted water surplus in the Carpinteria County Water District may be increased proportionate to the amount of additional documented water such as that provided by reinjection programs and/or water reclamation and reservoir facilities which are designed to collect and reclaim wastewater and runoff from swales, creeks, or waterways which the district has the legal right to so utilize. The total uncommitted water surplus within the district shall be reevaluated on an annual basis.

Action:

The County's portion of the uncommitted water surplus shall be allocated for priority uses, including but not limited to the following:

1) Agriculture: Water shall be distributed between open field crops and greenhouses, nurseries, and cover crops on the basis of established water usage, i.e., approximately 56 percent of the agricultural water supply shall be used for open field crops and 44 percent for greenhouses, nurseries, and other cover crop production.
2) Residential development: New development shall be based on the 10 to 1 ratio (between urban development in the City of Carpinteria and residential development in the unincorporated area of the County) established by the State Coastal Commission. (For example, since 30 percent of the water surplus is currently being allocated to the City of Carpinteria for urban uses, 3 percent shall be allocated to the County for residential development within the rural neighborhoods delineated on the land use plan maps.)
3) Public recreation
4) Visitor-serving commercial: Two areas allow for this use on the land use plan map;-the eastern end of the Carpinteria bluffs and-the Carpinteria Camper Park on North Via Real west of the City.

Policy 2-10 Annexation of a rural area(s) to a sanitary district or extensions of sewer lines into rural area(s) as defined on the land use plan maps shall not be permitted unless required to prevent adverse impacts on an environmentally sensitive habitat, to protect public health, or as a logical extension of services.

3.14.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.
f) Result in cumulatively considerable impacts relating to utilities and service systems.

3.14.4 Impact Analysis

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project is a shared-use path that would be used primarily for bicycle and pedestrian travel. The project would therefore not create additional demands in the areas of natural gas, electricity or telecommunications facilities. The project would moderately alter the existing drainage patterns of the site, via regrading of project slopes and short-term removal of vegetation, as well as through introduction of the impervious trail surface (approximately 1 acre of new impervious surface), resulting in a potentially significant impact. Increased stormwater run-off during construction and until new vegetation is established are addressed under Section 3.8, Hydrology and Water Quality, as **Mitigation Measure (MM) WAT-1, MM-WAT-2, MM-WAT-3,** and **MM-WAT-4**. Stormwater run-off from the trail surface would be collected by a concrete v-ditch adjacent to the trail and released through a series of short storm drains with discharge along the adjacent beach. The storm drains would be installed by the project and would be the responsibility of the project sponsors to maintain. **MM-WAT-5** requires maintenance of the storm drains in perpetuity to prevent failure of such systems. Potential impacts related to stormwater system facilities would be **less than significant with mitigation.**

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The proposed project would not require new water supply to serve the trail and its supporting facilities; minimal water would be required for landscape irrigation and maintenance purposes. Recycled water would be used for irrigation if locally available. Following restoration and during the plant establishment period, native plants would require regular irrigation during the dry season until they are established; approximately one to two years. The Carpinteria Valley Water District releases an annual report which assesses its water supply and indicates the District has excess water to meet the demands of all lands within the District's jurisdiction into the foreseeable future (CVWD 2017). A minimal amount of water would be required during construction of the proposed trail for fugitive dust control during earthwork activities. Furthermore, project construction is not anticipated to adversely affect or disrupt water service. The total amount of water required during construction and operation of the project would not impact the availability of water to the District's service area. Impacts would be **less than significant.**

c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The proposed project is a shared-use path that would be used primarily for bicycle and pedestrian travel. The project would not include the use of septic systems or alternative wastewater disposal systems; therefore, the proposed project is not anticipated to generate a need for new or altered sewer system facilities. Wastewater generated by users of the proposed trail would be serviced by existing facilities at the Rincon Beach County Park. The proposed project would not adversely affect the wastewater treatment provider's ability to serve existing commitments. Potential impacts related to sewer system facilities would be **less than significant.**

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The proposed project consists of a shared-use path that would not generate a substantial amount of solid waste that would adversely affect landfill capacity or would breach national, state or local standards. Solid waste

generated by using the trail would be limited to trash and recycling materials deposited in the waste receptacles provided at the existing dirt parking lot at the west end of the trail or in Rincon Beach County Park; both waste and recycling receptacles are currently provided at Rincon Beach County Park. Construction waste generated by the project, including concrete, steel rebar, exported soils and wood for concrete forms, would be taken to an appropriate construction waste recycling facility in Santa Barbara or Ventura County, to avoid such waste from entering a landfill facility. Impacts would be **less than significant.**

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As mentioned in criteria d), the project will not generate a substantial amount of solid waste that would affect landfill capacity or breach national, state, or local standards. Potential impacts would be **less than significant.**

f) Would the project result in cumulatively considerable impacts relating to utilities and service systems?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to utility and service impacts, resulting in a potentially significant impact. However, with implementation of required mitigation measures (**MM-WAT-1** through **MM-WAT-5),** utility and service system impacts of the project would be reduced to less than significant or no impacts; the project would therefore have a less than considerable contribution to potential cumulative impacts in the region.

3.14.5 Mitigation

The proposed project could have potentially significant impacts upon stormwater systems and cumulative impacts to stormwater systems, for which mitigation has been required (**MM-WAT-1** through **MM-WAT-5**). **MM-WAT-1** through **MM-WAT-5**, outlined in Section 3.8, would be implemented to reduce potential project impacts to stormwater runoff during construction and until new vegetation is established. The proposed project would result in less than significant or no impacts to utilities and service systems other than stormwater systems. All potential impacts upon utilities and services systems would be reduced to less than significant with incorporation of required mitigation measures.

3.14.6 Level of Significance After Mitigation

As discussed above, the project could have potentially significant impacts on stormwater systems. With implementation of mitigation **MM-WAT-1** through **MM-WAT-5**, impacts would be reduced to less than significant.

4 Effects Found Not to be Significant

Section 15128 of the California Environmental Quality Act (CEQA) guidelines requires that an Environmental Impact Report (EIR) briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. The environmental issues discussed in the following sections are not considered significant for the proposed Carpinteria Rincon Trail Project (project) and the reasons for these less-than-significant impact or no impact determinations are discussed herein.

The environmental issues addressed in this chapter include the following:

- Agricultural and Forestry Resources
- Energy
- Mineral Resource
- Population and Housing
- Public Services
- Wildfire

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4.1 Agriculture and Forestry Resources

This section describes the existing agriculture and forestry resources conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

4.1.1 Existing Conditions

Agricultural soil is defined as soil that is utilized or suitable for agricultural crop production. The project site and immediately adjacent lands are designated on California Department of Conservation Important Farmland Maps as "Urban and Built-Up Land" and "Other Land" (DOC 2020). In addition, as shown in Figure 4.1-1, Williamson Act Land Contracts in Project Vicinity, the project site is not designated under a Williamson Act Contract. However, several nearby properties are under a Williamson Act Contract. Soils within the project site have been classified as Xerorthents, cut and fill areas (USDA 2011). Xerorthents can be rock, concrete, asphalt or other debris or earthy fill and typically consist of mechanically removed and mixed soil material in cut and fill areas used primarily for highways and urban development. Soils in the project area are rated as "Not Prime Farmland" (USDA NRCS 2011).

No agricultural resources or forest land are present within the project site nor have any been thought to exist in modern times.

4.1.2 Relevant Plans, Policies, and Ordinances

4.1.2.1 Federal

Farmland Protection Policy Act

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. Further, the FPPA directs federal programs to be compatible with state and local policies for the protection of farmlands. The FPPA does not authorize the federal government to regulate the use of private or non-federal land or in any way affect the property rights of owners of such land. Because the proposed project does not have federal involvement, the FPPA is not applicable in this situation.

4.1.2.2 State

California Department of Conservation

The California Department of Conservation (DOC) is the state agency that administers both the State Farmland Mapping and Monitoring Program (FMMP) and the California Land Conservation Act, more commonly known as "The Williamson Act." The Important Farmland Mapping Program compiles information of the state's important farmlands, including tracking farmland proposed for development, and provides this information to state and local government agencies for use in planning and for decision makers and decision-making bodies.

Farmland Mapping and Monitoring Program

The FMMP Important Farmland Maps are based on a classification system that combines technical soil ratings and current land use. Important Farmland Categories include Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Land. FMMP's Important Farmland Maps require that Prime Farmland, meet the following criteria: (1) Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date, which equates to four years (DOC 2020); and (2) The soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA NRCS. NRCS compiles lists of which soils in each survey area meet the quality criteria. Factors considered in qualification of a soil by NRCS (DOC 2020) include the following:

- Water moisture regimes, available water capacity, and developed irrigation water supply
- Soil temperature range
- Acid-alkali balance
- Water table
- Soil sodium content
- Flooding (uncontrolled runoff from natural precipitation)
- Erodibility
- Permeability rate
- Rock fragment content
- Soil rooting depth

The soils information presented in this analysis is derived from statewide soils maps that have been prepared by both state and federal government entities. The California DOC, Division of Land Resource Protection, and the USDA NRCS both conduct regular and ongoing assessments of soil types and then prepare detailed soil maps. Once soils are mapped, they are grouped into the following categories that have specific definitions. The categories and definitions are as follows:

Prime Farmland. In California, the FMMP maps all statewide farmlands. The FMMP's soils study area is contiguous with modem soil surveys developed by the USDA. The FMMP requires that any land designated as Prime must meet the criteria related to land use and soils. As such, farmland with the optimal combination of physical and chemical features to sustain long-term agriculture is described as Prime. The land has been determined to have the soil quality, growing season, and moisture supply needed to produce sustained high crop yields (DOC 2020).

Farmland of Statewide Importance. As with Prime Farmland, Farmland of Statewide Importance must also meet both the criteria described above with respect to land use and soils and is similar to the Prime Farmland category. The difference is that Farmland of Statewide Importance tolerates greater shortcomings of the soil, such as greater slopes or less ability to store moisture (DOC 2020).

Unique Farmland. This category of farmland is categorized as having lesser quality soils but is still used for the production of leading agricultural crops. This farmland is typically irrigated but can also include non-irrigated orchards or vineyards found in some climatic zones in the state. These lands must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date (DOC 2020).

Farmland of Local Importance. Lands that have been determined by local jurisdictional authorities such as county boards of supervisors or local advisory committees to have a specific importance to the local agricultural economy are considered Farmland of Local Importance (DOC 2020).

The FMMP has three other categories of land that are generally more limited in terms of agriculture value:

Grazing Land. Land that is particularly suited to the grazing of livestock given existing vegetation. This particular designation was developed in concert with the California Cattlemen's Association, University of California Cooperative Extension, and a host of other groups with an interest in grazing and livestock (DOC 2020).

Urban and Built-Up Land. This category refers to land that is occupied by structures with a building density of at least one unit to 1.5 acres or six structures to a 10-acre parcel. This category includes land uses such as residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other developed purposes (DOC 2020).

Other Land. All other lands that do not fall into the categories above are subsumed into this category. Examples of these lands include low-density rural developments, brush, timber wetland, riparian areas not suitable for livestock grazing, confined livestock poultry or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. In addition, vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land (DOC 2020).

The California Land Conservation Act of 1965

The California Land Conservation Act of 1965, better known as the Williamson Act as mentioned above, provides for reduced property taxation on agricultural land in exchange for a 10-year continuously rolling agreement. The purpose of the Williamson Act is the long-term conservation of agricultural and open space lands. The act establishes a program to enroll land in Williamson Act whereby the land is restricted to agricultural, open space, or recreational uses or uses deemed to be "compatible" with the agricultural land uses or compatible recreational uses as outlined in the act in exchange for reduced property tax assessments. The Act requires that each participating local government has a set of uniform rules for administering Williamson Act and Farmland Security Zone contracts within its jurisdiction. None of the project site is under a Williamson Act contract. Several nearby properties are under a Williamson Act contract as shown on Figure 4.1-1.

Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act and was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy (California Government Code Section 51296–51297.4). Farmland Security Zone Act contracts are sometimes referred to as "Super Williamson Act Contracts." Under the provisions of this act, a landowner already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the county. Farmland Security Zone contracts must be for an initial term of at least 20 years. As with Williamson Act contracts, each year an additional year is automatically added to the contract term unless a notice of nonrenewal is given. In return for a further 35% reduction in the property tax value of land and growing improvements (in addition to Williamson Act tax benefits), the owner of the property promises not to develop the property into nonagricultural uses during the term of the contract. Farmland Security Zone contracts may also be cancelled, but only upon finding that cancellation would both service the purposes of the Williamson Act, and that cancellation would be in the public interest (California Government Code, Section 51297). None of the project site is under a Farmland Security Zone contract.

California Public Resources Code

The California Public Resources Code defines "forest land" and "timberland" as follows (California Public Resources Code, Sections 12200[g] and 4526, respectively):

> 'Forest land' is land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.
>
> 'Timberland' means land, other than land owned by the federal government and land designated by the board [State Board of Forestry and Fire Protection] as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.

4.1.2.3 Local

The Santa Barbara County Uniform Rules for Agricultural Preserves and Farmland Security Zones (referred to as "Uniform Rules") are the set of rules the County uses to implement the Agricultural Preserve program, established by the California Land Conservation Act of 1965, also known as the Williamson Act. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which may be lower than normal because they are based upon farming and open space uses as opposed to full market value (County of Santa Barbara 2018).

The Uniform Rules define eligibility requirements and qualifying uses that each participating landowner must follow in order to receive a reduced property tax assessment under the Williamson Act. Often the Uniform Rules are more restrictive than the underlying agricultural zoning requirements. The County of Santa Barbara's Agricultural Preserve program has a high level of participation, covering approximately 550,000 acres, representing approximately 75% of all privately held agricultural lands in the County.

4.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to agriculture and forestry resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to agriculture and forestry resources would occur if the project would:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
d) Result in the loss of forest land or conversion of forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

f) Result in cumulatively considerable impacts to agriculture and forestry resources.

4.1.4 Impact Analysis

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

No Impact. As discussed under Sections 4.1.1 and 4.1.2, the California Department of Conservation State FMMP designates soils occurring within the project site as "Urban and Built-Up Land" and "Other Land" (DOC 2020). These categories are not considered suitable to support agriculture, but instead are suited to land uses such as residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other developed purposes (DOC 2020).

As such, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, there would be **no impact** and no mitigation measures are required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The portion of the project site within the City has been zoned for Resort Zone District use (City of Carpinteria 2016), while the portion within the County of Santa Barbara is zoned Transportation Corridor and Recreation (County of Santa Barbara 2020); consequently none of the project site carries agricultural zoning. As discussed above, the project site is not enrolled in a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use nor with a Williamson Act contract and as such, **no impact** would occur and no mitigation measures are required.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. As discussed above and in Sections 4.1.2.2 and 4.1.2.3, the project site does not contain any forest or timberland, and is not zoned for forest land, timberland, or timberland production, as defined in the California Public Resources Code and Government Code. California Public Resources Code, Section 12220(g), defines "forest land" for the purposes of CEQA as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

California Government Code Section 51104(g) defines "Timber," "Timberland," and "Timberland Production Zone" for the purposes of CEQA as either trees of any species maintained for eventual harvest for forest production purposes ("Timber"); privately owned land, or land acquired for state forest purposes, used for growing and harvesting timber ("Timberland"); or "Timberland Production Zone" which means an area zoned and used for growing and harvesting timber.

As such, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government code section 51104(g)). Therefore, **no impact** would occur, and no mitigation measures are required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

As discussed under Sections 4.1.1 and 4.1.2, there are no existing forest lands located on the project site or in the vicinity of the site as defined in the California Public Resources Code or Government Code 51104(g)). The proposed project would construct a 16-foot wide (10-foot wide path with 3-foot wide paved shoulder along both sides) and approximately 2,800-foot long shared-use trail that would provide safe access for bicyclists and pedestrians traveling from Carpinteria Avenue in the City of Carpinteria to Rincon Beach County Park in Santa Barbara County at the Ventura County line; this use would not prevent adjacent areas from supporting forest uses in the future. The proposed project would also not result in loss of any existing forest land. **No impact** would occur, and no mitigation measures are required.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As discussed under Sections 4.1.1 and 4.1.2, the project site has no agricultural resources or forest land within the area of project effect, nor have any been thought to exist in modern times. The proposed project would construct a 16-foot wide (10-foot wide path with 3-foot wide paved shoulder along both sides) and approximately 2,800-foot long shared-use trail that would connect existing bike and pedestrian facilities on Carpinteria Avenue in the City of Carpinteria to Rincon Beach County Park in Santa Barbara County. Because the project would close a gap in existing trail systems, and in that use of the trail by pedestrians and cyclists would not affect the productivity of existing agriculture and forest lands in the region, the proposed project would not cause other changes that would result in conversion of Farmland to non-agricultural use or forest land to non-forest use. Therefore, **no impact** would occur, and no mitigation measures are required.

f) Would the project result in cumulatively considerable impacts to agriculture and forestry resources?

No Impact. As discussed under Sections 4.1.1 and 4.1.2, the project site has no agricultural resources or forest land within the project site nor have any been thought to exist in modern times. The proposed project would not convert agricultural land to non-agricultural uses nor convert forest land to non-forest use. Therefore, the proposed project would not contribute to a cumulative impact. As such, **no impact** would occur, and no mitigation measures are required.

4.1.5 Level of Significance Prior to Mitigation

As discussed above, no significant direct or indirect impacts related to agriculture and forestry resources would result from the proposed project.

4.1.6 Conclusion

As described above, the project site has no agricultural resources or forest land within the project site nor have any been thought to exist in modern times. The proposed project would not conflict with agriculturally zoned land and would not convert any agricultural, farmland or forest land to other uses. The proposed project would also not conflict with any regulatory federal, state, and local policies. Therefore, there would be no impact.



AERIAL SOURCE: CIRGIS 2017
California Department of Conservation

FIGURE 4.1-1

Williamson Act Land Contracts in Project Vicinity

Carpinteria Rincon Trail EIR

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4.2 Energy

This section describes the existing energy conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

4.2.1 Existing Conditions

4.2.1.1 Electricity

According to the U.S. Energy Information Administration (EIA), California used approximately 250,379 gigawatt hours of electricity in 2017 (EIA 2019a). By sector in 2017, commercial uses utilized 46% of the state's electricity, followed by 35% for residential uses, and 19% for industrial uses (EIA 2019a). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the commercial sector is lower than any other state except Hawaii (EIA 2018).

Southern California Edison (SCE) provides electricity to the project. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Public Utilities Commission (CPUC), approximately 84 billion kilowatt-hours of electricity were used in SCE's service area in 2017. Demand forecasts anticipate that approximately 75 billion kilowatt-hours of electricity would be used in SCE's service area in 2020 (CPUC 2018).

SCE receives electric power from a variety of sources. According to the 2018 SCE Power Content Label, SCE has renewable energy at 36% of its overall energy resources, with geothermal resources at 8%, wind power at 13%, large hydroelectric sources at 1%, and solar energy is at 13% (SCE 2019). The California Renewables Portfolio Standard (RPS) Program establishes a goal for California to increase the amount of electricity generated from renewable energy resources to 20% by 2010, and to 33% by 2020. Recent legislation revised the current RPS target for California to obtain 50% of total retail electricity sales from renewable sources by 2030, with interim targets of 40% by 2024, and 45% by 2027 (CPUC 2016).

4.2.1.2 Natural Gas

According to the California Energy Commission (CEC), California used approximately 2,154,030 cubic feet of natural gas in 2019 (EIA 2019b). In 2017 (the most recent year for which data is available), by sector, industrial uses utilized 37% of the state's natural gas, followed by 32% from electric power, 19% from residential, 11% from commercial, and 1% from transportation uses (CEC 2018a). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (EIA 2019b).

The Southern California Gas Company (SoCalGas) provides the project with natural gas service. The territory serviced by SoCalGas encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory. As of 2017, approximately 7.2 billion therms were used in SoCalGas's

service area per year. Around the time of project construction in 2022, natural gas demand is anticipated to be approximately 7.7 billion therms per year in SoCalGas's service area (CEC 2018c). In 2020, the total capacity available is also estimated to be 3.9 billion cubic feet per day[1] (California Gas and Electric Utilities 2020). This amount is approximately equivalent to 3.98 billion thousand British thermal units (kBTU) per day or 39.8 million therms per day. Over the course of a year, the available capacity would therefore be 14.5 billion therms per year, which is well above the existing and future anticipated natural gas demand in the area serviced by SoCalGas.

4.2.1.3 Petroleum

According to the CEC, California used approximately 24.5 billion gallons of petroleum in 2018 (EIA 2019c). This equates to a daily use of approximately 51 million gallons of petroleum. By sector, transportation uses utilize approximately 85.5% of the state's petroleum, followed by 11.1% from industrial, 2.5% from commercial, 0.9% from residential, and 0.01% from electric power uses (EIA 2018). In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. Production of petroleum in the United States was 9.7 million barrels per day during April 2015, which was the highest output since April 1971 (CEC 2016).

4.2.2 Relevant Plans, Policies, and Ordinances

4.2.2.1 Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased corporate average fuel economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2013). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

[1] One cubic foot of natural gas has approximately 1,020 BTUs of natural gas or 1.02 kBTUs of natural gas.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in greenhouse gas (GHG) emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program (RFS2) includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel, and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

4.2.2.2 State

Warren-Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

Integrated Energy Policy Report (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (California Public Resources Code, Section 25301a). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on

Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (CEC 2019). The 2020 IEPR Update is currently in progress but is not anticipated to be adopted until February 2021.

State of California Energy Action Plan

The CEC and California Public Utility Commission (CPUC) approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

Senate Bill (SB) 1078 established the California Renewable Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2001), 350 (2015), and 100 (2018)

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) increased the standards set forth in SB 350. The bill establishes that 44% of the total electricity sold per year to retail customers in California be secured from qualifying renewable energy sources by December 31, 2024, with that number increasing to 52% by December 31, 2027, and 60% by December 31, 2030. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be met through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the 60% RPS in 2030. Therefore, any project's reliance on non-renewable energy sources would also be reduced.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the state legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.6.2 in Section 4.6, Greenhouse Gas Emissions, of this EIR.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards would further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards would use approximately 53% less energy than those under the 2016 standards (CEC 2018b). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018b).

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be those whose primary use is noncommercial

personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009 through 2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013 through 2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2012).

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code Section 65080, SB 375 requires metropolitan planning organizations (e.g., Southern California Association of Governments) to include a Sustainable Communities Strategy in their regional transportation plan. The main focus of the Sustainable Communities Strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels.

4.2.2.3 Local

Santa Barbara County Comprehensive Plan

Goals and policies pertaining to Energy are addressed in the Energy Element of the comprehensive plan (County of Santa Barbara 2015a). The following goals and policies from the Energy Element are applicable to the project:

Goal 3 Transportation and Land Use

Provide a composition of land-uses and transportation programs that reduces dependency on automobiles.

Policy 3.1 Alternative Transportation and Support Facilities

Enhance opportunities for alternative transportation

Research 3.1.1 The County, in coordination with the Santa Barbara County Association of Governments and cities within the County, shall prepare a report for the Board of Supervisors which provides details on enhancing alternative transportation (e.g., mass transit, vanpools, bikeways, etc.). The report shall include the following tasks:

a) Identify steps that would increase transportation, considering factors of attractiveness, and cost-savings;

b) Ridership of alternative security, convenience,

c) Estimate expected increase in ridership affected by each step;

d) Estimate the financial investment necessary to implement each step

e) Recommend those steps that appear to present the most return on investment;

f) Evaluate all existing, projected and potential funding sources for the purpose of enhancing investment in alternative transportation; and

g) Recommend steps to realize needed funding.

Public Service 3.1.1 The County shall continue to develop programs that encourage the use of alternative modes of transportation, including bike-and-ride and park-and-ride facilities.

Public Service 3.1.2 The County shall work with the Santa Barbara County Association of Governments and adjacent jurisdictions to pursue a commuter rail system as a potential mass transit option for the County.

Public Service 3.1.3 The County shall work with the Santa Barbara County Association of Governments, appropriate organizations, local mass transit agencies, educational institutions, driver education, Department of Motor Vehicle, etc., to inform the public about available transportational choices, and to inform the transit agencies about ways to make alternative transportation more attractive, etc.

Policy 3.4 Recreation Near Homes

Encourage coordination of scheduling recreational events (e.g., organized sports, arts and handicrafts for minors) at locations that would reduce recreation-related transportation by automobile.

Public Service 3.4.1 The County should work with local recreational organizations and schools to encourage neighborhood-based recreational practices and events to reduce vehicular trips.

Regulatory Incentive 3.4.1: The County should seek to designate and establish neighborhood parks when preparing Community Plans.

Policy 3.5 Bikeways and Support Facilities

The County shall consider the completion of an integrated bikeway system, linking residences with commercial centers, work locations, schools, parks and mass transit facilities to be a high priority for promoting the use of the bicycle as an alternative mode of transportation.

Research 3.5.1 See Research 3.1.1; bikeways shall be included in this study.

Public Service 3.5.1: The County shall continue to work with Santa Barbara County Association of Governments, local jurisdictions, bicycle organizations, educational institutions, driver education, Department of Motor Vehicles, and Caltrans to develop outreach programs designed to inform the public of available transportational choices. Outreach programs shall include:

a) Information on existing and proposed bikeways;
b) Information on cycling safety, commuting and recreational issues; and
c) Information on how much money a person can save by bicycling to work or using mass transit

Public Service 3.5.2 The County shall encourage the Santa Barbara County Association of Government (SBCAG) to continue to encourage bicycling. Pro-active efforts shall continue to help jurisdictions with fund-raising, coordination between jurisdictions, focusing on intermodal links, dissemination of information, etc. If and when this effort requires dedication of additional staff time, the County should encourage SBCAG to so dedicate this time.

Public Service 3.5.3 The County shall continue to commit staff to facilitate bicycle planning, design, construction, and maintenance of bikeways and supporting facilities, updating the Bicycle Element, including efforts to fund these activities from outside grants.

Public Service 3.5.4 To the extent feasible, the County shall accommodate bicycle lanes in all new roadway improvements consistent with adopted bikeway plans.

Public Service 3.5.5 The County should encourage all of the cities within the county to provide safe bicycle access to all major county facilities through construction of bicycle paths, lighting, signage, etc.

Public Service 3.5.6 The County shall survey bike use (count bicycles) during traffic counts to measure the effectiveness of these programs.

Public Service 3.5.7 The County shall encourage and work with the local transit agencies to equip buses with bicycle racks and coordinate location of transit facilities with bicycle access.

Policy 3.6 Pedestrian-Oriented Designs

The County shall improve the convenience, comfort and safety for pedestrians.

Public Service 3.6.1 The County shall develop a list of recommendations for designing pedestrian-oriented facilities; the recommendations shall include details on widths of sidewalks, providing direct paths, lighting requirements, promoting signage, locating parking lots behind buildings, pedestrian-scale access, visual interest, etc.

Encouragement 3.6.1 New development should include direct, safe and pleasant pedestrian routes connecting new and existing origins and destinations.

Goal 4 Water Use and Solid Waste

Increase the efficiency of water and resource use to reduce energy consumption associated with various phases of using resources (pumping, distribution, treatments, heating, etc.).

Policy 4.1 Construction

Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.

Public Service 4.1.1 The County will serve as a source of information regarding current markets and collection services for recycling and reuse of construction-generated waste.

Public Service 4.1.2 The County, in coordination with Ventura and San Luis Obispo counties, and cities within these counties, should develop a local guide to recycled construction products.

Public Service 4.1.3 To encourage recycling and use of recycled materials in construction and demolition, copies of *A Resource Guide to Recycled Construction Products and Energy Efficiency* published by the Public Works Department, Integrated Solid Waste Management Office, City of Los Angeles, and *California Materials Exchange (CALMAX)* published by California Integrated Waste Management Board, and any local version that is developed, shall be distributed by the County with issuance of a building or demolition permit.

Encouragement 4.1.1 The County should require an initial assessment of construction-generated waste and require recycling bins at those construction sites where it would be feasible for the contractor to recycle the material. County should consider this encouragement to be feasible when added cost for recycling, if any, is minimal compared to the overall benefits of recycling, and when recyclers are regionally accessible.

Encouragement 4.1.2 The County shall develop guidelines for managing construction-generated wastes. These guidelines must be economically feasible for the contractor, considering the constraints of a highly competitive industry. Once guidelines have been developed, new developments would be recommended to recycle construction waste.

Policy 4.2 Recycled Materials

The County shall require adequate areas for collecting and loading recyclable materials in development projects, and shall further address recycling logistics in its zoning ordinance.

Encouragement 4.2.1 The County shall amend the zoning ordinances to include a recycling access ordinance by following the Model Ordinance developed by the California Integrated Waste Management Board. [The Solid Waste Reuse and Recycling Act requires the adoption of a recycling access ordinance, or adoption of the state's model ordinance.]

Regulatory Incentive 4.2.1 The County shall revise its zoning ordinances as appropriate to alleviate or reduce unnecessary impediments that may inhibit recycling.

Policy 4.3 Reuse of Asphalt

Promote reuse of asphalt removed from roads and paved structures within the county and use of recycled materials in roadway and paved surface construction.

Internal Action 4.3.1 The County shall increase applications of reusing existing road materials and use of recycled materials (e.g., asphalt-rubber, recycled base material, crush rock material, recycled toilets, and the cold in-place method of re-paving), when feasible.

Policy 4.8 Water Efficient Landscaping

The County shall require (per Government Code, Section 65590, Article 10.8) water-efficient landscape design and irrigation systems in new and renovated developments and at public parks and facilities. [Energy-savings are accrued through reduced water pumping and treatment, and reduced disposal and maintenance.]

Encouragement 4.8.1 To encourage energy conservation and as required by Groundwater Policy 3.6 of the Conservation Element, water-conserving landscaping and irrigation shall be incorporated into all new developments, where appropriate, effective, and consistent with applicable law.

Internal Action 4.8.1 The County shall continue to give priority to native and drought-tolerant plants and to install water-efficient irrigation at County parks and facilities.

Energy and Climate Action Plan

The County's Energy and Climate Action Plan (ECAP) as discussed in Section 3.6.2.3 also addresses energy use within the County (County of Santa Barbara 2015b). Although the ECAP established greenhouse gas reduction goals for the County, the measures with which the County would reduce greenhouse gas emissions to meet those goals included those to reduce energy consumption. Measures to reduce energy consumption within the ECAP include implementation of Community Choice Energy, renewable energy, and industrial energy efficiency.

City of Carpinteria

The City has adopted measures within its Open Space, Recreation & Conservation Element of its General Plan to reduce energy consumption (City of Carpinteria 2003). Measures identified within Section 3.6.2.3 for reducing GHG emissions would also help to reduce energy consumption.

The City also adopted the Energy Action Plan in August 2016 (City of Carpinteria 2016) to identify the City of Carpinteria's long term vision and goals on achieving energy efficiency in local government facilities. This document specifically addresses energy consumption by the City's facilities and operations. The City of Carpinteria aims to increase the energy efficiency in their own facilities in order minimize energy costs and protect the environment, with the understanding that energy generation is directly related to greenhouse gas emissions. This document is intended to reduce greenhouse gas emissions and lower municipal energy costs by identifying projects and priorities for energy efficiency work throughout the City's facilities and operations.

The Energy Action Plan will outline a strategy for increased energy efficiency, based on available funding and energy reduction goals. The following sections include: an outline of the City's current work in the field of energy efficiency; energy usage data across municipal buildings and operations; and goals for energy reduction from 2015 baseline levels. Specifically, this EAP outlines a goal of a 15% reduction in electricity consumption from the 2015 baseline level by the year 2020. The function of the EAP is to serve as a working document that allows the City of Carpinteria flexibility if new regulations are adopted, new facilities are brought online, or new funding sources become available.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to energy are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to energy would occur if the project would:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.2.4 Impact Analysis

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Electricity

Construction Use

Temporary electric power for as-necessary lighting and electronic equipment, such as computers, may be needed inside temporary construction trailers. However, the electricity used for such activities would be temporary and would have a negligible contribution to the project's overall energy consumption.

Operational Use

The project does not include any components that would require the use of electricity during operation. Therefore, the project would have no impact on electricity during operation.

Natural Gas

Construction Use

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would have a negligible contribution to the project's overall energy consumption.

Operational Use

Similar to electricity, the project does not include any components that would require the use of natural gas during operation. Therefore, the project would have no impact on natural gas during operation.

Petroleum

Construction Use

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, and haul trucks involved in relocating dirt around the project site would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during construction. CalEEMod was used to estimate construction equipment usage; results are included in Appendix B. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 95,616 hours.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The estimated diesel fuel use from construction equipment is shown in Table 4.2-1.

Table 4.2-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation	3	24.18	10.21	2,368.70
Grading	3	143.12	10.21	14,017.49
Trail Construction	2	38.74	10.21	3,794.38
Bridge Construction	5	6.38	10.21	625.27

Table 4.2-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Paving	2	16.73	10.21	1,638.79
Architectural Coating	1	2.55	10.21	250.08
			Total	**22,694.70**

Sources:
[a] Appendix B.
[b] The Climate Registry 2020.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor trips was estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled. Calculations for total worker, vendor, and hauler fuel consumption are provided in Table 4.2-2, Table 4.2-3, and Table 4.2-4.

Table 4.2-2. Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation	256	0.6015	8.78	68.51
Grading	1792	4.1846	8.78	476.61
Trail Construction	2688	6.0798	8.78	692.46
Bridge Construction	280	0.6333	8.78	72.13
Paving	192	0.4343	8.78	49.46
Architectural Coating	120	0.2714	8.78	30.91
			Total	**1,390.08**

Sources:
[a] Appendix B.
[b] The Climate Registry 2020.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.2-3. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation	0	0.00	10.21	0.00
Grading	0	0.00	10.21	0.00
Trail Construction	1,152	12.98	10.21	1,270.94
Bridge Construction	120	1.35	10.21	132.39
Paving	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
			Total	**1,403.33**

Sources:
[a] Appendix B.
[b] The Climate Registry 2020.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.2-4. Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation	0	0.00	10.21	0.00
Grading	11,764	446.88	10.21	43,768.44
Trail Construction	0	0.00	10.21	0.00
Bridge Construction	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
			Total	**43,768.44**

Sources:
[a] Appendix B.
[b] The Climate Registry 2020.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.2-1 through 4.2-4, the project is estimated to consume approximately 69,257 gallons of petroleum during the construction phase. By comparison, approximately 27.9 billion gallons of petroleum would be consumed in California over the course of the project's construction phase, based on the California daily petroleum consumption estimate of approximately 52.9 million gallons per day (CEC 2019). In 2022, the total mobile source petroleum consumption within the County of Santa Barbara is estimated to be 164 million gallons (CARB 2020). In 2022, the total construction equipment petroleum consumption within the County of Santa Barbara is estimated to be 2.9 million gallons (CARB 2020). The project would also be required to comply with CARB's Airborne Toxics Control Measures, which restrict heavy-duty diesel vehicle idling time to five minutes. The project would be subject to the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) which applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). This includes vehicles that are rented or leased (rental or leased fleets). The Off-Road Regulation also requires off-road equipment fleets to become more efficient over-time through equipment retrofits, replacements, or retirements. The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology (BACT) requirements.

Operational Use

The project would result in petroleum consumption during operation due to periodic maintenance of the trail. As discussed in Section 3.2.4, it was assumed that one employee vehicle would travel to the site per week. Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The project is estimated to consume 17 gallons of gasoline and 1 gallon of diesel per year, for a total of 18 gallons of petroleum per year. By comparison, California as a whole consumes approximately 19.3 billion gallons of petroleum per year (CEC 2019). It is forecasted that in 2024, approximately 156 million gallons of petroleum in Santa Barbara County will be consumed (CARB 2020).

Over the lifetime of the project, the fuel efficiency of the vehicles being used by the residents is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, as mentioned previously, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single,

coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020, and 18% by 2035 for light-duty passenger vehicles in the planning area for SBCAG. As such, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

Significance of Impact

Electricity

The electricity used for construction activities would be temporary and would have a negligible contribution to the project's overall energy consumption. The project would not consume electricity during operation. Therefore, the electricity consumption of the project would not be inefficient or wasteful, and impacts would be **less than significant**.

Natural Gas

The natural gas used for construction activities would be temporary and would have a negligible contribution to the project's overall energy consumption. The project would not consume natural gas during operation. Therefore, the natural gas consumption of the project would not be inefficient or wasteful, and impacts would be **less than significant**.

Petroleum

In summary, because petroleum use during construction would be temporary and relatively minimal, consumption associated with the project would not be wasteful or inefficient during construction. Additionally, although the project would increase petroleum use during operation as a result of periodic maintenance, the use would be a small fraction of the statewide and countywide use and, due to efficiency increases, would diminish over time. Given these considerations, petroleum consumption associated with the project would not be inefficient or wasteful and impacts would be **less than significant**.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.

Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. The project would be required to comply with Title 24, Part 6, per state regulations. In addition, Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the project under the CALGreen Code. As discussed under the previous threshold, the project would result in a nominal increased demand for electricity, natural gas, and petroleum.

The City's Energy Action Plan outlines a goal of a 15% reduction in electricity consumption from the 2015 baseline level by the year 2020. The project would not result in an increase in long-term consumption of electricity or natural gas during operation. Similarly, the project would not interfere with the goals within the

County's ECAP to reduce energy use. Therefore, the project would not interfere with the City and County's goal to reduce energy consumption.

Because the project would comply with Title 24, Part 6 and Part 11, would be consistent with the City's Energy Action Plan and the County's ECAP, no conflict with existing energy standards and regulations would occur. Therefore, impacts would be **less than significant**.

4.2.5 Level of Significance Prior to Mitigation

As discussed above, no significant direct or indirect impacts related to energy would result from the proposed project.

4.2.6 Conclusion

Impacts would be less than significant.

4.3 Mineral Resources

This section describes the existing mineral resources of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

4.3.1 Existing Conditions

4.3.1.1 Minerals

Mineral resource mapping from the California Department of Conservation (DOC) Geologic Survey classifies the project site and surrounding lands as Mineral Resource Zone 3 (MRZ-3) (DOC 1989). MRZ-3 designates areas containing mineral deposits whose significance cannot be evaluated from available data. The City's General Plan/Local Coastal Land Use Plan states that there are no non-oil mineral resources of substantial quantities within the City's planning area (City of Carpinteria 2003). The County's Comprehensive Plan identifies mineral resources within the County and does not indicate the presence of mineral resources in the portion of the project site in unincorporated Santa Barbara County (County of Santa Barbara 2010).

4.3.1.2 Oil and Gas

Oil is the only substantial mineral resource known to be present within the general vicinity of the project site. Oil-related activities in the Carpinteria region consist of offshore drilling and extraction platforms, onshore oil storage facilities, a product transportation terminal, and a natural gas processing plant (City of Carpinteria 2003). There are ten oil platforms currently off the coast of Carpinteria, only three (Platforms Grace, Gail, and Habitat) pipe extracted oil and natural resources to facilities within the City of Carpinteria (City of Carpinteria 2003). Platform Grace ceased production in 1998. The Carpinteria Processing Facility is located approximately 1.2 miles west of the western end of the proposed project. The facility includes a crude oil storage tank, pipeline shipping pumps, metering skids, a gas compression plant, a natural gas liquids recovery plant, offices, tanks, maintenance shops and various equipment and facilities. The Carpinteria Processing Facility is in the initial stages of decommissioning,, as are one or more of the platforms that pipe oil and gas to the Carpinteria Processing Facility.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, there are no active or abandoned oil wells within the project site (DOGGR 2021). An abandoned oil well does exist within the Rincon Beach County Park property, outside of the project limits.

4.3.2 Relevant Plans, Policies, and Ordinances

4.3.2.1 Federal

There are no federal regulations related to mineral resources that apply to the proposed project.

4.3.2.2 State

Department of Conservation, Division of Oil, Gas, and Geothermal Resources

Division of Oil, Gas, and Geothermal Resources (DOGGR) is responsible for supervising the drilling, operation, maintenance, plugging, and abandonment of oil, gas, and geothermal wells. DOGGR's regulatory program promotes the sensitive development of oil, natural gas, and geothermal resources in California through sound engineering practices, prevention of pollution, and implementation of public safety programs. To implement this regulatory program, DOGGR requires avoidance of building over or near plugged or abandoned oil and gas wells or requires the remediation of wells to current DOGGR standards.

All oil and gas wells drilled and constructed in California must adhere to strict requirements. These requirements include general laws and regulations regarding the protection of underground and surface water, and specific regulations regarding the integrity of the well casing, the cement used to secure the well casing inside the bore hole, and the cement and equipment used to seal off the well from underground zones bearing fresh water and other hydrocarbon resources. (See California Public Resources (CPR) Code sections 3106, 3203, 3211, 3220, 3222, 3224, 3255; Title 14 of the California Code of Regulations, sections 1722.2, 1722.3, 1722.4, etc.). In addition, the DOGGR requires avoidance of building over or near plugged or abandoned oil and gas wells or requires the remediation of wells to current DOGGR standards. DOGGR also has the authority under the CCR to adopt field rules for oil and gas pools or zones in a field when sufficient geologic and engineering data is available from previous drilling operations. The administrative boundaries of each pool or zone for which field rules have been adopted and geologic and engineering information is available to accurately describe subsurface conditions are designated through a ministerial process by DOGGR. Applicable field rules identify down hole conditions and well construction information that oil and gas operators should consider when drilling and completing onshore oil and gas wells. In addition to DOGGR facilities regulations, operators that have facilities in designated areas must have Spill Prevention, Control and Countermeasure Plans per U.S. Environmental Protection Agency (EPA) requirements.

Surface Mining and Reclamation Act of 1975

The mineral resources addressed in this report pertain to those resources that are classified under the State Mining and Reclamation Act of 1975 (SMARA). SMARA mandated the initiation of mineral land classification by the State Geologist in order to help identify and protect mineral resources in areas within the State subject to urban expansion and other irreversible land uses that would preclude mineral extraction. SMARA also allowed the designation of lands containing mineral deposits of regional or statewide significance. SMARA was amended (1980) to provide for the classification of nonurban areas subject to land-use threats incompatible with mining. The classification of land within California takes place according to a priority list that was established by the State Mining and Geology Board (SMGB) in 1982, or when SMGB is petitioned to classify a specific area. The State Geologist's SMARA classification activities are carried out under a single program for urban and nonurban areas of the state.

Mineral lands are mapped using the California Mineral Land Classification System according to jurisdictional boundaries, mapping all mineral commodities at one time in the area, including aggregate, common clay, and dimensions stone. Priority is given to areas where future mineral resource extraction could be precluded by incompatible land use or to mineral resources likely to be mined during the 50-year period following their classification.

SMGB established MRZs to designate lands that contain mineral deposits. Accordingly, the MRZ classification system is used to evaluate an area's mineral resources pursuant to SMARA. A "resource" is a concentration of naturally occurring solid, liquid, or gaseous material in such form and amount that economic extraction of a

commodity from the concentrations is currently potentially feasible. A "reserve" is that part of the resource base that could be economically extracted or produced within the foreseeable future. For any given mineral resource, an area may be classified as MRZ-1, MRZ-2, MRZ-3, or MRZ-4, as follows:

MRZ-1: Areas where the available geologic information indicates that no significant mineral deposits are present, or where it is judged that no significant likelihood exists for their presence.

MRZ-2: Areas where the available geologic information indicates that significant mineral deposits are present, or that there is likelihood for the presence of significant mineral deposits.

MRZ-3: Areas where the available geologic information indicates that mineral deposits are likely to exist, the significance of which cannot be determined from available data ·

MRZ-4: Areas where available geologic information is inadequate for assignment into any other MRZ, or where there is not enough information available to determine the presence or absence of mineral deposits.

The MRZ classifications are applied based on available geologic information and on geologic appraisal of the mineral resource potential of the land, including geologic mapping and other information on surface exposures, drilling records, and mine data; and on socioeconomic factors such as market conditions and urban development patterns.

Special Publication 51

Special Publication 51 prepared by SMGB in cooperation with the Office of Mine Reclamation and the California Geological Survey, contains California Surface Mining and Reclamation Policies and Procedures.

California Geological Survey (Formerly California Division of Mines and Geology)

The California Geological Survey (CGS, formerly the California Division of Mines and Geology within the State Department of Conservation) has responsibility for identifying and assisting in the utilization of mineral deposits, and identifying geological hazards, including fault locations.

4.3.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The Open Space, Recreation and Conservation Element of the General Plan/Local Coastal Land Use Plan identifies oil as the only known mineral resource in the City and also notes: "On-shore oil and gas facilities in Carpinteria are largely defunct and are now incompatible with residential neighborhoods that are established" (City of Carpinteria 2003). General Plan/Local Coastal Land Use Plan objectives and policies which could be considered relevant to the proposed project include the following.

Objective OSC-12: Maintain an understanding of the oil industry and its exploration objectives.

OSC-12a. Remain informed of activities in the oil industry, both plans and regulations.

OSC-12b. Work with the oil and gas plant operator(s) to remove obsolete equipment, to upgrade all facilities to current safety standards, and to consolidate activities in order to eliminate redundancy.

County of Santa Barbara Coastal Land Use Plan

The County's Coastal Land Use Plan (County of Santa Barbara 2019*)* applies to coastal areas of the County, including the portions of the project site located within the County. There are no policies in the County's Coastal Land Use Plan related to mineral resources that would be relevant to the proposed project.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to mineral resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to mineral resources would occur if the project would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.
c) Result in cumulatively considerable impacts relating to mineral resources.

4.3.4 Impact Analysis

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

While California DOC designated the vicinity surrounding and including the project site as MRZ-3, indicating that the significance of mineral resources could not be evaluated from available data (DOC 1989), there is no evidence of mineral extraction activities having occurred within the project site. Also, within the project site, there are no active or abandoned oil wells (DOGGR 2021). In addition, no mineral resources are identified to exist in the project site or vicinity (although offshore oil platforms are present) in local planning documents, including the Carpinteria General Plan/Local Coastal Land Use Plan and County of Santa Barbara Comprehensive Plan. Hence, construction and operation of the proposed project would not result in the loss of availability of mineral or oil resources that have been identified as valuable at the regional or state level. **No impacts** would occur, and no mitigations are required.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The California DOC designated the vicinity surrounding and including the project site as MRZ-3 (DOC 1989); however, the proposed trail occurs within a corridor that has supported transportation facilities (i.e., highway and railroad) spanning more than a century, in which substantial topographic modification has occurred to accommodate existing and previous transportation alignments. As a result, mineral extraction (including oil) has not been compatible with transportation activities within the project corridor and has not occurred to date. The project site is also designated for open space and recreational uses (City of Carpinteria 2003; County of Santa Barbara 2010), with which future mineral extraction activities would be incompatible. Oil wells exist on offshore platforms in the region, but there are no facilities associated with the platforms that are located within the project site. Finally, no mineral resources are identified to exist in the project site or vicinity in local planning documents, including the Carpinteria General Plan/Local Coastal Land Use Plan and County of Santa Barbara

Comprehensive Plan. The proposed project would therefore not result in the loss of availability of known mineral resources as delineated on a local land use plan. **No impacts** would occur, and no mitigations are required.

c) Would the project result in cumulatively considerable impacts relating to mineral resources?

Cumulative development throughout the Carpinteria Valley could incrementally contribute to the loss of availability of mineral resources, through conversion of undeveloped land and limitations on areas available for mineral extraction and via consumption of mineral resources during the construction process. However, the proposed project would have no impacts on the availability of mineral resources. As such, the proposed project would not contribute to any potentially significant cumulative impacts upon mineral resources.

4.3.5 Level of Significance Prior to Mitigation

As discussed above, no impacts related to mineral resources would result from the proposed project.

4.3.6 Conclusion

Mineral resources including oil have not been identified to be present within the project site. Therefore, no impacts on mineral resources would occur from the proposed project.

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4.4 Population and Housing

This section describes the existing population and housing of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

4.4.1 Existing Conditions

The proposed project would be located within the City of Carpinteria (City), and within the County of Santa Barbara (County). The U.S. Census Bureau estimates that the City had a population of 13,385 residents in 2019 (U.S. Census Bureau 2020). Projected residential buildout within the City is 6,321 residential units, with the majority of growth in attached single-family homes and multifamily developments of varying size. Per the City's General Plan/Local Coastal Land Use Plan, the City is near buildout due to land use constraints (City of Carpinteria 2003). Santa Barbara County Association of Governments (SBCAG) projects the City's population will reach its maximum of 14,700 people by 2045, with 5-year population growth slowing to 1% or less by 2030. SBCAG also projects a smaller growth in households for the City, with households projected to number 5,700 units by 2050 (SBCAG 2019).

The portion of the project site within the City has a General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (City of Carpinteria 2003) and has been zoned for Resort Zone District use (City of Carpinteria 2016). The portion of the project within the County of Santa Barbara is designated as Other Recreation/Open Space and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2020). No housing is currently present on the project site, nor is the site designated for residential uses.

4.4.2 Relevant Plans, Policies, and Ordinances

4.4.2.1 Federal

There are no federal regulations associated with population and housing that are relevant to the proposed project.

4.4.2.2 State

There are no state regulations associated with population and housing that are relevant to the proposed project.

4.4.2.3 Local

Regional Housing Needs Assessment

The state requires communities develop a Regional Housing Needs Allocation (RHNA) Plan to be incorporated into General Plan Housing Elements by cities and counties in the region. Within Santa Barbara County, the RHNA Plan is developed by SBCAG. The RHNA Plan evaluates projected population growth and jobs, affordability of housing, and other factors that affect housing problems to identify housing needs and allocate a share of the region's housing need to jurisdictions within the RHNA Plan. Housing needs are subdivided into household income levels to help jurisdictions plan for the appropriate number and mix of housing affordable to various income levels. Jurisdictions use the RHNA Plan when updating their General Plan Housing Elements to assure zoning and land is available to accommodate their projected housing needs. The RHNA projections for Carpinteria have been incorporated into the 2015-2023 Housing Element of the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2014).

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City of Carpinteria's General Plan/Local Coastal Land Use Plan Housing Element is updated every 8 years and plans for existing and future housing needs in the community in compliance with the RHNA Plan. The 2015-2023 Housing Element includes the following goals and policies relevant to the proposed project organized by program category:

Program Category 1 Make Sites Available to Accommodate the RHNA

Goal Attain additions to the housing supply that meet the housing needs of all economic segments

Goal Maintain a jobs-housing balance or ratio within the 0.75 to 1.25 range suggested by SBCAG

Policy Adequate Sites: Provide sufficient sites to the General Plan/Coastal Plan and zoning map to meet the housing needs allocated to the City by the RHNA Plan

Policy Public Services and Facilities: Ensure that public services and facilities have the capacity to support the need for the new residential development allocated to the City by the RHNA Plan.

The City is currently updating their General Plan/Local Coastal Land Use Plan. All elements of the General Plan/Local Coastal Land Use Plan, aside from the Housing Element, which was updated in 2011, will be revised during the General Plan/Local Coastal Land Use Plan update. The updated plan is expected to become available in 2021.

County of Santa Barbara Comprehensive Plan

The County of Santa Barbara's Comprehensive Plan Housing Element includes goals and policies to address housing development and needs in the unincorporated County. The portion of the County within the project site is not zoned for residential use; therefore, Housing Element policies are not relevant to the proposed project.

County of Santa Barbara Coastal Land Use Plan

The County of Santa Barbara's Coastal Land Use Plan includes policies to address housing development in the coastal zone in the County. The portion of the County within the project site is not zoned for housing; therefore, housing policies in the Coastal Land Use Plan are not relevant to the proposed project.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to population and housing are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to population and housing would occur if the project would:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.
c) Result in cumulatively considerable impacts relating to population and housing.

4.4.4 Impact Analysis

a) Would the project Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project is not anticipated to result in an increase in population. The proposed project would generate short-term employment opportunities during construction of the proposed trail. Given the temporary duration of project construction of approximately 24 months and availability of construction workers within Santa Barbara and Ventura Counties, project construction is unlikely to generate a significant increase in population and/or new development that could result in a significant impact to the environment. The proposed trail maintenance would be performed by existing City or County parks and recreation/public works maintenance staff. There would be no increase in part or full-time staff equivalents. Therefore, the project would not induce substantial unplanned population growth in an area, either directly or indirectly, and **no impacts** would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

As discussed in Section 4.5.2, no housing is currently present on the project site, nor is the site designated for residential uses. Therefore, the proposed project would not include the demolition of existing housing, construction of new housing, or displacement of people, and **no impacts** would occur.

c) Would the project result in cumulatively considerable impacts relating to population and housing?

As discussed above, construction of the project is not anticipated to result in the creation of permanent employment opportunities in the community or the attraction of new residents. In addition, the trail construction would not remove any existing residences and is not located on land zoned for residential uses. Consequently, the project would not contribute to cumulatively considerable impacts relating to population and housing, resulting in **no impacts.**

4.4.5 Level of Significance Prior to Mitigation

As discussed above, no significant impacts related to population and housing would result from the proposed project.

4.4.6 Conclusion

No impact to population or housing would occur.

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4.5 Public Services

This section describes the existing public services of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

4.5.1 Existing Conditions

Fire Protection

Carpinteria is serviced by the Carpinteria-Summerland Fire Protection District (CSFPD). The CSFPD covers 40 square miles along the Pacific Ocean including land area within the City of Carpinteria and the County of Santa Barbara. The CSFPD is bordered on the east by the Santa Barbara/Ventura County line and to the west by the community of Montecito. The CSFPD provides the Carpinteria Valley with adequate staff and facilities to serve the area in the event of a fire or emergency. There are currently two fire stations that serve the area: one in the City (Walnut Avenue) and one in Summerland. Current response times range from 3 minutes to 5 minutes. All fire fighters (full-time and reserves) have EMT-1 training (City of Carpinteria 2003).

Wildland or brush fires are defined as those fires occurring in undeveloped areas commonly covered by heavy vegetation, typically in the hills and canyons. The Santa Barbara County Fire Department generally responds to wildland fires outside the urban limit zone defined by the CSFPD (City of Carpinteria 2003).

Police Protection

Law enforcement services within the incorporated City of Carpinteria are provided by the Santa Barbara County Sheriff's Department.

Schools

Schools within the Carpinteria Planning Area are administered by the Carpinteria Unified School District, which includes Aliso Elementary School, Canalino Elementary School and Canalino Preschool, Carpinteria High School, Carpinteria Middle School, Carpinteria Family School, Carpinteria Children's Project at Main, Rincon High School and Summerland Elementary School (CUSD 2019).

Parks

Carpinteria has approximately 97.96 acres of City parks within the City boundary, administered and maintained by the Carpinteria Parks & Recreation Department. Carpinteria State Beach is also within the City boundary, which is operated and maintained by the California Department of Parks and Recreation. Various County parks in the area include Rincon Beach County Park and Toro Canyon Park. Rincon State Beach Park is located just east of Rincon Beach County Park.

4.5.2 Relevant Plans, Policies, and Ordinances

4.5.2.1 Federal

There are no federal regulations that pertain to the local delivery of public services including fire and police protection, public education, or parks and recreation.

4.5.2.2 State

California Penal Code

All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are State Peace Officers.

California Department of Forestry and Fire Protection: State Responsibility Areas

Open space and undeveloped areas identified as having a fire hazard and not falling under federal jurisdiction, are referred to as State Responsibility Areas (SRAs) because the state has the primary financial responsibility of preventing and suppressing fires within such areas. The agency responsible for suppressing fires in SRAs is CAL FIRE. Local fire agencies are responsible for suppressing fires in private property within City limits. Legislative mandates passed in 1981 (SB 81) and 1982 (SB 1916) that became effective on July 1, 1986, required CAL FIRE to develop and implement a system to rank the fire hazards in California. Areas were rated as moderate, high or very high based primarily on fuel types. Thirteen different fuel types were considered using the 7.5-minute quadrangle maps by the US Geological Survey as base maps. SRAs include all lands regardless of ownership, except for cities and federal lands. The project site is within the City of Carpinteria and County of Santa Barbara, and no part of the project site is included in the CalFire SRA maps.

California Code of Regulations Title 24, Part 2, and Part 9

The 2016 California Building Standards Code was published July 1, 2016, with an effective date of January 1, 2017. Part 2 of Title 24 of the California Code of Regulations (CCR) refers to the California Building Code, which contains regulations and general construction building standards of state agencies, including administrative, fire, and life safety, and field inspection provisions. Part 2 was updated in 2017 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This code is preassembled with the 2000 Uniform Fire Code of the Western Fire Chiefs Association. This code was revised in January 2017 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

California Fire Code

The California Fire Code and Office of the State Fire Marshal provides regulations and guidance for local agencies in the development and enforcement of fire safety standards. The California Fire Code also establishes minimum requirements that would provide a reasonable degree of safety from fire, panic, and explosion (24 CCR 9).

Senate Bill 50 School Financing and Mitigation Requirements

Currently, school financing and developer mitigation obligations are governed by SB 50 (Government Code Section 65995 et seq.), which was passed in 1998 and has been amended several times since then. SB 50 was enacted to provide comprehensive school facility finance and mitigation reform, which assists in providing school facilities to serve students generated by new development projects. SB 50 allows school districts to collect school facilities fees from developers of new residential and commercial/industrial building space.

SB 50 substantially revamped prior statutory and regulatory methods of providing state monies for school construction by eliminating the apportionment of state funds method used by the State Allocation Board (SAB) under the old system originally enacted as part of the Leroy F. Greene State School Building Lease Purchase - Law of 1976 and replacing it with the Leroy F. Greene School Facilities Act of 1998. SB 50, among other things, established a new state program by which the SAB provides state per-pupil grant funding for new school facilities construction and reconstruction, as well as modernization of existing facilities. An important objective of SB 50 was to provide, on a one-time basis, a baseline analysis of unhoused students and existing capacity in a local school district's school facilities to determine eligibility for new state school construction funding. In addition to providing 50% of the state funding and construction costs, which include construction cost containment mechanisms through limitations on the state per-pupil grant amounts (grant amounts are adjusted annually by the SAB to reflect construction cost changes), the state also provides funding for 50% of the site acquisition and site development costs for a school site.

SB 50 specifically provides that it is the exclusive method for financing school facilities, and provides the methods for mitigating environmental effects related to the adequacy of school facilities. Nevertheless, school districts and developers may enter into separate mitigation agreements to provide enhanced mitigation measures beyond the requirements of SB 50. SB 50 establishes three levels of developer fees that can be imposed upon new development that are deemed to be "full and complete facilities mitigation." The school fees that are charged towards new residential development are state mandated and beyond the City's control.

Comprehensive School Safety Plan

It is the intent of the Comprehensive School Safety Plan that all California public schools that offer kindergarten and/or grades 1 through 12 are inclusive and are operated by school districts, and develop a comprehensive school safety plan that addresses the safety concerns identified through a systematic planning process. The schools must work in cooperation with local law enforcement agencies, community leaders, parents, pupils, teachers, administrators, and other persons who may be interested in the prevention of campus crime and violence (California Education Code, Title 1, Section 32280).

Quimby Act

Cities and counties have been authorized since the passage of the 1975 Quimby Act (California Government Code, Section 66477) to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The goal of the Quimby Act is to require developers to help mitigate the impacts of property improvements. The act gives authority for passage of land dedication ordinances only to cities and counties. Special districts must work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide park and recreation services communitywide. Cities and counties with a high ratio of park space to inhabitants

can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can only require the provision of up to three aces of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

4.5.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The Public Facilities and Services Element of the General Plan/Local Coastal Land Use Plan includes goals, objectives, and policies related to providing essential public services, implementing regulations in the interest of the public health and safety, and providing for the general welfare of the community. Objectives and policies specifically related to the proposed project include (City of Carpinteria 2003):

Objective PF-3: The City shall strive to maintain the best possible police and fire safety services for the community.

- **PF-3a.** The City shall endeavor to monitor relevant statistics and enforcement criteria to assure adequate police service.
- **PF-3b.** The City shall begin evaluation of potential programs that can resolve seasonal tourist-related police service demands.
- **PF-3c.** The City shall cooperate with the fire district for the purpose of determining district needs and to provide development mitigations as indicated by the study.
- **PF-3d.** The City shall strive to increase district/City communication by initiating development review procedures that incorporate district interaction at the earliest times possible.

Objective PF-4 To assist the school district in continued provision of high-quality educational opportunities for all of the community's youth.

- **PF4a** To continue efforts to cooperatively resolve service demands for educational facilities.
- **PF4b** To encourage school district input to new development proposals by improved review procedures.
- **PF4c** The City will cooperate with the Carpinteria Unified School District to ensure sufficient capacity for increases in student population caused by future development projects.

Objective PF-5 To provide a high quality and broad range of public services, facilities and utilities to meet the needs of all present and future residents of the Carpinteria Planning Area.

- **PF-5b.** The City will require proposed new developments to pay a fair share of the cost of needed public facilities and services. Further, in areas of the city designated for nonresidential use but where residential use may be permitted, the City shall monitor total residential development and report annually to the School, Fire, Water and Sanitary districts to permit proper facilities planning by these special districts.
- **PF-5c.** The City will ensure that new development will not adversely impact services and facilities provided to existing development.
- **PF-5d.** Detailed master plans will be prepared for major facilities and service systems.

PF-5e. The City will improve and extend services and facilities to the extent possible, within the limits of available funding.

PF-5f. Carpinteria will focus City funds on service and facilities improvements to meet existing needs prior to committing funds to the extension of services and facilities to new areas.

PF-5g. The City will coordinate with the appropriate agencies/districts and plan for public facilities to be located and sized to discourage expansion of urban development beyond the transition area of the urban/rural boundary. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses allowed consistent with the provisions of the City's Local Coastal Program.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) includes goals, objectives, and policies related to ensuring the provision of adequate essential public services for proposed development, implementing regulations in the interest of the public health and safety, and providing for the general welfare of the community. Policies specifically related to the proposed project include:

Policy 2-6: Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer ads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan. Where an affordable housing project is proposed pursuant to the Affordable Housing Overlay regulations, special needs housing or other affordable housing projects which include at least 50% of the total number of units for affordable housing or 30% of the total number of units affordable at the very low income level are to be served by entities that require can-and-will-serve letters, such projects shall be presumed to be consistent with the water and sewer service requirements of this policy if the project has, or is conditioned to obtain all necessary can-and-will-serve letters at the time of final map recordation, or if no map prior to issuance of land use permits.

Santa Barbara County Office of Emergency Management and Emergency Management Plan

The Santa Barbara County Office of Emergency Management (SBCOEM) is responsible for planning and coordination of the Santa Barbara Operational Area, which includes the cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The SBCOEM acts as a liaison between these cities; special districts including the SBCAPCD, fire districts, sanitary districts, school districts, vector control districts, and water districts; and volunteer organizations such as the American Red Cross. The SBCOEM also coordinates with adjoining offices of emergency services in Ventura and San Luis Obispo counties through several annual meetings. The Santa Barbara County Emergency Management Plan was developed for use by the County and the cities within the Santa Barbara Operational Area (County of Santa Barbara 2013). The Emergency Management Plan addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies.

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services would occur if the project would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
   i. Fire protection?
   ii. Police protection?
   iii. Schools?
   iv. Parks?
   v. Other public facilities?

b) Result in cumulatively considerable impacts relating to public services.

4.5.4 Impact Analysis

The following analysis of potential project impacts is based upon the above thresholds of significance.

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection

According to the City of Carpinteria's General Plan/Coastal Plan Fire Hazards Zones Map, the project site is located within a moderate fire hazard area (City of Carpinteria 2003). Carpinteria – Summerland Fire Protection District Fire Station #1, located at 911 Walnut Avenue, approximately 2 miles west of the project site, is the closest fire station to the project site that has the primary responsibility for responding to emergencies (CSFPD 2019). The proposed project would not involve the construction of buildings or introduce substantial numbers of people into the area. The proposed project would also not require the construction of new fire facilities to accommodate the proposed trail and amenities. Further, the project may help reduce the fire danger from the current setting as proposed native plantings, vegetation control, and fire-resistant project materials would be less prone to fire danger than the currently dry and unmaintained vegetation sources on-site, and the paved trail would accommodate light-duty firefighting equipment access to trail portions below the UPRR alignment from the Rincon Beach County Park and to portions above the UPRR alignment from the connection to the Carpinteria Avenue Eastern terminus, resulting in **less than significant impacts** to fire protection services.

Police Protection

The proposed project is not anticipated to require the construction of new police facilities. The Santa Barbara County Sheriff's Department, Carpinteria Station, is located at City Hall at 5775 Carpinteria Avenue,

approximately 1.3 miles west of the project site (Santa Barbara County Sheriff's Department 2019). The proposed project would not result in the construction of new buildings that could present unique challenges for police protection services on-site or result in an increase in population that would warrant the construction of new facilities to provide adequate police protection services. The trail would permit more convenient patrol of the project area by Park Rangers and County Sheriff personnel, resulting in a potential marginal benefit to police protection, and resulting in **less than significant impacts** to police protection services.

Schools

The proposed project is not anticipated to generate an increase in population that would have an adverse effect on existing schools or warrant the construction of new or expanded schools. Therefore, there would be **no impact** of the project related to the need for development of new school facilities.

Parks

The proposed project is not anticipated to generate an increase in population that would warrant the construction of additional new parks. The proposed project would provide a safe connection from Carpinteria Avenue to Rincon Beach County Park, thereby increasing the ease of pedestrian and bicycle access to the Rincon Beach County Park, which is an objective of the proposed project. As the project would facilitate safe access to the Rincon Beach County Park, it would be anticipated to increase recreational use of the Rincon Beach County Park and the Carpinteria Trail system. However, the increased use is not anticipated to result in the degradation of Rincon Beach County Park, other nearby parks, trails, or associated recreational facilities and amenities. Also, the Rincon Trail would enhance access between the existing Rincon Point residential community and the newly established Rincon Bluffs preserve, benefitting the Rincon Point population as well as other Ventura County residents that would be able to walk or bike to the Rincon Bluffs preserve area. Lastly, the Rincon Trail itself represents a recreation resource for biking and hiking, with opportunities including enjoyment of the natural scenery (refer also to Section 3.10, Recreation). The proposed project would require additional and occasional trail maintenance. Initially, the landscape areas would require weed management and irrigation during the dry months. Park design attributes such as the use of native plants would help to reduce costs associated with watering and plant care. Annual estimated maintenance costs are expected to be minimal. Therefore, the project would result in **less than significant impacts** to park resources.

Other Public Facilities

The proposed project is not anticipated to generate an increase in population that would increase the demand for any other public facilities. There would be **no impact.**

b) Would the project result in cumulatively considerable impacts relating to public services?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to public service impacts. However, current and future projects proposed in the City of Carpinteria and County of Santa Barbara will be required be consistent with applicable General Plan/Coastal Plan policies, and to pay pertinent Development Impact Fees (DIFs) and all special district fees. The proposed project would not result in significant impacts to any public services. As such, the proposed project would not result in a considerable contribution to any potentially significant cumulative impacts upon public services.

4.5.5 Level of Significance Prior to Mitigation

As discussed above, no significant impacts related to public services would result from the proposed project.

4.5.6 Conclusion

The proposed project would neither construct structures nor place combustible materials on the site, thereby avoiding any increases in the demand for police or fire protection services. The project would not lead to an increase in local population that could increase demands for school or parks resources. The construction and operation of the trail would also not place additional demands on other public facilities. As such the project would have no impacts on public services and no mitigation would be required or recommended.

4.6 Wildfire

This section describes the existing wildfire conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

4.6.1 Existing Conditions

Wildland or brush fires are defined as those fires occurring in undeveloped areas commonly covered by heavy vegetation, typically in the hills and canyons. The project site may be characterized as a ridgeline and associated slopes, supporting areas of native vegetation as well as bare ground. While the native vegetation within the project area could become involved in a wildland fire, the project site is somewhat isolated from ignition sources by virtue of the presence of the U.S. Highway 101 corridor along the northern side and the Pacific Ocean along the southern side. These features would also act to limit the spread of a wildland fire originating within the project area or immediately adjacent urban areas to the west (City of Carpinteria) or east (Rincon Point).

With respect to fire protection resources, the Carpinteria Planning Area is serviced by the Carpinteria- Summerland Fire Protection District (CSFPD). The CSFPD covers 40 square miles along the Pacific Ocean including land area within the City and the County. The CSFPD is bordered on the east by the Santa Barbara/Ventura County line and to the west by the community of Montecito. There are currently two fire stations that serve the area: one in the City (Walnut Avenue) and one in Summerland. Current response times range from 3 minutes to 5 minutes. All fire fighters (full-time and reserves) have EMT-1 training (City of Carpinteria 2003). The Santa Barbara County Fire Department generally responds to wildland fires outside the urban limits associated with Cities within the County, and would therefore participate in responding to a wildfire incident involving portions of the trail within unincorporated County lands.

4.6.2 Relevant Plans, Policies, and Ordinances

4.6.2.1 Federal

Healthy Forests Restoration Act

The 2003 Healthy Forests Restoration Act gives incentives for communities to engage in comprehensive forest planning and prioritization. This legislation includes statutory incentives for the U.S. Forest Service and the Bureau of Land Management to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction priorities (USFS 2021).

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not laws or codes unless adopted as such or referenced as such by the California Fire Code or the local fire agency.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009, by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions (USFS et al. 2009). An important component of the Federal Wildland Fire Management Policy is the acknowledgement of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles:

- Firefighter and public safety are the first priorities in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan was a presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and providing assurance for sufficient firefighting capacity in the future. The plan addresses five key points: Firefighting, Rehabilitation, Hazardous Fuels Reduction, Community Assistance, and Accountability. The plan continues to provide invaluable technical, financial, and resource guidance and support for wildland fire management across the United States. The U.S. Forest Service and the Department of the Interior are working to successfully implement the key points outlined in the plan (USFS 2019).

International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated in order to protect life and property (often times these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

International Wildland-Urban Interface Code

The International Wildland–Urban Interface Code is published by the International Fire Code and is a model code addressing wildfire issues.

4.6.2.2 State

California Code of Regulations

Title 14 Natural Resources

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, hardscape landscaping or reduced exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Building Code (CBC), California Code of Regulations Title 24, Part 2, Chapter 7A.

Title 24 California Building Standards Code

California Building Code

Part 2 of Title 24 contains the CBC. Chapter 7A of the CBC regulates to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a WUI fire area. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone (FHSZ) within a State Responsibility Area or a WUI fire area to resist the intrusion of flames or burning embers projected by a vegetation fire and to contribute to a systematic reduction in conflagration losses. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in CBC Chapter 7A.

California Fire Code

Chapter 9 of Title 24 contains the California Fire Code (CFC), which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. Chapter 49 of the CFC contains minimum standards for development in the WUI and fire hazard areas. The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission.

California Public Resources Code

California Public Resources Code, Section 4290, requires minimum fire safety standards related to defensible space that are applicable to residential, commercial and industrial building construction in State Responsibility Area lands and lands classified and designated as Very High FHSZs (VHFHSZs). These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations that equal or exceed minimum regulations required by the state.

California Public Resources Code, Section 4291, requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is

covered in flammable material. It is required to maintain a minimum 100 feet of vegetation management around all buildings and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction. Further, California Public Resources Code, Section 4291, requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Government Code

California Government Code Sections 51175 through 51189 provide guidance for classifying lands in California as fire hazard areas and requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria and makes the information available for public review. Further, local agencies must designate, by ordinance, VHFHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, building materials, and standards. Defensible space consists of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe; vegetation near buildings must be maintained; and roofs of structures must be cleared of vegetative materials. A local agency may exempt certain standards set forth in Section 51182 for buildings with an exterior constructed entirely of nonflammable materials and may vary the requirements associated with management of fuels surrounding the structures in such cases.

California Department of Forestry and Fire Protection

CAL FIRE is tasked with reducing wildfire-related impacts and enhancing California's resources. CAL FIRE responds to all types of emergencies including wildland fires and residential/commercial structure fires. In addition, CAL FIRE is responsible for the protection of approximately 31 million acres of private land within the state and, at the local level, is responsible for inspecting defensible space around private residences. CAL FIRE is responsible for enforcing State of California fire safety codes included in the California Code of Regulations and California Public Resources Code. California Public Resources Code 4291 states generally that any person operating any structure located on brush-covered lands or land covered with flammable material is required to maintain defensible space around the structure. California Code of Regulations Title 14 Section 1254 identifies minimum clearance requirements required around utility poles. In State Responsibility Areas within the jurisdiction of CAL FIRE, the Fire Safety Inspection Program is an important tool for community outreach and enforcement of state fire codes.

CAL FIRE also inspects utility facilities and makes recommendations regarding improvements in facility design and infrastructure. Joint inspections of facilities by CAL FIRE and the utility owner are recommended by CAL FIRE so that each entity may assess the current state of the facility and successfully implement fire prevention techniques and policies. Violations of state fire codes discovered during inspections are required to be brought into compliance with the established codes. If a CAL FIRE investigation reveals that a wildfire occurred as a result of a violation of a law or negligence, the responsible party could face criminal and/or misdemeanor charges. In cases where a violation of a law or negligence has occurred, CAL FIRE has established the Civil Cost Recovery Program, which requires parties liable for wildfires to pay for wildfire-related damages.

Fire Hazard Severity Zones

CAL FIRE mapped FHSZs in Santa Barbara County based on fuel loading, slope, fire history, weather, and other relevant factors as directed by California Public Resources Code, Sections 4201–4204, and Government Code Sections 51175–51189. FHSZs are ranked from Moderate to Very High (VHFHSZ) and are categorized for fire protection within a Federal Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively.

California Strategic Fire Plan

The 2019 Strategic Fire Plan for California reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem service; and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. The Strategic Fire Plan for California provides a vision for a natural environment that is more fire resilient; buildings and infrastructure that are more fire resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships (CAL FIRE 2019). Plan goals include the following:

1. Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of local, county and regional plans that address fire protection and landowner objectives.
4. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
5. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
6. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
8. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

4.6.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The Public Facilities and Services Element of the General Plan/Local Coastal Land Use Plan includes goals, objectives, and policies related to providing for the general welfare of the community. Objectives and policies specifically related to the proposed project include (City of Carpinteria 2003):

Objective PF-3 The City shall strive to maintain the best possible police and fire safety services for the community.

PF-3c The City shall cooperate with the fire district for the purpose of determining district needs and to provide development mitigations as indicated by the study.

PF-3d The City shall strive to increase district/City communication by initiating development review procedures that incorporate district interaction at the earliest times possible.

The Safety Element of the General Plan/Local Coastal Land Use Plan includes goals, objectives, and policies related to achieving and maintaining public health and safety. Objectives and policies specifically related to the proposed project include (City of Carpinteria 2003):

Objective S-5 Minimize the potential risks and reduce the loss of life, property and economic and social dislocation resulting from urban and wildland fires.

S-5a All new structures must adhere to the Carpinteria-Summerland Fire Protection District Ordinance and the Santa Barbara County Fire Department Ordinances, where applicable

S-5b. All new structures, whether within or outside the urban limit zone, must adhere to the city Fire Sprinkler Ordinance.

S-5c Roads shall be installed or improved to the standards specified in the County of Santa Barbara Private Road and Driveway Standard, Section 8 of the County of Santa Barbara Municipal Code.

S-5d The City will work in conjunction with the Carpinteria Summerland Fire Protection District to adhere to, and enforce, all fire codes.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) indicates that areas of moderate fire hazard within urban areas of the coastal zone are restricted to hilly sections of the Carpinteria Valley and Summerland. Developments within any of the hazardous zones in rural areas will be very low density and subject

to stringent building, brush clearance, access, and water storage capacity restrictions (for fire suppression purposes) by the County Fire Department and/or the U.S. Forest Service.

4.6.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to wildfire are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, a significant impact related to wildfire would occur if the project would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan.
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
e) Result in cumulatively considerable impacts relating to wildfire.

4.6.4 Impact Analysis

The following analysis of potential project impacts is provided, based upon the above thresholds of significance.

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The Rincon Trail property is currently undeveloped and spans an area roughly between the eastern terminus of Carpinteria Avenue and Rincon Beach County Park. There are no developed roads within the project site, and consequently there are no evacuation routes currently extending onto the property from adjacent areas. In addition, no official evacuation routes have been designated by the County Office of Emergency Services and the Santa Barbara Operational Area Emergency Management Plan (County of Santa Barbara 2013). The 2017 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (County of Santa Barbara 2017) also does not provide specific emergency management plans for the vicinity of the project. Consequently, the project would have **no impact** on an adopted emergency response plan or emergency evacuation plan.

b) Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project involves the creation and maintenance of a concrete trail and steel frame bridge crossing over the UPRR alignment. These are non-combustible materials that would not increase fire risk. Slopes along the trail alignment would be regraded to achieve a shallower slope angle, which would marginally decrease the potential for wildfire spread and also facilitate access for firefighters to extinguish a potential wildland fire on the property. The trail would also allow lightweight fire-fighting equipment to access all points of the trail, facilitating firefighting activities. As such, the project would not exacerbate wildfire risks or the uncontrolled spread of wildfire, resulting in **no impact** related to wildland fire risks.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project would not require the installation of associated infrastructure for fire protection purposes. No structures or other improvements subject to combustion or requiring protection from fire are included or proposed in the multi-use trail proposal. The trail itself would assist firefighting access to most of the project site, without the need for other roads. The project would therefore have **no impact** with respect to infrastructure or systems necessary for fire protection.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project would not include the development of any habitable structures. The concrete path and steel frame bridge structure would not be prone to damage by wildfire. Created slopes along the trail alignment would be less steep than the existing manufactured slopes, decreasing the potential for shallow soil movement down these slopes. Run off from the new trail would be accommodated by existing and proposed drainage facilities which would convey storm water short distances for release at the adjacent beach. No existing homes or structures are located adjacent to the trail alignment that could be affected by secondary effects from a wildland fire event which involves the project site. Therefore, the project would have **no impacts** on risks related to wildland fire.

e) Would the project result in cumulatively considerable impacts relating to wildfire?

Cumulative development throughout the Carpinteria Valley would incrementally contribute to wildland fire risks and related impacts. However, as the proposed project would result in less than significant or no impacts to wildland fire risks, it would have a less than cumulatively considerable contribution to cumulative impacts.

4.6.5 Level of Significance Prior to Mitigation

As discussed above, no significant impacts related to wildfire would result from the proposed project.

4.6.6 Conclusion

The proposed project would neither construct structures nor place combustible materials on the site. Proposed grading modifications would not increase wildland fire risk, and the project would not lead to an increase in local population that could be exposed to existing regional wildland fire risks. As such, the project would have no impacts on wildland fire risk and no mitigations would be required or recommended.

5 Other CEQA Considerations

5.1 Growth-Inducing Impacts

Section 15126.2(e) of the California Environmental Quality Act (CEQA) Guidelines requires a discussion of how the potential growth-inducing impacts of the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Induced growth is distinguished from the direct employment, population, or housing growth of a project (14 CCR 15000 et seq.). If a project has characteristics that "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively," then these aspects of the project must be discussed as well. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of the proposed project. Typically, the growth-inducing potential of a project would be considered significant if it stimulates population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities, such as the Santa Barbara County Association of Governments (SBCAG).

1. The CEQA Guidelines also indicate that growth should not be assumed to be either beneficial or detrimental (14 CCR 15126.2[d]). According to Section 15126.2(e) of the CEQA Guidelines, a project is defined as growth inducing when it directly or indirectly:
2. Fosters population growth;
3. Fosters economic growth;
4. Includes the construction of additional housing in the surrounding environment;
5. Removes obstacles to population growth;
6. Taxes existing community service facilities, requiring construction of new facilities that could cause significant environmental effects; and/or
7. Encourages or facilitates other activities that could significantly affect the environments, either individually or cumulatively.

5.1.1 Growth Inducement Due to Population Growth

As discussed in Section 4.4, Population and Housing, of this Environmental Impact Report (EIR), the proposed Carpinteria Rincon Trail Project (project) would not contribute to population growth in the City of Carpinteria (City) or the County of Santa Barbara (County). The proposed project would generate short-term employment opportunities during construction of the proposed trail. Given the temporary duration of project construction of approximately 24 months and availability of construction workers within Santa Barbara and Ventura Counties, project construction is unlikely to generate a significant increase in population and/or new development that could result in a significant impact to the environment. The proposed trail maintenance would be performed by existing City or County parks and recreation/maintenance staff and would not require additional part- or full-time employees. Therefore, the project would not induce substantial unplanned population growth in an area, either directly or indirectly, and would not result in growth inducement due to population growth.

5.1.2 Growth Inducement Due to Economic Growth

An increase in population would foster economic growth by increasing demand for regional and local goods and services. However, as discussed above, the proposed project would generate short-term employment opportunities during construction of the proposed trail and no additional employees during operations and maintenance of the trail. Therefore, the project is not expected to result in substantial growth inducement associated with economic growth.

5.1.3 Growth Inducement Due to Additional Housing

The proposed project involves construction of a proposed trail and no housing is proposed. Therefore, the proposed project would not result in growth inducement due to additional housing.

5.1.4 Growth Inducement Due to Removal of Obstacles

Indirect growth can also occur by a project installing infrastructure that can support further growth. The proposed project includes development of a recreational trail. Therefore, the project would not require utility infrastructure. The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria, to Rincon Beach County Park, in unincorporated Santa Barbara County. The new, shared-use trail would provide a strategic addition to Carpinteria's Coastal Vista Trail that upon completion, will connect Padaro Lane to the west and Rincon Beach County Park to the east. In addition, the project would provide a connection to the newly opened bike path to Mussel Shoals as well as serve as a link in the larger California Coastal Trail. Although the proposed project would result in expansion of pedestrian and bicycle infrastructure, which would provide additional recreational opportunities to nearby residents and visitors, the proposed project is not anticipated to result in additional development in the area. Therefore, as the proposed project would not provide a surplus in traditional urban systems infrastructure capacity that would induce growth in surrounding areas, the project would not be considered growth inducing due to removal of obstacles to population growth.

5.2 Significant Irreversible Changes

The California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) require an Environmental Impact Report (EIR) to address any significant irreversible environmental changes that would result from a project should it be implemented. Pursuant to Section 15126.2(d) of the CEQA Guidelines, significant irreversible environmental impacts could involve:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- Irreversible damage from environmental accidents associated with the project;
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether a project could result in significant and irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

Implementation of the proposed project would involve consumption of limited, slowly renewable, and non-renewable resources. This consumption would occur during the construction phase of the project and would not continue throughout its operational lifetime. The project would require a commitment of resources that would include materials needed for the proposed trail, fuel and operational materials/resources, and the transportation of goods and people to and from the project site.

Construction of the project would require the consumption of resources that are not renewable or that may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: aggregate materials such as sand, gravel, or stone; water; and fossil fuels such as gasoline and oil.

Once constructed, the proposed project would result in consumption of minor limited, slowly renewable, and non-renewable resources. The resources that would be committed during operation of the project could include petroleum needed for transportation to and from the site, for those trail users not opting to cycle or walk to the new trail. No other fossil fuels, such as electricity or petroleum, would be required for operations of the proposed project. As discussed in Section 4.2, Energy, of this EIR, the project would result in less-than-significant impacts related to the potential wasteful, inefficient, or unnecessary consumption of energy resources during project construction and operation.

Additionally, the project would involve an unquantifiable, but limited, use of potentially hazardous materials typical for construction, such as gasoline, diesel fuel, lubricating oil, grease, and solvents. These materials would be contained, stored, and used on site in accordance with manufacturers' instructions and applicable standards and regulations. Compliance with regulations would serve to protect against a significant and irreversible environmental change that could result from the accidental release of hazardous materials.

Furthermore, the project would result in direct permanent impacts to one special-status wildlife species, the silvery legless lizard, and nesting birds and sensitive natural communities. Permanent project impacts would consist of vegetation clearing, grading, and construction of the proposed trail. Permanent impacts to special-status wildlife species, nesting bird habitats, and sensitive natural communities would be considered potentially significant under CEQA and would require implementation of mitigation measures, as outlined in Section 3.3, Biological Resources, to reduce impacts to a level below significance.

5.3 Significant and Unavoidable Impacts

CEQA Guidelines Section 15126.2(b) requires an EIR to describe significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. Chapter 1, Executive Summary, of this EIR provides a summary of the environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that could reduce or avoid those environmental impacts As discussed throughout Chapter 3, Environmental Analysis, with implementation of mitigation measures, the proposed project would not result in any significant and unavoidable impacts.

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6 Alternatives

6.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, Environmental Impact Reports (EIRs) are required to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (14 CCR 15126.6[a]). This EIR "must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (14 CCR 15126.6[a]). The alternatives discussion is required even if these alternatives "would impede to some degree the attainment of the project objectives or would be more costly" (14 CCR 15126.6[b]).

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker for a given project who must make the necessary findings addressing the potential feasibility of reducing the severity of significant environmental effects (California Public Resources Code, Section 21081; see also 14 CCR 15091).

6.2 Project Objectives

The proposed trail was identified by the City to meet critical safety and public access needs. Objectives of the proposed Carpinteria Rincon Trail Project (project) include the following:

- Improve pedestrian and bicyclist safety, as well as vehicular safety, by significantly reducing unsafe and/or illegal use of the railway corridor and the U.S. Highway 101 shoulder.
- Enhance regional mobility for cyclists and pedestrians, while enhancing support of regional initiatives to promote alternative transportation modes between Carpinteria, Santa Barbara County and Ventura County, by providing a continuous bike and pedestrian path connecting Santa Barbara County to Ventura County.
- Reduce air pollution from vehicle-related air quality emissions and traffic congestion on local and regional transportation systems by promoting pedestrian and bicycle access to coastal resources and recreation opportunities via a scenic multi-use trail, as an alternative to use of motorized vehicles to access and experience such coastal resources.
- Improve the local coastal bluff environment through improved water quality of surface water runoff through stabilization of bluff slope faces that are currently eroding into the Pacific Ocean, and enhancement of sensitive coastal bluff scrub habitats in the project area. Also, avoid deposits of petroleum fuels or lubricants associated with typical motor vehicle use for transportation in close proximity to the ocean, preventing such pollutants from stormwater runoff entering the adjacent marine environment.
- Complete a critical missing link in the California Coastal Trail consistent with the goals of Senate Bill 908, including provision of a continuous trail as close to the ocean as possible, with connections to the shoreline at appropriate intervals and sufficient access to encourage public use. The California Coastal Trail is intended to offer scenic coastal vistas, wildlife viewing areas, recreational or interpretive facilities, and other points of interest, and is recognized in regions throughout the state as a key resource or opportunity for these coastal-oriented experiences.

- Provide a coastal-oriented pathway that supports the broadest use by the public through a design that complies with standards established via the Americans with Disabilities Act (ADA).
- Provide new scenic coastal access and coastal tourism opportunities in the City of Carpinteria, and Santa Barbara County.

6.3 Significant Impacts

As discussed throughout Chapter 3, Environmental Analysis, of this EIR, implementation of the proposed project would not result in any significant and unavoidable impacts on the environment. Prior to mitigation, the proposed project would result in potentially significant impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, and utilities and service systems. However, with implementation of mitigation measures provided in Table 1-1, Summary of Project Impacts, of Chapter 1, Executive Summary, all potentially significant impacts would be mitigated to below a level of significance.

6.4 Alternatives Considered but Rejected

State CEQA Guidelines Section 15126.6(c) provides guidance in selecting a range of reasonable alternatives for the project. The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

State CEQA Guidelines Section 15126.6(f)(1) provides the following guidance in selecting a range of reasonable alternatives for the project. There are many factors that may be taken into account when addressing the feasibility of a range of potential alternatives for the project, such as site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). The alternatives discussion shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects (14 CCR 15126.6[f]). The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination (14 CCR 15126.6[c]).

The EIR need not discuss every alternative to the project. A range of alternatives that are "reasonable" for analysis have been evaluated and are discussed below in Section 6.5, Project Alternatives Under Further Consideration. The following describes other alternatives considered by the City of Carpinteria (City) but dismissed from further evaluation in this EIR, and a brief description of the reasons for their rejection.

6.4.1 Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. The proposed project is planned to function as the local section of the scenic California Coastal Trail, and would be connected to existing trail segments on both ends. The proposed project is heavily oriented toward closing this important regional gap within this existing trail system. Therefore, no feasible alternative locations exist for the proposed project. As such, an alternative location was ultimately rejected from further analysis in the EIR.

6.5 Project Alternatives Under Further Consideration

Section 15126.6 of the CEQA Guidelines states that the EIR shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

The range of alternatives evaluated in an EIR is governed by the "rule of reason" that requires the EIR set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (14 CCR 15126.6[a]).

In developing the alternatives to be addressed in this EIR, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while reducing or avoiding the environmental impacts of the project identified in Chapter 3 of this EIR.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in California Code of Regulations (CCR) Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, the Carpinteria Planning Commission (see PRC Section 21081[a] [3]).

This chapter discusses alternatives to the proposed project, including the No Project/No Build Alternative. The No Project/No Build Alternative is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines that examines the environmental effects that would occur if the project were not to proceed. The alternatives addressed in this chapter are listed below, followed by a more detailed discussion of each:

1. Alternative 1: No Project/No Build Alternative
2. Alternative 2: Maximize Existing Benchwork/Topography Alternative
3. Alternative 3: Steeper Slopes/Reduced Earthwork Alternative
4. Alternative 4: Freeway Adjacent Trail Avoiding Bluff Face Alternative

6.6 Alternatives Impact Summary

6.6.1 No Project/No Build Alternative (Alternative 1)

Project Alternative 1 Summary

CEQA Guidelines Section 15126.6 requires the inclusion of a No Project/No Build Alternative (Alternative 1) to be analyzed. Under Alternative 1, no development would occur on the project site. Accordingly, the site characteristics of this alternative would be equivalent to the existing conditions for each category analyzed in Chapter 3 of this EIR. In particular, pedestrian and cyclist travel between the eastern terminus of Carpinteria Avenue and Rincon Beach County Park would continue to be limited to the shoulder of US Highway 101 or to informal pathways that require illicit crossing of the UPRR alignment. In addition, the excessively steep cut slopes along the ocean bluffs, remnant from former transportation projects, would continue to experience elevated erosion rates.

Project Alternative 1 Impact Analysis

Aesthetics

The proposed project would result in less than significant impacts associated with aesthetics, with implementation of **Mitigation Measure (MM) AES-1** and **MM-BIO-3**. Alternative 1 would not result in any changes to the existing visual character, views, or lighting and glare. The site would remain as undeveloped land. Therefore, no impacts to aesthetics would occur under Alternative 1 because no development would occur on the project site and **MM-AES-1** and **MM-BIO-3** would not be required to reduce impacts to aesthetics. Therefore, the project's impacts to aesthetics would be reduced under Alternative 1.

Air Quality

Under Alternative 1, there would be no criteria air pollutant emissions during construction or for maintenance during operation. The Alternative would not generate traffic as there would be no construction or operation, and thus would not impact sensitive receptors, create a CO hotspot, or emit toxic air contaminants. This Alternative would also not generate odors as there would be no construction or operation. There would be no impact to air quality under Alternative 1, and thus impacts would be reduced.

Biological Resources

The No Project/No Build Alternative would not result in any changes to the currently undeveloped project site. The No Project/No Build Alternative would not result in any direct/indirect impacts to biological resources as would occur with development of the proposed project, since there would be no project related grading or construction involved. Therefore, impacts to biological resources including sensitive native vegetation communities, special-status wildlife species, and nesting birds would be reduced under the No Project/No Build Alternative.

Cultural Resources

The No Project/No Build Alternative would not result in any changes to the currently undeveloped project site. The No Project/No Build Alternative would not result in any direct/indirect impacts to cultural resources as would occur with development of the proposed project, since there would be no project related grading or construction involved. Therefore, impacts to cultural resources would be eliminated under the No Project/No Build Alternative and reduced compared to the proposed project.

Energy

The proposed project would result in less than significant impacts to energy. Under Alternative 1, there would be no energy use as the development of a trail would not occur. Therefore, no impact to energy would occur under Alternative 1; thus, impacts would be reduced.

Geology and Soils

The No Project/No Build Alternative would not result in any changes to the project site. The No Project/No Build Alternative would not result in any direct/indirect impacts to geologic resources as would occur with development of the proposed project, since there would be no project related grading or earthwork modification. However, as discussed in Section 3.5.1, the existing ocean-facing slope south of the proposed bridge is considered to be

susceptible to surficial/local instability under static conditions. These steep slopes in the southern trail alignment are the result of former landform modification carried out for the railroad alignment and former state highway, and do not represent natural conditions resulting from natural weathering of the involved earth materials and geologic formations. Therefore, erosion of the existing hillside could still occur under existing conditions and therefore under Alternative 1. The proposed project would implement measures such as native plantings and the application of hydro-seed, to stabilize slope areas to minimize soil erosion; no such remedial measures to address slope instability would occur under the No Project/ No Build alternative, However, Alternative 1 would not require implementation of mitigation measures to address significant geology-related impacts from occurring that involve structural damage from seismic events, differential settlement of the pedestrian bridge structure, shallow slope instability associated with seismic activity, and increased soil erosion on slopes graded for the project. Therefore, impacts related to short-term construction-related increased erosion and structural damage from seismicity, would be reduced under the No Project/No Build Alternative.

Greenhouse Gas Emissions

Under Alternative 1, there would be no greenhouse gas (GHG) emissions during construction or for maintenance during operation. There would be no loss of sequestered carbon as no vegetation would be removed. This Alternative may not be consistent with some of the County's or City's goals to increase recreation opportunities or the state's goal to create multimodal communities, which are designed to reduce GHG emissions by encouraging alternative modes of transportation instead of motor vehicle access to coastal recreation areas. Impacts to GHG emissions would be less than significant and similar to that of the proposed project

Hazards and Hazardous Emissions

The No Project/No Build Alternative would not result in any changes to the project site. The No Project/No Build Alternative would not result in any direct/indirect impacts to hazards or hazardous emissions during project construction, as would occur with development of the proposed project, since there would be no project related construction involved. Therefore, impacts related to hazards or hazardous emissions would be reduced under the No Project/No Build Alternative.

Hydrology and Water Quality

Under Alternative 1, there would be no construction or other alterations to the existing project site. As such, water quality impacts associated with erosion of disturbed soil and release of construction related petroleum products would be avoided. Although the proposed project would result in improved stormwater drainage infrastructure and implementation of features such as native plantings and the application of hydro-seed, to stabilize slope areas to minimize soil erosion and avoid sediment-related water quality impacts, impacts to hydrology and water quality associated with the proposed project would be potentially significant and mitigation measures **MM-WAT-1** through **MM-WAT-6** would be required. Alternative 1 would result in no development at the project site and therefore potentially significant impacts would be avoided and mitigation measures would not be required. As such, hydrology, and water quality impacts under Alternative 1 would be reduced.

Land Use and Planning

Impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. Therefore, **Mitigation Measures (MM) AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through

MM-WAT-6; MM-NOI-1 through MM-NOI-2; MM-TCR-1 would reduce impacts to conflicts with any land use plan, policy, or regulations to less than significant with mitigation. Alternative 1 would be inconsistent with City and County General Plan policies that support construction of the proposed trail. However, because Alternative 1 would result in no development, mitigation measures would not be required and impacts would be reduced compared to the proposed project.

Noise

The No Project/No Build Alternative would not result in any changes to the project site. The No Project/No Build Alternative would not result in any direct/indirect impacts from noise emissions during project construction, as would occur with development of the proposed project, since there would be no project related construction involved. Therefore, impacts related to noise would be reduced under the No Project/No Build Alternative.

Recreation

Under Alternative 1, there would be no changes or alterations to the project site. There would be no provision of a multi-use trail for cyclists and pedestrians, and the substantial gap that currently exists in the Coastal Trail system would remain. In this regard, enhancement of local and regional biking and hiking opportunities delivered by the project would not occur under Alternative 1, and recreational and safety benefits of the project would not be realized. On the other hand, re-grading of the bluff slopes would not occur under Alternative 1, thereby preserving the existing wind and uplift conditions along the bluffs that currently support soaring opportunities in the air space above the trail alignment. This Alternative may not be consistent with some of the County's or City's goals to increase recreation opportunities via completion of a local path that also closes a gap in the regional coastal trail network, or the state's goal to create multimodal transportation opportunities to reduce reliance on private vehicle use. Therefore, the recreational impacts of Alternative 1 would be similar to or greater than the proposed project.

Transportation

Under Alternative 1, there would be no changes or alterations to the project site. There would be no provision of a multi-use trail for cyclists and pedestrians, and the substantial gap that currently exists in the Coastal Trail system would remain. The use of a vehicle by residents in visiting the Rincon Beach County Park would continue, due to a lack of a safe alternative to vehicle travel from points within Carpinteria. Transportation hazards would persist, in the form of pedestrians using informal trails along the UPRR corridor to navigate to Rincon Beach County Park. In this regard, enhancement of local and regional biking and hiking opportunities delivered by the project would not occur under Alternative 1, and a solution to existing pedestrian hazards of the project would not be realized. The proposed project would contain adequate signage and traffic calming measures to protect pedestrians and cyclists from hazards associated with vehicle parking maneuvers in the Rincon Beach County Park parking lot. Alternative 1 may not be consistent with some of the County's or City's goals to create multimodal transportation opportunities to reduce reliance on private vehicle use, and to provide a safe environment for pedestrian and bicyclist travel. Impacts would be slightly greater under Alternative 1 than the proposed project, because the existing risks to pedestrians and cyclists crossing the UPRR tracks would remain unaddressed.

Tribal Cultural Resources

The No Project/No Build Alternative (Alternative 1) would not result in any changes to the currently undeveloped project site. The No Project/No Build Alternative would not result in any direct/indirect impacts to cultural resources as would occur with development of the proposed project, since there would be no project related grading or construction involved. Therefore, impacts to cultural resources would be eliminated under the No Project/No Build Alternative and reduced compared to the proposed project.

Utilities and Service Systems

The proposed project could have potentially significant impacts upon stormwater systems, for which mitigation has been required. Under Alternative 1, there would be no construction or other alterations to the existing project site. As such, impacts to stormwater systems would be avoided and mitigation would not be required. However, under Alternative 1, existing failing stormwater systems would remain. Nonetheless, Alternative 1 would avoid all construction and mitigation measures **MM-WAT-1** through **MM-WAT-5,** outlined in Section 3.14.5, would not be required. Therefore, impacts to utilities and service systems under Alternative 1 would be reduced.

Relation to Project Objectives

Primary objectives include closing a substantial gap in the Coast Trail System, which in turn would enable regional commuting opportunities that employ alternative transportation modes (i.e., walking and cycling). Another objective is to provide recreation opportunities for all residents, and to enhance formal access to coastal resources including ocean views and a direct route to Rincon Beach County Park from Carpinteria, and to Rincon Bluffs from Rincon Point. The no project alternative would not achieve these primary objectives of the project.

6.6.2 Maximize Existing Benchwork/Topography Alternative (Alternative 2)

Project Alternative 2 Summary

The Maximize Existing Benchwork/Topography Alternative (Alternative 2) would involve development of the originally proposed trail, as described and analyzed in the 2015 Mitigated Negative Declaration (MND). Per the 2015 MND, development under Alternative 2 would consist of a 12-foot wide and approximately 4,000-foot long pedestrian and bicycle shared use trail, that would also extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria (City), to the Rincon Beach County Park in Santa Barbara County (see Figure 6-1, Proposed Alternatives), but following a different alignment than the proposed project. The trail alignment under Alternative 2 was configured to largely follow existing topographic benches that were originally created (and since abandoned) for previous railroad and highway alignments within the project site. Using the existing benches for the alignment was assumed to minimize the need for topographic modification and earthwork volumes. Under Alternative 2, the northern portion of the trail, from the eastern terminus of Carpinteria Avenue to the Union Pacific Railroad (UPRR) corridor, which crosses the middle of the site, traverses an engineered slope, cut during construction of the U.S. Highway 101. The trail proposed under Alternative 2 would cross the UPRR tracks in an area that consists of engineered slopes cut during construction of the UPRR. On the southern side of the UPRR alignment, new grading not associated with an existing bench was proposed, accompanied by extensive retaining walls, to connect the trail to an existing informal trail on an existing cut bench extending westward from Rincon Beach County Park that was abandoned by the UPRR in the late 1960's. The Alternative 2 trail route would be flat in this area.

Project Alternative 2 Impact Analysis

Aesthetics

The proposed project would result in less than significant impacts associated with aesthetics, with implementation of **MM-AES-1** and **MM-BIO-3**. Alternative 2 would result in development of a trail that would follow a different alignment than the proposed project, which would follow existing topographic benches that were originally created (and since abandoned) for previous railroad and highway alignments within the project site. However, because Alternative 2

would be located within a similar location, it would still potentially result in impacts to scenic vistas and scenic resources and would potentially result in significant adverse impacts on visual character or quality of the site and its surroundings because of the removal of mature vegetation and addition of new human-scale development including approximately 1,000 linear feet of retaining walls with a height of up to 14 feet above grade. **MM-AES-1,** which requires City Architectural Review Board and County Board of Architectural Review approval, and **MM-BIO-3**, which requires restoration or enhancement of coastal sage scrub and coastal bluff scrub communities in areas temporarily impacted by construction of the trail or adjacent area, would still be required. Therefore, impacts would be similar to but marginally greater than, the proposed project under Alternative 2.

Air Quality

Alternative 2 would result in a narrower but longer trail than the proposed project. It would result in 46,000 cubic yards (CY) of cut and 10,500 CY of fill, resulting in 35,500 CY of export. This is lower than the proposed project's 92,526CY of export and therefore would result in fewer haul trucks during construction. Alternative 2 would result in fewer haul truck trips and less construction activity as it is fewer square feet of path compared to the proposed project. Therefore, criteria air pollutant emissions during construction are expected to be less than the proposed project. Impacts would be less than significant during construction. During operation, Alternative 2 would result in emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant and similar to the proposed project.

Biological Resources

The Maximum Existing Benchwork/Topography Alternative, would overall disturb less area than the proposed project. Project temporary impacts total 4.02 acres and this alternative has no temporary impacts identified, resulting in a net decrease of 4.02 acres of temporary impacts. It should be noted that although temporary impacts have not been identified, this alternative will likely result in temporary impacts. Project permanent impacts total 1.02 acres and this alternative includes 0.67 acres of permanent impacts resulting in a net decrease of 0.35 acres of permanent impacts. Overall, the net impacts will decrease by 4.37 acres under this alternative since less grading and earthwork is required. More specifically, the project would result in 3.55 acres of temporary impacts to County ESH and City ESHA and this alternative has no temporary impacts identified, resulting in a net decrease of 3.55 acres of temporary impacts to County ESH and City ESHA. The project will result in 0.76 acres of permanent impacts to County ESH and City ESHA and this alternative includes 0.51 acres of permanent impacts to County ESH and City ESHA, resulting in a net decrease of 0.25 acres of permanent impacts to County ESH and City ESHA. Overall, the net impacts to County ESH and City ESHA would decrease by 3.80 acres under this alternative since less grading and earthwork is required.

Because the vast majority of impacts under the proposed project are occurring within sensitive native vegetation communities identified as County ESH and City ESHA and require mitigation, this alternative would result in fewer overall impacts. However, mitigation measures associated with County ESH and City ESHAs would still be required. While less area is proposed to be impacted under this alternative, similar impacts to special-status wildlife species and nesting birds may occur and would require similar mitigation. Therefore, due to the decreased overall direct impacts to sensitive native vegetation communities identified as County ESH and City ESHA, impacts to biological resources would be reduced under the Maximum Existing Benchwork/Topography Alternative, Alternative 2.

Cultural Resources

Alternative 2 would result in a narrower but longer trail than the proposed project. As discussed in Section 3.4, Cultural Resources, cultural resources are thought to be present between the UPRR crossing bridge and U.S. Highway 101. Development under Alternative 2 would still result in development of the trail in this general area, and would therefore result in impacts to these cultural resources. In addition, the project could still potentially impact undiscovered cultural resources, including archaeological resources and human remains. **MM-CR-1** through **MM-CR-4** would still be required. Impacts would be similar to the proposed project.

Energy

The proposed project would result in less than significant impacts to energy. Alternative 2 would result in a narrower but longer trail than the proposed project. It would result in 46,000 CY of cut and 10,500 CY of fill, resulting in 35,500 CY of export. This is lower than the proposed project's 92,526CY of export and therefore would result in fewer haul trucks during construction. Alternative 2 would result in fewer haul truck trips and less construction activity as it is fewer square feet of path compared to the proposed project. Therefore, energy use during construction are expected to be less than the proposed project. During operation, Alternative 2 would result in emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would consume energy. Operational impacts would be considered less than significant and similar to the proposed project.

Geology and Soils

Alternative 2 would result in 46,000 CY of cut and 10,500 CY of fill, for a total of 56,500 CY of earthwork, which would be approximately 46.2% lower than the proposed project's 122,246 CY of total earthwork. Given the much lower volume of earthwork involved, temporary erosion impacts during construction would be reduced with this alternative; however, **MM-GEO-3** would continue to be required. A similar bridge structure over the UPRR alignment would be employed, although it would be greater in length, and therefore more difficult to design to withstand forces created during a seismic event; **MM-GEO-1** and **MM-GEO-2** would continue to be required. The most substantial difference geologically for Alternative 2 is that geotechnical testing during advancement of the design identified an extensive landslide along the portion of the proposed alignment where the trail changes direction from west to east, on the south side of the UPRR alignment. In order to attempt to stabilize a large landslide feature such as this, multiple deep caissons can be required, and would be intended to pin the mass in place. However, movement can still occur between the caissons, and the expense of the caisson installation could be prohibitive. In that available engineering and geotechnical methods for stabilizing the landslide mass are not known to be feasible, geology and soils impacts related to slope instability under Alternative 2 are considered significant and unavoidable, and impacts would be significantly greater compared to the proposed project.

Greenhouse Gas Emissions

Alternative 2 would result in a narrower but longer trail than the proposed project resulting in 35,500 CY of export. This is lower than the proposed project's 92,526 CY of export and therefore would result in fewer haul trucks during construction. Alternative 2 would result in fewer haul truck trips and less construction activity as it is fewer square feet of path compared to the proposed project. Therefore, GHG emissions during construction are expected to be reduced compared to the proposed project. Impacts would be less than significant during construction. During operation, Alternative 2 would result in emissions from maintenance activities similar to the proposed project.

Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and similar to the proposed project.

Hazards and Hazardous Emissions

Alternative 2 would involve a trail length considerably longer than the project trail length. The additional length would not affect use or operation of the trail since no hazardous wastes are anticipated from these activities. However, construction of the proposed project would require heavy construction equipment, which involves the use of hydrocarbon fuels and lubricants that are considered hazardous materials, Concrete is considered a hazardous material until it cures, and is included in the project construction. Paint or other surface coatings are also considered hazardous materials, until they are fully dried; the bridge and certain fencing elements may involve paint application on site. With a comparatively longer trail length under Alternative 2, the volumes of hazardous materials associated with construction would increase and the risk of release would be slightly elevated over project levels. The section of the trail north of the UPRR corridor (the western portion) would have the same potential to encounter soils with ADL as the project. Overall, impacts would be only marginally greater for Alternative 2 compared to the project, relative to the volumes of hazardous materials associated with construction and the risk of release, as well as handling and disposal of ADL containing soils. **MM-WAT-2** and **MM-HAZ-1** would continue to be required, and residual impacts would also be less than significant.

Hydrology and Water Quality

Alternative 2 would result in 46,000 CY of cut and 10,500 CY of fill, for a total of 56,500 CY of total earthwork, which would be approximately 46.2% lower than the proposed project's 122,246 CY of total earthwork. Given the much lower volume of earthwork involved, temporary erosion impacts during construction would be reduced with this alternative; however, **MM-WAT-1**, **MM-WAT-2**, and **MM-WAT-3** would continue to be required. Alternative 2 would also involve a trail length considerably longer than the project trail length. The additional length would increase the impervious surface of the trail, resulting in greater volumes of stormwater runoff. Project storm drain systems would need to be expanded in capacity, and additional new storm drains on the face of the bluff, west of the UPRR crossing point, could be necessitated to serve the trail segments south and west of the UPRR crossing. Given the potential need for additional bluff-face drains, Alternative 2 would have greater hydrology impacts than the project. While **MM-WAT-4**, **MM-WAT-5**, and **MM-WAT-6** would continue to be required to address long-term operational affects upon water quality, storm drain system maintenance requirements and the potential for failure of storm drain system components would be greater under Alternative 2.

Land Use and Planning

The proposed project would result in less than significant impacts to land use and planning with incorporation of **MM-BIO-1** through **MM-BIO-4**, which prescribe required mitigation measures to satisfy requirements found in City and County policies governing ESHA, and less than significant impacts to conflicts with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect with implementation of **MM-AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1**. As discussed under Biological Resources, above, Alternative 2 would result in decreased overall direct impacts to sensitive native vegetation communities identified as County ESH and City ESHA. However, mitigation measures associated with County ESH and City ESHAs would still be required. In addition, Alternative 2 would still be required to implement similar mitigation measures to address any potential conflicts with land use plan, policy, or regulations adopted for the purpose of avoiding or

mitigating an environmental effect. However, because Alternative 2 would result in decreased overall direct impacts to sensitive native vegetation communities impacts to land use and planning would be reduced under the Maximum Existing Benchwork/Topography Alternative, Alternative 2.

Noise

Alternative 2 would involve a trail length substantially longer than the project, which would increase the duration of activities involving concrete installation and the related necessary equipment. The installation of numerous deep caissons could also be required to attempt to stabilize the landslide area for the trail segments immediately south of the UPRR crossing. The additional trail segments under Alternative 2 would occur south and west of the UPRR crossing, which are not closer to any noise-sensitive users than the remaining trail segments common to the project. Rincon Point residences would remain the closest noise-sensitive receptors to project construction activities. Based on the noise level values at the nearest sensitive receptor, daytime construction noise levels would average approximately 12 dBA lower than ambient noise levels. However, construction noise levels in the evening or overnight period could be plainly audible above background levels and could also result in sleep disturbance for residential occupants. Therefore, as with the project, Alternative 2 temporary construction noise impacts are potentially significant. **MM-NOI-1** and **MM-NOI-2** would continue to be required to reduce construction noise impacts to a less than significant level. Noise impacts from Alternative 2 would be marginally greater than the project, due to the need to import specialized equipment and materials by additional heavy truck trips for the caisson installation.

Recreation

Under Alternative 2, a multi-use trail for cyclists and pedestrians would be constructed and operated, and the substantial gap that currently exists in the Coastal Trail system would be filled. In this regard, enhancement of local and regional biking and hiking opportunities delivered by the project would also occur under Alternative 2, and the recreational benefits of the project would be realized. In addition, members of the soaring community have provided comments indicating they believe this original trail alignment would not have adverse effects upon the existing wind and uplift conditions along the bluffs that currently support soaring opportunities in the air space above the trail alignment. However, the original alignment did not achieve an overall path grade that would meet ADA requirements, and therefore the trail under alternative 2 would not meet the objective of providing recreation opportunities to the broadest segment of the local and visitor populations. Overall, the recreation impacts and benefits of Alternative 2 would be very similar to the project, in that perceived lesser impacts on soaring opportunities under this alternative would be offset by eliminating trail use by mobility impaired individuals.

Transportation

Alternative 2 would provide a multi-use trail for cyclists and pedestrians, and the substantial gap that currently exists in the Coastal Trail system would be eliminated. The use of a vehicle by residents in visiting the Rincon Beach County Park would be expected to decline, due to the existence of a new safe alternative to vehicle travel from points within Carpinteria. Transportation hazards associated with pedestrians crossing the UPRR alignment to navigate to Rincon Beach County Park would be resolved. In this regard, the enhancements of local and regional biking and hiking opportunities delivered by the project would occur under Alternative 2, and a solution to existing pedestrian hazards of the project would be realized. This alternative would have transportation benefits and impacts equivalent to the project.

Tribal Cultural Resources

Alternative 2 would be narrower but longer than the proposed project. As discussed in Section 3.13, Tribal Cultural Resources, no previously recorded archaeological resources of Native American origin or TCRs were identified within the project site. Further, no TCRs have been identified by California Native American tribes as part of the City's AB 52 notification process, and no California Native American tribes requested consultation with the City. However, there is still a potential for unknown subsurface TCRs to be significantly impacted by the project, which could result in a potentially significant impact. Development under Alternative 2 would still result in development of the trail in this general area, and would therefore result in similar impacts to TCRs. **MM-CR-1** through **MM-CR-4** and **MM-TCR-1** would still be required. Impacts would be similar to the proposed project.

Utilities and Service Systems

Alternative 2 would result in 46,000 CY of cut and 10,500 CY of fill, for a total of 56,500 CY of total earthwork, which would be approximately 46.2% lower than the proposed project's 122,246 CY of total earthwork. Although a much lower volume of earthwork would be required for Alternative 2, impacts to existing drainage patterns of the site would still occur. Therefore, **MM-WAT-1**, **MM-WAT-2**, **MM-WAT-3**, and **MM-WAT-4** would continue to be required. Alternative 2 would also involve a trail length considerably longer than the project trail length. The additional length would increase the impervious surface of the trail, resulting in greater volumes of stormwater runoff. Project storm drain systems would need to be expanded in capacity, and additional new storm drains on the face of the bluff, west of the UPRR crossing point, could be necessitated to serve the trail segments south and west of the UPRR crossing. Given the potential need for additional bluff-face drains, Alternative 2 would have greater impacts to utilities and service systems than the project.

Relation to Project Objectives

Alternative 2 would meet project objectives including closing an important gap in the coastal trail network, the provision of a safe route for cyclists and pedestrians between eastern Carpinteria and Rincon Beach County Park, the promotion of alternative transportation to reduce air quality and GHG emissions, and the creation of ocean viewing opportunities for cyclists and pedestrians along the section of the trail southward of the UPRR alignment. However, the presence of a substantial landslide area that could prove infeasible to stabilize makes the feasibility of this alignment very questionable. Also, as discussed in Recreation, above, the original alignment did not achieve an overall path grade that would meet ADA requirements, and therefore the trail under alternative 2 would not meet the objective of providing recreation opportunities to the broadest segment of the local and visitor populations.

6.6.3 Steeper Slopes/Reduced Earthwork Alternative (Alternative 3)

Project Alternative 3 Summary

Under the proposed project, to achieve compliance with pathway surface slope limitations under the Americans with Disability Act (ADA), the existing benched slope would be regraded along the entire trail alignment. On some portions of the trail, the proposed project also includes creation of a second earthwork bench on the new slope above the trail to reduce erosion potential. The Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) would remove one of the earthwork benches that was originally proposed on the slope above the trail alignment, for a portion of the trail length. The cross sections proposed under Alternative 3 are shown in Illustration 6-1, Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) Trail Cross Section, below. Alternative 3 would result in a 7.6% reduction of earthwork, or 10,015 less CY, compared to the project. Under Alternative 3, the proposed

alignment would be the same as the proposed project. Similar to the proposed project, a bridge would be provided to provide safe crossing for trail users over the UPRR. However, the cross section of the trail south of the UPRR crossing, on the eastern portion of the trail alignment, would be different. More specifically, Alternative 3 would not provide benches above the trail (to control drainage and rockfall).

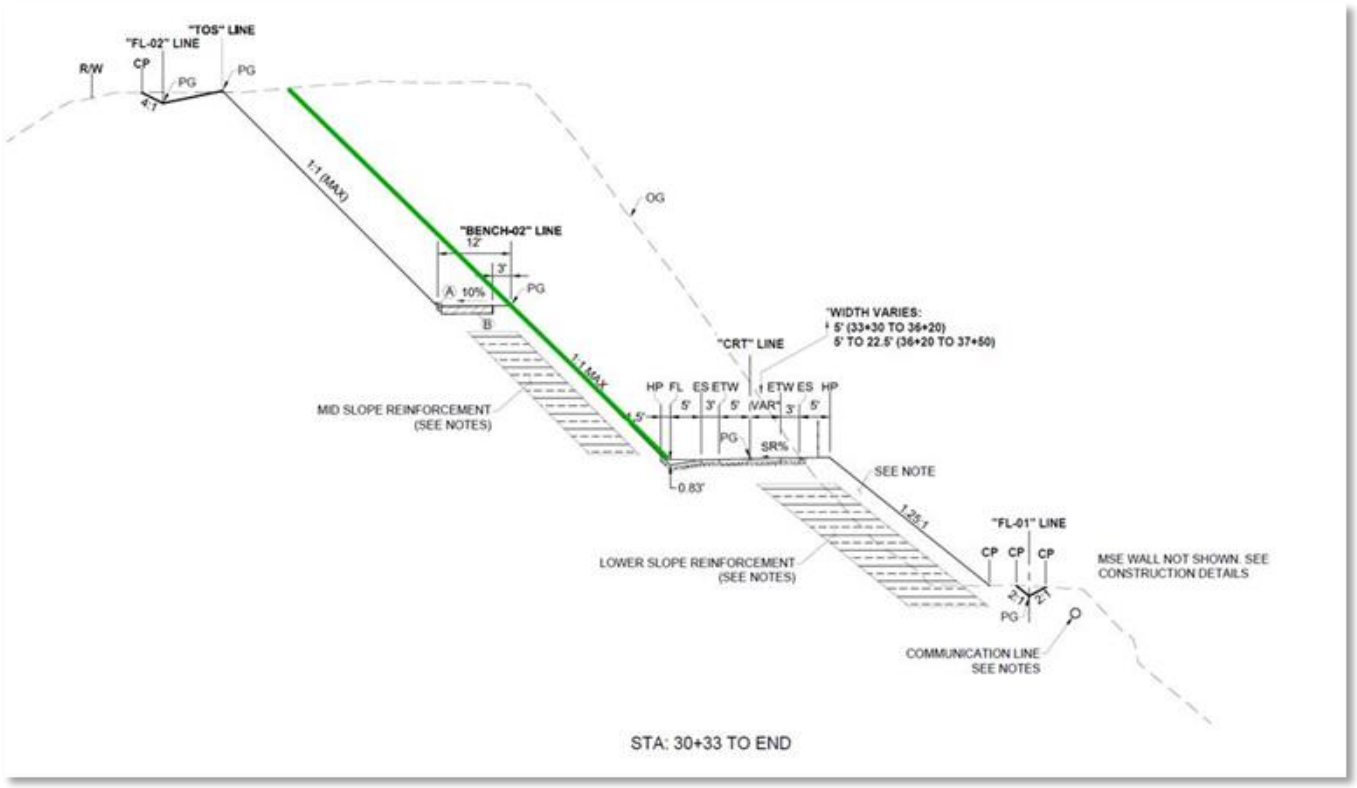


Illustration 6-1 Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) Trail Cross Section

Legend for Illustration 6-1:

CP	Control Point (survey tie-in)
CRT	Center of Route Travel
ETW	Edge of Travel Way
ES	Edge of Shoulder
FL	Flow Line (of drain swale adjacent to path)
HP	High Point (of drain swale adjacent to path)
OG	Original Grade
PG	Project Grade

Project Alternative 3 Impact Analysis

Aesthetics

The proposed project would result in less than significant impacts associated with aesthetics, with implementation of **MM-AES-1** and **MM-BIO-3**. Alternative 3 would result in development of a trail that would follow the same alignment as the proposed project. However, under Alternative 3, one of the earthwork benches that was originally proposed

on the slope above the trail alignment would be removed, for a portion of the trail length. However, because Alternative 3 would be located within the same location as the project, it would still potentially result in impacts to scenic vistas and scenic resources and would potentially result in a significant adverse impact on visual character or quality of the site and its surroundings because of the removal of mature vegetation and addition of new human-scale development. **MM-AES-1,** which requires City Architectural Review Board and County Board of Architectural Review approval, and **MM-BIO-3**, which requires restoration or enhancement of coastal sage scrub and coastal bluff scrub communities in areas temporarily impacted by construction of the trail or adjacent area, would still be required. Therefore, impacts would be similar to the proposed project under Alternative 3.

Air Quality

Alternative 3 would result in 96,077 CY of cut and 10,570 CY of fill, resulting in 85,507 CY of export. This is lower than the proposed project's 92,526 CY of export and therefore would result in fewer haul trucks during construction. Therefore, criteria air pollutant emissions during construction are expected to be less than the proposed project. Impacts would be less than significant during construction. During operation, Alternative 3 would result in emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and similar to that of the proposed project.

Biological Resources

Alternative 3 would disturb approximately the same area as the proposed project. While the volume of sediment removed and grading configuration proposed for this alternative would reduce overall earthwork, it would occur within the same overall grading and development footprint since the location of the trail alignment would be the same as for the proposed project. Additionally, impacts to special-status wildlife species and nesting birds would be similar under this alternative since the temporary and permanent impact footprints are approximately the same. The Steeper Slopes/Reduced Earthwork Alternative would result in similar temporary and permanent impacts to biological resources as the proposed project and would require similar mitigation because development would generally occur within the same footprint as the proposed project. Therefore, the Steeper Slopes/Reduced Earthwork Alternative would result in similar impacts to biological resources.

Cultural Resources

Alternative 3 would disturb approximately the same area as the proposed project. As discussed in Section 3.4, cultural resources are present between the UPRR crossing bridge and U.S. Highway 101. Development under Alternative 2 would still result in development of the trail in the same area, and would therefore result in impacts to these existing cultural resources. In addition, the project could still potentially impact undiscovered cultural resources, including archaeological resources and human remains. **MM-CR-1** through **MM-CR-4** would still be required. Impacts would be similar to the proposed project.

Energy

Alternative 3 would result in 96,077 CY of cut and 10,570 CY of fill, resulting in 85,507 CY of export. This is slightly lower than the proposed project's 92,526 CY of export and therefore would result in fewer haul trucks during construction. Therefore, energy use during construction is expected to be less than the proposed project. During operation, Alternative 3 would result in energy use from maintenance activities similar to the proposed project.

Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal energy usage. Operational impacts would be considered less than significant, and similar to the proposed project.

Geology and Soils

Alternative 3 would result in 110,019 less CY of earthwork, compared to the project. Under Alternative 3, the proposed alignment would be the same as the proposed project. However, for the cross section of the trail south of the UPRR crossing, on the eastern portion of the trail alignment, Alternative 3 would not provide benches above the trail. Given the lower volume of earthwork involved, temporary erosion impacts during construction would be reduced with this alternative; however, **MM-GEO-3** would continue to be required. The same bridge structure over the UPRR alignment would be employed, and therefore **MM-GEO-1** and **MM-GEO-2** would continue to be required. Updated geotechnical design details would be needed to address long-term stability of the regraded slopes south of the UPRR alignment, but the project engineers have indicated that feasible methods to achieve such stability are available and could be detailed in an updated geotechnical report if Alternative 3 were to be selected for implementation. Therefore, impacts would be similar to the proposed project.

Greenhouse Gas Emissions

Alternative 3 would result in 96,077 CY of cut and 10,570 CY of fill, resulting in 85,507 CY of export. This is slightly lower than the proposed project's 92,526 CY of export and therefore would result in fewer haul trucks during construction. Therefore, GHG emissions during construction are expected to be less than the proposed project. Impacts would be less than significant during construction. During operation, Alternative 3 would result in GHG emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and similar to the proposed project.

Hazards and Hazardous Emissions

Alternative 3 would involve an identical trail length to the project, but would reduce earthwork by approximately 10,019 CY. The use of heavy equipment would be slightly reduced in duration, compared to the project, due to the reduced earthwork volume. The section of the trail north of the UPRR corridor (the western portion) would have the same potential to encounter soils with ADL. Overall, impacts would remain similar or the same as the project relative to the volumes of hazardous materials associated with construction and the risk of release, as well as handling and disposal of ADL containing soils. **MM-WAT-2** and **MM-HAZ-1** would continue to be required, and residual impacts would also be less than significant.

Hydrology and Water Quality

Alternative 3 would involve an identical trail length to the project but would reduce earthwork by approximately 10,019 CY. With reduced earthwork volume, the potential for erosion during construction would be reduced under Alternative 3, as compared to the project; however, **MM-WAT-1**, **MM-WAT-2**, and **MM-WAT-3** would continue to be required to address potential erosion and other water quality impacts during construction. The trail alignment under Alternative 3 would match the project, and therefore all the proposed storm drain components would continue to adequately serve the stormwater runoff volumes from the project. As with the project, **MM-WAT-4**, **MM-WAT-5**, and **MM-WAT-6** would continue to be required to address long-term operational affects upon water quality. Overall, Alternative 3 would marginally reduce hydrology and water quality impacts when compared to the project.

Land Use and Planning

The proposed project would result in less than significant impacts to land use and planning with incorporation of MM-BIO-1 through MM-BIO-4, prescribes required mitigation measures to satisfy requirements found in City and County policies governing ESHA. As discussed under Biological Resources, above, Alternative 3 would disturb approximately the same area as the proposed project, resulting in similar impacts to ESHA. In addition, the project would result in less than significant impacts to conflicts with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect with implementation of MM-AES-1; MM-BIO-1 through MM-BIO-6; MM-CR-1 through MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1 through MM-WAT-6; MM-NOI-1 through MM-NOI-2; MM-TCR-1. It is anticipated that Alternative 2 would require similar mitigation measures to reduce potential land use impacts. Thus, impacts to land use and planning would be similar under this alternative.

Noise

Alternative 3 would involve an identical trail length and alignment to the project but would reduce earthwork by approximately 10,019 CY. With reduced earthwork volume, the duration for earthwork activities using heavy equipment would be lessened; nonetheless MM-NOI-1 and MM-NOI-2 would continue to be required to reduce construction noise impacts to a less than significant level. Noise impacts from Alternative 3 would be similar to the project, but somewhat less due to the reduced earthwork volumes involved, as compared to the project.

Recreation

Under Alternative 3, a multi-use trail for cyclists and pedestrians identical to the project would be constructed and operated, and the substantial gap that currently exists in the Coastal Trail system would be filled. Enhancement of local and regional biking and hiking opportunities delivered by the project would also be achieved under Alternative 3, and recreational benefits of the project would be realized. A critical difference would be incorporated, however, in the grading profile for the trail segment along the bluff face adjacent to the ocean; this segment would not be re-graded to create a second bench above the trail bench (unlike the proposed project). The Air Flow Study (Appendix I) found that the elimination of the upper bench would result in a reduction in the vertical wind speed along the bluff edge by 10% to 20%, rather than the 30% maximum reduction resulting from the proposed project. In practical terms, a reduction in vertical wind speeds along the bluffs caused by regrading could maintain conditions favorable for paragliding and hang-gliding activities to occur in the air space over the trail alignment. A vertical wind speed reduction of 10% to 20% would have a lower effect upon soaring opportunities than the 30% reduction associated with the proposed project. As such, Alternative 3 would have lesser impacts on recreation resources and opportunities than the project, specifically in regard to soaring opportunities. Alternative 3 would continue to meet primary recreational objectives for the project by providing a trail that offers views of the Pacific Ocean, that is ADA compliant, and which achieves a safe connection between Carpinteria and the Rincon Beach County Park that can function as an alternative transportation mechanism. This alternative would therefore have lesser impacts on recreation resources than the proposed project.

Transportation

Under Alternative 3, a multi-use trail for cyclists and pedestrians identical to the project would be constructed and operated. Alternative 3 would therefore also close the substantial gap that currently exists in the Coastal Trail system, equivalent to the project. The use of a vehicle by residents in visiting the Rincon Beach County Park would be expected to decline under Alternative 3 as well, due to the existence of a new safe alternative to vehicle travel from points within Carpinteria. Transportation hazards associated with pedestrians crossing the UPRR alignment to

navigate to Rincon Beach County Park would be resolved. In this regard, the enhancements of local and regional biking and hiking opportunities delivered by the project would occur under Alternative 3, and a solution to existing pedestrian hazards of the project would also be realized. This alternative would have transportation benefits and impacts equivalent to the project.

Tribal Cultural Resources

Alternative 3 would disturb approximately the same area as the proposed project. As discussed in Section 3.13, no previously recorded archaeological resources of Native American origin or TCRs were identified within the project site. Further, no TCRs have been identified by California Native American tribes as part of the City's AB 52 notification process, and no California Native American tribes requested consultation with the City. However, there is still a potential for unknown subsurface TCRs to be significantly impacted by the project, which could result in a potentially significant impact. Development under Alternative 3 would result in development of the trail in the same area, and would therefore result in similar impacts to TCRs. **MM-CR-1** through **MM-CR-4** and **MM-TCR-1** would still be required. Impacts would be similar to the proposed project.

Utilities and Service Systems

Alternative 3 would involve an identical trail length to the project but would reduce earthwork by approximately 10,019 CY. Although Alternative 3 would result in reduced earthwork volume, impacts to existing drainage patterns of the site would still occur. Therefore, **MM-WAT-1, MM-WAT-2, MM-WAT-3, and MM-WAT-4** would continue to be required. Therefore, impacts to utilities and service systems would be similar under Alternative 3.

Relation to Project Objectives

Given that Alternative 3 would employ the same alignment as the project and would incorporate an identical trail width to the project, this alternative would be equivalent to the project in meeting all the stated project objectives. With regard to the project objective of reducing regional greenhouse gas emissions, Alternative 3 would be marginally more successful in meeting this objective, as earthwork would be reduced under this alternative, leading to fewer construction equipment emission contributions to greenhouse gas levels.

6.6.4 Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)

Under the Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4), the proposed trail alignment would be the same as the proposed project in the area north of UPRR and within the UPRR crossing. However, south of the UPRR crossing, the proposed alignment would be shifted to the north to remain on the north side of the ridge, and adjacent to the U.S. Highway 101 corridor, compared to the proposed project which locates this segment on the slopes on the south side of the same ridge, and facing the Pacific Ocean. Further, the trail proposed under Alternative 4 would extend further to the southeast, past the Rincon Beach County Park, and terminate at Bates Road (see Figure 6-1). The proposed UPRR crossing would not change under Alternative 4 compared to the proposed project. Under Alternative 4, most of the stormwater down drains proposed along the southern side of the UPRR trail crossing (see Illustration 2-6, Major Storm Drainage Components of the Project, in Chapter 2, Introduction & Project Description), would not be constructed; surface drainage would instead be delivered to existing systems serving the US 101 corridor.. Lastly, under this alternative, retaining walls would be required for the section of trail

extending to Bates Road, aligned to the north of the Rincon Beach County Park parking lot. Retaining walls along this portion of the trail would be approximately 500 feet in length.

Project Alternative 4 Impact Analysis

Aesthetics

The proposed project would result in less than significant impacts associated with aesthetics, with implementation of **MM-AES-1** and **MM-BIO-3**. Alternative 4 would result in development of a trail that would follow the same alignment as the proposed project in the area north of UPRR and within the UPRR crossing. However, south of the UPRR crossing, the proposed alignment would be shifted to the north to remain on the north side of the ridge, and adjacent to the U.S. Highway 101 corridor. In addition, under Alternative 4, the proposed trail alignment would extend further to the southeast, past the Rincon Beach County Park, and terminate at Bates Road. Therefore, without mitigation, impacts may be slightly greater than the proposed project, due to greater area of development. Nonetheless, Alternative 4 would be required to implement **MM-AES-1,** which requires City Architectural Review Board and County Board of Architectural Review approval, and **MM-BIO-3**, which requires restoration or enhancement of coastal sage scrub and coastal bluff scrub communities in areas temporarily impacted by construction of the trail or adjacent area. Lastly, as discussed above, under Alternative 4, retaining walls would be required for the section of trail extending to Bates Road, aligned to the north of the Rincon Beach County Park parking lot. Retaining walls along this portion of the trail would be approximately 500 feet in length. Therefore, due to additional retaining walls, that would be visible to motorists and visitors to the area, impacts to aesthetics under Alternative 4 would be greater compared to the proposed project.

Air Quality

Alternative 4 would result in a longer trail than the proposed project. It would result in 105,300 CY of cut and 710 CY of fill, resulting in 104,590 CY of export. This is greater than the proposed project's 94,100 CY of export and therefore would result in more haul trucks during construction. Alternative 4 would result in greater haul truck trips and greater construction activity as it is more square feet of path compared to the proposed project. Therefore, criteria air pollutant emissions during construction are expected to be greater than the proposed project, but still less than significant. During operation, maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant and would be similar to the proposed project.

Biological Resources

Based on impacts within the biological survey area, this alternative would result in a decrease of impacts to sensitive biological resources. However, since a portion of the trail alignment under this alternative has not been surveyed (vegetation mapping, special-status plant species, wildlife species, and tree assessment) a complete comparison analysis cannot be performed to determine if impacts to sensitive biological resources would be increased or reduced under the Freeway Adjacent Trail Avoiding Bluff Face Alternative. Therefore, additional surveys to detect potential sensitive biological resources would be required, and would include vegetation mapping, special-status plant species surveys, a special-status wildlife species habitat assessment, and a tree assessment. While it is unlikely that additional special-status plant or wildlife species may be present along the new trail alignment, since it is located within similar habitats and along previously disturbed and graded slopes within the proposed project footprint, this alternative may result in greater impacts to sensitive vegetation communities included as County ESH and City ESHA, and qualifying trees. The trail alignment under Alternative 4 is longer as compared to the proposed project resulting in more permanent impacts to undeveloped land, and may require removal of eucalyptus trees

located at the eastern terminus of the Rincon Beach County Park parking lot, which are qualifying trees and require mitigation for removal under Santa Barbara County Article II Zoning Ordinance. Therefore, Alternative 4 may require additional mitigation for impacts to sensitive vegetation communities, including County ESH and City ESHA. More specifically, Alternative 4 may result in greater areas of impacts to vegetation communities and therefore require greater mitigation acreages, outlined in a Habitat Mitigation and Monitoring Plan (see **MM-BIO-5**). Mitigation for removal of any qualifying trees impacted would also be required under Alternative 4. Similar impacts to special-status wildlife species and nesting birds are anticipated and would require similar mitigation.

Cultural Resources

Alternative 4 would result in greater ground disturbance compared to the proposed project, due to the longer length of the trail. It is anticipated that impacts to existing cultural resources would still occur, and that potential impacts to undiscovered cultural resources, including archaeological resources and human remains would be greater due to greater area of development. However, the presence of cultural resources within the area expanding the project footprint southeast, past the Rincon Beach County Park, and terminating at Bates Road, are unknown at this time. Therefore, development in this area would require additional investigation to appropriately determine the presence of existing cultural resources and potential impacts to these resources. **MM-CUL-1** through **MM-CUL-4** would still be required. Due to the longer length of the trail under Alternative 4, impacts to cultural resources would be slightly greater than the proposed project and additional mitigation may be required.

Energy

Alternative 4 would result in a longer trail than the proposed project. It would result in 105,300 CY of cut and 710 CY of fill, resulting in 104,590 CY of export. This is greater than the proposed project's 94,100 CY of export and therefore would result in more haul trucks during construction. Alternative 4 would result in greater haul truck trips and greater construction activity as it is more square feet of path compared to the proposed project. Therefore, energy use during construction is expected to be greater than the proposed project, but still less than significant. During operation, maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal energy use. Operational impacts would be considered less than significant and would be similar to the proposed project.

Geology and Soils

In Alternative 4, the proposed trail would employ the same alignment as the project along the north side of the UPRR alignment and would include the same bridge structure over the UPRR alignment. However, after the UPRR bridge, the trail would lead to the existing slope adjacent to U.S. Highway 101 on the north side of the ridge and would regrade this slope with a new bench for the trail. Alternative 4 would involve a similar volume of total earthwork as the project, and therefore short-term erosion impacts during construction would be the same or similar; **MM-GEO-3** would continue to be required. The same bridge structure over the UPRR alignment would be employed, and therefore mitigation measures **MM-GEO-1** and **MM-GEO-2** would continue to be required. The Alternative 4 trail is proposed to extend all the way to Bates Road, aligned to the north of the Rincon Beach County Park parking lot for the eastern portion. Along this section, retaining walls approximately 500 feet in length would be required, to create a bench in this sloped area.. In addition, as discussed in Section 3.5.1, the existing ocean-facing slope south of the proposed trail bridge is considered to be susceptible to surficial/local instability under static conditions. These steep slopes in the southern trail alignment are the result of former landform modification carried out for the railroad alignment and former state highway, and do not represent natural conditions resulting from natural weathering of the involved earth materials and geologic formations. Alternative 4 would not include

any grading of the ocean facing slopes east of the UPRR crossing, and therefore, erosion of the existing hillside could still occur under Alternative 4. The proposed project would implement measures such as native plantings and the application of hydro-seed, to stabilize these ocean-facing slope areas to minimize soil erosion; no such remedial measures to address ocean-facing slope instability would occur under Alternative 4. Given the need for retaining walls for the trail section adjacent to the Rincon Beach County Park, and the absence of remedial grading to address the unstable sections of the ocean-facing slopes, this alternative would have moderately greater impacts to geology and soils than the project

Greenhouse Gas Emissions

Alternative 4 would result in a longer trail than the proposed project. It would result in 105,300 CY of cut and 710 CY of fill, resulting in 104,590 CY of export. This is greater than the proposed project's 94,100 CY of export and therefore would result in more haul trucks during construction. Alternative 4 would result in greater haul truck trips and greater construction activity as it is more square feet of path compared to the proposed project. Therefore, GHG emissions during construction are expected to be greater than the proposed project. Impacts would, however, continue to be less than significant during construction. During operation, Alternative 4 would result in GHG emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and would be similar to the proposed project.

Hazards and Hazardous Emissions

Alternative 4 would involve a trail length considerably longer than the proposed project trail length. The additional length would not affect use or operation of the trail since no hazardous wastes are anticipated from these activities. However, construction of the proposed project would require heavy construction equipment, which involves the use of hydrocarbon fuels and lubricants that are considered hazardous materials. Concrete is considered a hazardous material until it cures, and is included in the project construction. Paint or other surface coatings are also considered hazardous materials, until they are fully dried; the bridge and certain fencing elements may involve paint application on site. With a comparatively longer trail length under Alternative 4, the volumes of hazardous materials associated with construction would increase and the risk of release would be slightly elevated over project levels. Because the entire trail would be aligned on existing slopes facing U.S. Highway 101, a greater volume of soils containing aerially deposited lead (ADL) may be encountered. Surface soils that could potentially contain ADL are likely to be removed and transported off the site. However, some soils containing ADL could be used as fill for the project or could be used off site as fill in areas where the public could have exposure to the soils. Consequently, as with the proposed project, impacts from soil containing ADL under Alternative 4 could be potentially significant. **MM-HAZ-1** would be required to reduce ADL impacts to less than significant. The marginally greater impacts from hazardous materials under Alternative 4 would still be reduced to a level of less than significant through implementation of **MM-WAT-2** and **MM-HAZ-1**, which would continue to be required.

Hydrology and Water Quality

The proposed project would result in construction of improved stormwater drainage infrastructure, which would not be constructed under Alternative 4. In addition, Alternative 4 would result in a similar scale of total earthwork to the proposed project; as such, **MM-WAT-1**, **MM-WAT-2**, and **MM-WAT-3** would continue to be required. In addition, Alternative 4 would involve a trail length considerably longer than the project trail length. The additional length would increase the impervious surface of the trail, resulting in greater volumes of stormwater runoff. Project storm

drain systems would need to be expanded in capacity to accommodate the increased runoff; storm drain management for Alternative 4 has not been fully investigated for the portion of the trail east of the UPRR alignment, but since the entire trail would be on the slope adjacent to U.S. Highway 101, some intertie with Caltrans drainage systems (including possible expansion) may be required. Given the potential need for expansion of drainage systems serving the U.S. Highway 101 corridor, Alternative 4 would have greater hydrology impacts than the project. MM-WAT-4, MM-WAT-5, and MM-WAT-6 would continue to be required to address long-term operational affects upon water quality. In addition, Alternative 4 would fail to correct the elevated erosion associated with the existing steep cut slopes along the ocean bluffs, resulting in greater water quality impacts than the proposed project.

Land Use and Planning

As discussed under Biological Resources, above, because development would generally occur beyond the extent of the current biological survey area and the area of disturbance would be greater due to the length of the Alternative 4 trail, it is assumed that impacts to biological resources would be greater than the proposed project. Alternative 4 may require additional mitigation for impacts to sensitive vegetation communities, including County ESH and City ESHA. More specifically, Alternative 4 may require greater mitigation acreages, outlined in a Habitat Mitigation and Monitoring Plan (see MM-BIO-5). Therefore, impacts to land use and planning would be greater compared to the project.

Noise

Alternative 4 would involve a trail length substantially longer than the project, which would increase the duration of activities involving concrete installation and the related necessary equipment. The additional trail segments under Alternative 4 would occur along the slope facing U.S. Highway 101, which is closer to the most proximate noise-sensitive users than the remaining trail segments common to the proposed project. Rincon Point residences would remain the closest noise-sensitive receptors to project construction activities, which would now be as close as approximately 225 feet (reduced from a minimum distance of 775 feet for the project). At these closest distances, daytime construction noise levels would average approximately 6 dBA lower than ambient noise levels. However, construction noise levels in the evening or overnight period could be plainly audible above background levels and could also result in sleep disturbance for residential occupants. Therefore, as with the project, Alternative 4 temporary construction noise impacts are potentially significant. MM-NOI-1 and MM-NOI-2 are required to reduce construction noise impacts to a less than significant level. Noise impacts from Alternative 4 would be similar to the proposed project, but somewhat greater due to the more extensive concrete work and reduced distance between construction work and adjacent residences.

Recreation

Under Alternative 4, a multi-use trail for cyclists and pedestrians would be constructed and operated, and the substantial gap that currently exists in the Coastal Trail system would be filled, achieving the desired enhancement of local and regional biking and hiking opportunities delivered by the project. In addition, with alignment of the trail along the slope adjacent to the freeway, rather than on the ocean bluff face, Alternative 4 would have reduced effects upon the existing wind and uplift conditions along the bluffs that currently support soaring opportunities in the air space above the trail alignment. However, Alternative 4 would not meet the objective of providing trail users with an experience oriented to the ocean environment north of the UPRR bridge to as great a degree as the project. Rather than a sweeping view of the ocean, beach, and Channel Islands, trail users east of the railroad bridge would overlook the U.S. Highway 101 corridor and be subject to elevated noise levels and emissions from vehicular traffic along this corridor. On the whole, the recreation impacts and benefits of Alternative 4 would be very similar to the project, in that lesser impacts on soaring opportunities under this alternative would be offset by eliminating ocean vistas southeast of the railroad bridge and providing a less noisy environment for enjoyment during walking and cycling along the path.

Transportation

Once again, Alternative 4 would provide a multi-use trail in nearly the same alignment as the project for cyclists and pedestrians. Alternative 4 would therefore also close the substantial gap that currently exists in the Coastal Trail system, similar to the project. The use of a vehicle by residents in visiting the Rincon Beach County Park would be expected to decline under Alternative 4 as well, due to the existence of a new safe alternative to vehicle travel from points within Carpinteria. Transportation hazards associated with pedestrians crossing the UPRR alignment to navigate to Rincon Beach County Park would be resolved. In this regard, the enhancements of local and regional biking and hiking opportunities delivered by the project would occur under Alternative 4, and a solution to existing pedestrian hazards of the project would also be realized. Unlike the proposed project, Alternative 4 would route the trail along the north side of the existing parking lot for Rincon Beach County Park, thereby avoiding potential cyclist and pedestrian conflicts with vehicle parking maneuvers. On the other hand, Alternative 4 may create similar hazards to the project by creating a crossing adjacent to the U.S. Highway 101 off-ramp at Bates Road. As such, Alternative 4 would have similar transportation impacts to the proposed project.

Tribal Cultural Resources

Alternative 4 would result in greater ground disturbance compared to the proposed project, due to the longer length of the trail. As discussed in Section 3.13, no previously recorded archaeological resources of Native American origin or TCRs were identified within the project site. Further, no TCRs have been identified by California Native American tribes as part of the City's AB 52 notification process, and no California Native American tribes requested consultation with the City. However, there is still a potential for unknown subsurface TCRs to be significantly impacted by the project, which could result in a potentially significant impact. Development under Alternative 4 would result in development of a longer trail alignment, and could therefore result in greater impacts to TCRs. However, the presence of existing tribal cultural resources within the area expanding the project footprint southeast, past the Rincon Beach County Park, and terminating at Bates Road, are unknown at this time. Therefore, development in this area would require additional investigation to appropriately determine the potential presence of existing tribal cultural resources and potential impacts to these resources. **MM-CR-1** through **MM-CR-4** and **MM-TCR-1** would still be required, and impacts would be potentially greater than the proposed project.

Utilities and Service Systems

Alternative 4 would involve a longer trail length than the project. The additional length would increase the impervious surface of the trail, resulting in greater volumes of stormwater runoff. Project storm drain systems would need to be expanded in capacity to accommodate the increased runoff; storm drain management has not been fully investigated for the portion of the Alternative 4 trail east of the UPRR alignment, but since the entire trail would be on the slope adjacent to U.S. Highway 101, some intertie with Caltrans drainage systems (including possible expansion) may be required. Given the potential need for expansion of drainage systems serving the U.S. Highway 101 corridor, Alternative 4 would have greater impacts to utilities and service systems than the project. **MM-WAT-1, MM-WAT-2, MM-WAT-3,** and **MM-WAT-4** would continue to be required under this alternative and more mitigation may be required.

Relation to Project Objectives

Alternative 4 would be capable of achieving certain project objectives including closing a substantial gap in the Coast Trail System, which in turn would enable regional commuting opportunities that employ alternative transportation modes (i.e., cycling). Alternative 4 would also satisfy the objective to provide recreation opportunities for all residents, and a direct route to Rincon Beach County Park from Carpinteria, and to Rincon Bluffs from Rincon

Point. Alternative 4 would not, however, meet the multiple project objectives associated with providing trail users with an experience oriented to the ocean environment to the same extent as the project and the other alternatives would provide. Rather than a sweeping view of the ocean, beach, and Channel Islands, trail users would overlook the U.S. Highway 101 corridor and be subject to elevated noise levels and emissions from vehicular traffic along this corridor. Lastly, Alternative 4 would not meet the objective of improving the local coastal bluff environment through improved water quality of surface water runoff through stabilization of ocean-facing bluff slope faces that are currently eroding into the Pacific Ocean, nor would it achieve enhancement of sensitive coastal bluff scrub habitats along the bluff top south of the UPRR alignment in the project area. In this regard, Alternative 4 would not satisfy a number of key objectives identified for the project.

6.7 Environmentally Superior Alternative

The No Project Alternative would result in the least environmental impacts and would be the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is the Steeper Slopes/Reduced Earthwork Alternative (Alternative 3). Alternative 3 would meet all of the project objectives. With regard to the project objective of reducing regional greenhouse gas emissions, Alternative 3 would be marginally more successful in meeting this objective, as earthwork would be reduced under this alternative, leading to fewer construction equipment emission contributions to greenhouse gas levels. This alternative would also marginally reduce erosion potential during construction (due to reduced earthwork volumes), and slightly reduce construction-related noise impacts, compared to the project. Lastly, alternative 3 would also have lesser impacts upon existing soaring opportunities above the trail alignment. The project's impacts are compared to each alternative's impacts in Table 6-1.

Table 6-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project/ No Build Alternative (Alternative 1)	Maximize Existing Benchwork/ Topography Alternative (Alternative 2)	Steeper Slopes/ Reduced Earthwork Alternative (Alternative 3)	Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)
Aesthetics	Less Than Significant with the Incorporation of Mitigation	Reduced	Greater	Similar	Greater
Air Quality	Less Than Significant	Reduced	Reduced for construction; similar for operations	Reduced for construction; similar for operations	Greater for construction; similar for operations
Biological Resources	Less Than Significant with the Incorporation of Mitigation	Reduced	Reduced	Similar	Greater

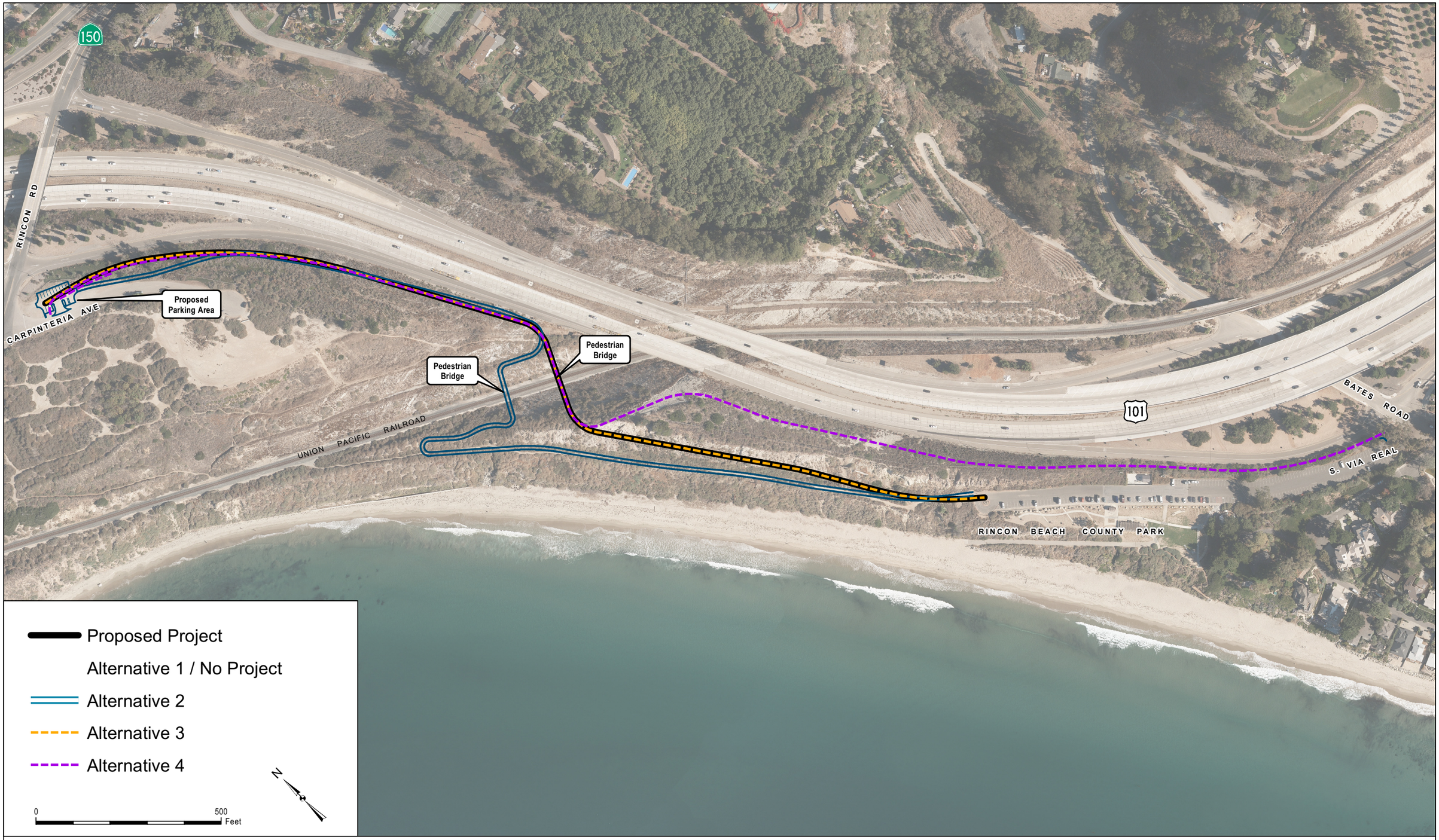
Table 6-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project/ No Build Alternative (Alternative 1)	Maximize Existing Benchwork/ Topography Alternative (Alternative 2)	Steeper Slopes/ Reduced Earthwork Alternative (Alternative 3)	Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)
Cultural, Tribal Cultural	Less Than Significant with the Incorporation of Mitigation	Reduced	Similar	Similar	Greater
Energy	Less Than Significant	Reduced	Reduced for construction; similar for operations	Reduced for construction; similar for operations	Greater for construction; similar for operations
Geology and Soils	Less Than Significant with the Incorporation of Mitigation	Reduced	Greater	Similar	Greater
Greenhouse Gas Emissions	Less Than Significant	Similar	Reduced for construction; similar for operations	Reduced for construction; similar for operations	Greater for construction; similar for operations
Hazards, Hazardous Materials	Less Than Significant with the Incorporation of Mitigation	Reduced	Greater	Similar	Greater
Hydrology and Water Quality	Less Than Significant with the Incorporation of Mitigation	Reduced	Greater	Reduced	Greater
Land Use and Planning	Less Than Significant with the Incorporation of Mitigation	Reduced	Reduced	Similar	Greater
Noise	Less Than Significant with the Incorporation of Mitigation	Reduced	Greater	Reduced	Greater
Recreation	Less Than Significant	Similar	Similar	Reduced	Similar
Transportation	Less Than Significant with the Incorporation of Mitigation	Greater	Similar	Similar	Similar

Table 6-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue	Project	No Project/ No Build Alternative (Alternative 1)	Maximize Existing Benchwork/ Topography Alternative (Alternative 2)	Steeper Slopes/ Reduced Earthwork Alternative (Alternative 3)	Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)
Utilities and Service Systems	Less Than Significant the Incorporation of Mitigation	Reduced	Greater	Similar	Greater

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AERIAL SOURCE: CIRGIS 2017

FIGURE 6-1

Proposed Alternatives

Carpinteria Rincon Trail EIR

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Chapter 5 Other CEQA Considerations

There are no references cited in this chapter.

Chapter 6 Alternatives

There are no references cited in this chapter.

Chapter 7 List of Preparers

There are no references cited in this chapter.

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Appendix A

NOP and Comment Letters

Nick Bobroff

From: Willy Dydo <willydydo@hotmail.com>
Sent: Monday, November 30, 2020 4:52 PM
To: Nick Bobroff
Subject: Rincon Bike Path

EXTERNAL EMAIL

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi Nick,

I am writing In regards to the planned bike path near Bates beach/ Rincon. This site for Paragliding and Hang Gliding is the only coastal soaring site in Carpinteria and the best location for consistent soaring conditions between San Diego and San Francisco. This Cliff site is cherished by residents, tourists, and pilots alike. It deserves to be preserved.

Thank you,

Willy Dydo

Nick Bobroff

From: andrewcraig@cox.net
Sent: Monday, November 30, 2020 7:54 AM
To: Nick Bobroff
Subject: Save BATES/RINCON paragliding launch

****EXTERNAL EMAIL****

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Nick,

I am horrified to hear that the Bates/Rincon paragliding launch is in jeopardy.

I travel to Carpinteria at least once each year to fly this incredibly rare site. I often stay in Carpinteria for up to 10 days at a time to get my annual "paragliding fix." I've been doing this for the past 20 years.

I have reviewed the proposals for a bike/walking trail and strongly urge you to consider locating the path along the highway. There is plenty of opportunity for walkers/bikers to experience the beauty of the ocean view, even with this half-mile "detour."

If this site is ruined by this proposed path, I will simply drive through Carpinteria and make my way to Seaside/Monterey to fly there, spending my roughly $2500 vacation money elsewhere.

Such sites are rare and once destroyed, they can never be brought back. Please think long-term, from both an outdoorsman's perspective and an economic perspective.

Thank you.

Andrew Craig, Fredericksburg VA 540-244-0744

- What Bates means to you and why the ridge should be preserved
- Why the EIR needs to assess impacts to wind and recreation

- Why the City should consider alternat ***Put the proposed trail along the highway and save money while preserving our precious paragliding site. I travel there at least once a year to paraglide and spend a lot of money in Carpinteria. If the site is gone, so am I. Andrew Craig, Virginia BATES RINCON BIKE PATH, 11/17/2020***

- ives like the North side of Bates.

Nick Bobroff

From: Angela Findley <angelafindley92@gmail.com>
Sent: Monday, November 30, 2020 1:05 PM
To: Nick Bobroff
Subject: Rincon Bike Path

****EXTERNAL EMAIL****

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Hey Nick,

Just emailing to reiterate why I don't support the proposed new bike path at Rincon.

1. It's going to ruin flying at a historical, frequently used, well loved free flight location
2. It's going to feed cyclists into a super unsafe parking lot with a steep grade at the end
3. It would be way more affordable and have less of an environmental impact if the path was just built along the highway.

Thanks,

Angela

Nick Bobroff

From: Andrew Labedz <realtimedigimob@gmail.com>
Sent: Monday, November 30, 2020 4:48 PM
To: Nick Bobroff
Subject: Bates paragliding

EXTERNAL EMAIL

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Nick Bobroff,

HI Nick, I'm a visiting pilot that purposely came to the Santa Barbara area to fly paragliders. In doing so I found an awesome little town called Carpinteria. Has it not been for flying I would have never stumbled upon it. Long story short, please consider revamping the bike path plans.

Thank you,
Andrew from OhIo

Sent from my iPhone

Nick Bobroff

From: Aaron LaPlante <aaron@cusd.net>
Sent: Sunday, November 01, 2020 7:17 PM
To: Nick Bobroff
Subject: Re: FW: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

****EXTERNAL EMAIL****

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When are you going to take a paragliding lesson Nick? All this paper pushing stuff has to be making you insane. Let's go fly!

Aaron

On Fri, Oct 30, 2020 at 11:22 AM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.
>
> The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.
>
> The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
>
> https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
>
> A copy of the NOP and project description is also attached to this email.
>
> Should you have any questions about the proposed project or this NOP, please feel free to contact me.
>
> Thank you,
>
> Nick Bobroff, Principal Planner

Community Development Department

(805) 755- 4407

Nick Bobroff

From: Aaron LaPlante <aaron@cusd.net>
Sent: Friday, November 06, 2020 2:20 PM
To: Nick Bobroff
Subject: Rincon Trail

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi Nick, hope your leisure life is more pleasant than dealing with this battle.

The EIR sales pitch by design paints a pretty picture but leaves out the fact that paragliding and hang gliding will be lost with this project at this site.

Please keep in mind that paragliders and hang gliders are a sanctioned aircraft and activity by the Federal Aviation Administration (FAA). We are breaking no rules by flying in this airspace. There are no FAA regulations about flying near trains, railroad tracks, bicycles, freeways or transportation corridors. Even the Rincon Park rule of no landing in the park would not hold up in a court of law as we are legally allowed to land there according to the FAA rules.

It does not matter if we launch from la cumbre peak, the beach, the bluff in the park, the privately owned bluff, off the top of my friends building, rincon mountain, etc, that it is 100% legal to fly in that airspace and only the FAA can decide otherwise.

We look forward to a complete impact report. Thanks for considering alternatives. Call if you want to chat.

Aaron LaPlante
805-886-1435
--

Nick Bobroff

From: Andrew Quine <drewski808@gmail.com>
Sent: Monday, November 30, 2020 11:59 AM
To: Nick Bobroff
Subject: Paragliding at Bates

EXTERNAL EMAIL

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Hi Nick,

Biking is just as important to me and many others as paragliding. The has been a free soaring site for a long time. We as a community are asking not that you stop the bike trail but that you find a way to keep the flying site and construct the bike path. There is a way, but once the flying site is destroyed it will never be the same.

Thank you for your time and consideration,

Drew Quine

Sent from my iPhone

Nick Bobroff

From: Bill Fosdick <fosdick@mcn.org>
Sent: Monday, November 16, 2020 3:11 PM
To: Nick Bobroff
Subject: Bates

EXTERNAL EMAIL

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Hello,

I have been driving to the Santa Barbara area for paragliding for at least two weeks a year for the past 10 years. I stay at the hotels and eat at the restaurants. I love flying the area and the Bates soaring site is one of my favorites. The wind hits the hillside and makes a perfect flying site….taking advantage of frequent wind directions…making it a perfect alternative when other sites are not flyable.

Flying is a lot like surfing….you need very special terrain conditions to make it work….and Bates works.

I also ride a bicycle a lot. I love riding. However there are thousands of miles of great cycling routes and only a select few flying sites.

Why destroy a very special site in order to make a path for bicycles? Can't we be creative and design something that works for both?

I'm truly surprised at a bicyclist wanting to destroy a flying site.

I'm wondering if there is someone else ….someone who stands to make a lot of money moving dirt around who is pushing this….it can't be coming from cyclists.

Please consider some alternative to destroying Bates for flying.

Thankyou for listening.

William B Fosdick
707 742 9296

Nick Bobroff

From: Becky Higbee <becky.higbee@gmail.com>
Sent: Wednesday, November 25, 2020 3:30 PM
To: Nick Bobroff
Subject: Bates bike path

****EXTERNAL EMAIL****

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Good afternoon,

The ridge above Rincon Beach is a world class short ridge flight for paragliders. The current bike path plan would destroy the launch area, making flights there no longer possible. My spouse and I traveled from Colorado to be able to fly Bates and other sites in the region. I humbly request that you take the interests of paragliders into consideration with these plans. It would be heartbreaking to hear Bates was destroyed.

Thank you,
Becky Higbee

November 23, 2020

City of Carpinteria

5775 Carpinteria Ave.

Carpinteria, Ca. 93013

Attn: Nick Bobroff

Re: Focused EIR for the Rincon Trail project

My name is Brian Nash and I reside at 6508 Camino Carreta. I am writing to you today with the purpose of giving my support to the Rincon trail project. As a 40-year resident of the city I have participated in numerous local projects including the community pool, Bluffs 1&3 and the proposed skate park. I believe that this project of connecting the city with the Rincon park via this bike path will be accretive to the residents and to the visitors of the area.

The current situation with bicycle riders using the highway or Bates road is simply dangerous. I drive to Rincon park daily via Bates road and observe the riders using good manners but the lack of shoulder gives them and motorists little room for error.

The opponents to this project are primarily from the Paraglider community. They use the parcel owned by King Ventures as their launching point. They apparently feel that their interests outweigh the interests of the rest of the community. I understand that they believe that this project will have detrimental effects on their ability to sail. The current geography that enables them to get the lift they require is not natural but rather man made from the time the original railroad line was bluff side. Since that time the railroad was moved, the current highway built and the old highway abandoned.

I want to be clear that I have no vendetta against the gliding community, however I do have issues with the logic that they are using. They are using private property to launch from and when the owner comes up with a plan to develop this parcel they will be forced to launch from an alternative site. They claim that this geography is natural and it clearly is not. They are looking at this project from their lens as it pertains to now and not looking forward to the future.

The legacy projects that have been accomplished in this community are amazing and this project of connecting the city to the Rincon park would be icing on the cake.

Respectfully submitted,

Brian Nash

Nick Bobroff

From: Carly V. Barham <BarhamC@sbcapcd.org>
Sent: Thursday, November 19, 2020 3:04 PM
To: Nick Bobroff
Subject: Carp Rincon Trail Project Question

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Hi Nick,

We are in the process of preparing comments on the NOP of an EIR for the Carp Rincon Multi-Use Trail Project. I was hoping to get a little more information on proposed equipment and duration of its use so that we can determine potential regulatory requirements for this project.

Is it possible to find out the anticipated timeline for the bridge construction/installation portion of the project? The total project duration is two years, but unclear how long the bridge portion may take. I ask because I'd like to determine how long the two cranes could be used/located onsite for this project.

Also, if it's possible to get more detail on the cranes that might be used, that would be helpful, but I understand if those specifics may not be nailed down yet.

Thanks,
Carly

Carly Barham
Planning Division
Air Pollution Control District
Santa Barbara County

BarhamC@sbcapcd.org
805.961.8890
Available Tues, Thurs, Fri

ourair.org @OurAirSBC

Sign Up for Air Alerts

Nick Bobroff

From: Chris Clontz <chrisgoglide@gmail.com>
Sent: Monday, November 30, 2020 5:20 PM
To: Nick Bobroff
Subject: Rincon trail concerns

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To, **City of Carpinteria Community Development Department**

I have been a Santa Barbara resident for the past 17 years, as well as the sole proprietor of my own business, and a career staff member of the UC Santa Barbara Department of Recreation. I am also an outdoor recreation enthusiast who frequents the many hiking trails and bike paths of South Santa Barbara County, and Ventura County. You may remember me from my original message to you back in December of 2019, regarding my concerns about the proposed Rincon Multi-Use Trail project.

First and foremost, although I strongly agree that a multi-use trail should be constructed to provide a safe, economical, and easily-maintainable path for cyclists and pedestrians, I strongly disagree with the currently-proposed plan by the Community Development Department. I believe that the currently-proposed plan aimlessly focuses more on aesthetics than practicality, which is a detriment to the land proposed to be used for the project's construction, and furthermore generates wasteful spending of financial resources, both now and well into the future. Please view my specific points of concern as follows:

- **Unstable seaside slope proposed as a site for the path:** Science has proven that sea levels are rising, storm activity has increased, and both are contributing to the erosion of coastal sea walls, beaches, and cliffs. I believe it makes neither practical, nor economical sense to spend the time and financial resources building and maintaining a multi-use trail next to the sea that will almost certainly be eroded beyond repair within the next decade or two. A more cost-efficient, reliable multi-use path would best be routed more inland, along the highway, and away from the sea.
- **Unsafe routing of path through vehicle parking lot:** I believe it is the Community Development Department's responsibility to be fully accountable for the safety of everyone who would potentially use the proposed path. Therefore, it was disturbing to hear the lack of accountability from the planning committee earlier this year, regarding the traffic and obstacles within the parking lot through which the proposed multi-use path would be routed. A more practical way to address this safety concern is to remove the traffic and obstacles completely from this plan by developing a dedicated path for pedestrians and cyclists, which physically prevents vehicle traffic and most obstacles from impeding the path.

Again, I strongly agree that a multi-use trail should be constructed, but I strongly disagree with the current plan. I implore you to please listen to your local community, and work with everyone to develop a safer, longer-lasting, and more cost-effective product that addresses all concerns. In doing so, I believe that the revised finished product will be the subject of efficiency, appreciation, and comradery for the people of Carpinteria, for many generations to come.

--

Chris Clontz

Owner/Proprietor,
Isla Vista Adventure Services
Santa Barbara, CA USA

Nick Bobroff

From: Caleb Phillips <cphillips@smallwhitecube.com>
Sent: Wednesday, November 25, 2020 3:25 PM
To: Nick Bobroff
Subject: Save Bates Paragliding

****EXTERNAL EMAIL****

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Hi Nick,

I live in Colorado but visit Santa Barbara to paraglide. It's where I learned, and is one of the best places for the sport in the country. The Bates beach ridge is a world class location for ridge soaring. A bike path is a great addition to the area and would be enjoyed by many, but there certainly must be a way to add a bike path and save this renowned free flying site? Appreciate your consideration and thanks for recieving input from the community.

Cheers,

Caleb Phillips

Nick Bobroff

From: Ristig, Ciara <cristig@co.santa-barbara.ca.us>
Sent: Wednesday, November 04, 2020 10:38 AM
To: Nick Bobroff
Cc: Harris, Tess
Subject: Rincon Trail Site Visit

****EXTERNAL EMAIL****

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Hi Nick,

Would it possible for Tess and I to come down for a site visit sometime soon? We don't want to take up too much of your time, but it would great if you could show us the project site and help us get our bearings.

We're available this Friday the 6th in the afternoon or the 13th.
The 9th or 16th are also options.

Thanks in advance!

Thanks,
Ciara

Ciara Ristig
Planner
Planning & Development
Development Review
123 E. Anapamu St.
Santa Barbara, CA 93101
805-568-2077
cristig@countyofsb.org
http://www.countyofsb.org/plndev/home.sbc

In light of the measures recommended by the CDC and State Government, Planning & Development has enacted a "work remotely" program. We are committed to advancing projects and will stay in regular communication. While we regularly check voicemail, it is best to contact us via email. Thank you.



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Yvon Chouinard

**Deceased*

Nick Bobroff, City of Carpinteria
5775 Carpinteria Avenue, Carpinteria, CA 93013
11-23-2020

Dear Mr. Bobroff,

Citizens for the Carpinteria Bluffs supports the development of the Carpinteria Rincon Multi-Use Trail project. It will provide a much needed link from the Carpinteria and Rincon Bluffs to the coastal walking/bike path that now runs from Rincon south to Ventura. However, we do have a concern that the current plan offers no on-site parking, unlike the original plan's inclusion of a small parking lot planned near the intersection of Carpinteria Ave and Highway 150. We anticipate that some bikers will choose to park near that intersection, whether or not there is a parking lot. With the acquisition and improvements at the Rincon Bluffs preserve, it is important to note that the current parking lot proposed is small and intended for preserve use. Perhaps, parking in that area by bikers and hikers may never become a problem, but we suggest that the City include a backup plan to accommodate future parking should that need arise.

One possible remedy in lieu of an additional parking lot might be to offer some on-street parking slots near that intersection and making them slightly longer than usually delineated to safely accommodate bikers as they unload their bikes. In addition, it would be helpful for City planners to make a determination of how many of these larger on-street parking spaces might be possible. A sign at the trailhead encouraging bikers to park at the larger Viola Fields lot also might be helpful.

We look forward to the development and completion of this critical link in our coastal trail system and support the City in its work on this project.

Sincerely,

Ted Rhodes

President, Citizens for the Carpinteria Bluffs

Nick Bobroff

From: Dylan Laughlin <dylanlaughlin@gmail.com>
Sent: Monday, November 16, 2020 5:10 PM
To: Nick Bobroff
Subject: Rincon bike path

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Hi Nick,

To keep it short, while cycling is popular, it can be done nearly anywhere. In a niche sport like paragliding, we have to stand up for our flyable areas since they are shrinking. We are trying to grow our sport in the Santa Barbara area, and nationwide. There is plenty of cycling that can be done here at any time, but flying requires specific geography. To tear down a great, consistent feature like the Rincon bluff would be a shame. Cyclists currently have access to the bike path as is. Wouldn't a barrier on the current highway path be much more cost effective than terraforming a large hill for 1/4 mile of path? I believe alternative plans are definitely worth exploring in this case.

Dylan Laughlin
--

Dylan Laughlin

Nick Bobroff

From: desmond177@cox.net
Sent: Sunday, November 15, 2020 8:37 AM
To: Nick Bobroff
Cc: ottisgillespie@gmail.com
Subject: Bates paragliding and the bike path extension project

EXTERNAL EMAIL

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hello Nick, I am a local resident and Santa Barbara County tax payer, and I am contacting you out of concern for the current bike path extension plan as presently constituted. We all know how much the tourist industry fiscally benefits Santa Barbara county. The beaches of Santa Barbara county, particularly Carpinteria State Beach, are a prime resource for Santa Barbara county's tourist industry, and I am sure we would all agree that such a resource should be protected and preserved because of how much it benefits Santa Barbara county.

Likewise the Carpinteria bluffs in the area of Bates Road 101 exit draws paragliding visitors from all over the country and the world because of its unique configuration to the prevailing wind. The bulldozing of the little Diamond Head bluff at the Bates Rd area would destroy a significant part of the topography that allows regular paragliding in that area and as such would have a significant fiscal impact on the Santa Barbara-Carpinteria tourist industry.

What I and other local free-flight pilots are proposing is that instead of bulldozing the little Diamond Head bluff and destroying a precious local resource, you simply relocate the bike path to the mountain side of the bluff and allow paragliding and biking to co-exist in harmony where neither tourist resource is irreparably harmed. I would note that there is a current dirt bike path at the base of the bluff that could be another alternative to the bulldozing of a precious local resource. Simply put, why destroy one invaluable local resource when you can have both, all to the fiscal benefit of Santa Barbara county.

Thanking you in advance for considering this in your bike path plans, Desmond McIntosh

Sent from my iPad

Nick Bobroff

From: Gmail <dmusashe@gmail.com>
Sent: Monday, November 30, 2020 4:57 PM
To: Nick Bobroff
Subject: Comments on the Rincon bike path project

EXTERNAL EMAIL

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi Nick,
I am a local resident and paragliding pilot, and I am the VP of Paragliding for the Santa Barbara Soaring Association.

I've made multiple public comments in the various town halls that have been open to public about the Rincon bike path project.

I won't rehash everything I have said about the project past, because my comments are a matter of public record, but I just want to reiterate how important this coastal bluff is to free flight recreation in Carpinteria (and the entire region, really). Removing as much soil as has been proposed would utterly destroy our flying site around the bluff, and would negatively affect soaring birds as well that rely on that bluff to travel along the coast.

The environmental impact review really must include changes to airflow of the project and its impacts on recreation and wildlife. This site is just too important to screw up, and I speak for the entire paragliding and hang gliding community when I say that I hope we can find an alternative solution to the current proposal that will still allow a path for cyclists and pedestrians while still preserving this historic soaring site.

Thanks in advance for your consideration.

Sincerely,
Derek Musashe

Nick Bobroff

From: David Patterson <davepatterson@ucsb.edu>
Sent: Friday, November 13, 2020 10:58 AM
To: Nick Bobroff
Subject: Support for maintaining the flyability of Bates Bluff

****EXTERNAL EMAIL****

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Nick -
My name is Dave Patterson; I am a professor at UCSB and a resident of Santa Barbara.

I'm writing to add my voice to the concerns regarding the future of flying at Bates bluff, as a consequence of the proposed Rincon Trail. I share the concerns of many other local pilots who believe that the proposed work will radically lessen the flyability of the site, which unique in our area and has been used continuously for over 40. I moved to Santa Barbara county a few years ago for work, but only fell in love with the area last summer when I learned to fly here, and flying at Bates Bluff has been a huge part of that. The site is truly a gem - a unique place to appreciate the unmatched peace that comes from silently floating above the ocean in perfect air.

I further believe that there are ways to both provide important bicycle access and maintain the site largely in its current form. I expect you are already familiar with those proposals, but if not they are described in the video at https://youtu.be/SVIdEfWHMpE, made by a local pilot. If nothing else, I strongly disagree with the current Carpinteria Rincon Trail report's conclusion that the proposed project will have no impact on recreation at the site - to the contrary, it will dramatically reduce the flyability of the site. Alteration to the airflow is unambiguously a physical change to the site, just as increased noise or unpleasant smell would be. Please let me know if there's anything I can do to maintain the site in a flyable form.

Thank you for taking the time to consider this matter which is very important to so many of us.

--Dave Patterson

Nick Bobroff

From: Ed S <drawdeylf@gmail.com>
Sent: Monday, November 30, 2020 5:04 PM
To: Nick Bobroff
Subject: Bates Beach

****EXTERNAL EMAIL****

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Nick.

Again the EIR has to include the Monarch butterfly habitat in the Eucalyptus trees. The wind will highly effect their WINTER Grounds..
The coastal migratory birds the fly up n down the coast twice a week. That use the ridgeline for lift and staging to fly around the next corner. With "X" amount of lift obtained at the cliff face. That will no longer be obtainable.

The banana farm thats micro climate will no longer be in a Perfect wind shadow. That will no longer grow!

The Coriolis effect the wind will AUTOMATICALLY Happen through the MILLION Dollar homes. Also a Butterfly habitat..

The fact is. Endangered species like the Monarch is a Priority.
The same with the growth on the front of the hill. That us being destroyed.

Those plants cannot be TOUCHED OR TRANSPLANTED under law!!!!

Even California condors come to the face every winter. It is the end of their feeding flight line. That will not allow them to soar and return to La Concheta an back to the Fillmore habitat..

These endangered spices need to be involved. As does the banana farm etc.

Mr Ed S

Nick Bobroff

From: efthacher@yahoo.com
Sent: Wednesday, November 04, 2020 2:02 PM
To: Nick Bobroff
Subject: Carp/Rincon multi use trail

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To Whom it May Concern;

Just wanted to let you know that I think this trail connecting Rincon to Carpinteria and beyond is a splendid idea! Some of us in the family look forward to biking into Carp from our beach house rather than using a car and the freeway.
We hope that the public respects the trail and that maintenance includes adequate trash receptacles and monitoring for graffiti, etc.
We hope that the building goes without a hitch,

Emily Ayala
The Thacher Family Beach House
132 Rincon Pt. Rd,
Rincon Point
Carpinteria

Nick Bobroff

From: Mr. E J <gnidilg@gmail.com>
Sent: Monday, November 16, 2020 7:10 PM
To: Nick Bobroff
Subject: Re: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

****EXTERNAL EMAIL****

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Good Morning.

In the preceeding meetings there was blatant disregards for endangered species whether animal or plants.

The Monarch butterflies the WINTER in the Eucalyptus trees behind the proposed path. That will NO LONGER allow safe harboring in the trees with such high wind blowing thru them! Caused by changing the slope of the hill.
The FEDERAL and STATE laws ignored of Migratory spices.
Birds. Butterflies. Raptors. CONDOR'S.
That all frequent the area. That use the ridge lift to continue there journey.
The Endangered plant life that cannot be LEGALLY cut, moved, or touched.
All protected by federal law, CA Costal commission etc.
The air flow change alone, will put enormous amount of wind through the MILLION DOLLAR homes. On the point.
The 1 an only place bananas grow along the coast will be greatly Affected!!! Potentially destroying the crop an farm. That grow in a perfect wind shadow. Caused by the bluff. That is being proposed to change!!!
The path is NOT ADA Compliant!
It cannot be done with the Enormuse slope thru the Parking lot!
The original path has the SAME SLOPE issue.
It will never be connected with a 100 million dollar bridge and rework of the WHOLE path!

These issues are beyond ignorent.

I know the little white book of rules.
Dealt with million dollar fines building 2 new hospitals in Ventura! Approx 18million in fines. For the 6million you are fighting to get!

Perhaps one needs to look at the bigger picture!
Do we as citizens want to do LEGAL Battle with all the above societies. An protected under federal law plants an wild life.

I hope the E.I.R. Has real people involving these issues being TRULY Addressed. Not swept aside with blatant disregard.

Although I cannot attend the Zoom meeting as I will be with patients that day/time.
I hope this is READ and brought to All peoples attn.

Edword Skow

On Thu, Oct 29, 2020, 7:43 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.
>
> The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.
>
> The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
>
> https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
>
> A copy of the NOP and project description is also attached to this email.
>
> Should you have any questions about the proposed project or this NOP, please feel free to contact me.
>
> Thank you,
>
> Nick Bobroff, Principal Planner
>
> Community Development Department
>
> (805) 755- 4407

Nick Bobroff

From: Elizabeth Zernik <Elizabeth.Zernik@bsigroup.com>
Sent: Monday, November 02, 2020 6:52 PM
To: Nick Bobroff
Subject: Stormwater for Rincon trail project

****EXTERNAL EMAIL****

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Hi Nick,

I'm a local Stormwater professional with a passion for protecting the ocean so please keep me in mind when you will be looking for QSD and/or QSP services on the Rincon Trail project.

I'd love to help make a difference in our own back yard!

I've worked previously on a wide range of construction projects including remote mountaintops, in sensitive habitats, public spaces, and with bridge installations.

Thank you and see you on the Zoom soon!

Elizabeth Zernik, QSD/QSP, QISP
BSI
Please excuse any typos

Visit the BSI website at www.bsigroup.com

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This email has been scanned for all known viruses.

Thank you for giving me the opportunity to speak. My name is George Jimenez.

I've lived in Carpinteria for over 60 years. As a member of the Santa Barbara Soaring Association and long- time Carpinteria resident I strongly object to Rincon Trail Project as proposed.

Listed below are my objections to the current Rincon Trail plan and suggestions to implement the Rincon Trail so all can enjoy [redacted] including para and hang gliders.

1. The City of Carpinteria and the Coastal Commission should look at alternative routes for the proposed Rincon Trail Project. Building a path along the freeway corridor is one possible alternative solution.

2. Following the existing bike path route to Muscle Shoals beside the 101 freeway is less destructive to nature and the local topography. It makes sense to construct the Rincon Trail for cyclists and hikers and preserve the Paraglider and Hang-glides flying site. It is a less costly alternative.

3. The alignment of the wind and the cliff at the Rincon site provides an ideal flying site. It's the only place between San Diego and San Francisco with a lift so paragliders can fly long distance from this spot.

4. As proposed, The Rincon Trail Project takes the airflow and changes the wind current, rendering the Paragliders Carpinteria flying ridge site destroyed. Our sport recreation opportunity would be taken away. I strongly object to losing our flying site

5. Cyclists, hikers and Paragliders can co-exist. There is no reason for the Rincon Trail Project to take our wind. We can all share the same space and enjoy our sport.

6. Thousands of Paragliders have flown from the Cliffs above the proposed Rincon Trail Project for over 50 years. To abolish the recreational activity and sport of Paragliding completely disregards a segment of the population. The Santa Barbara Soaring Association has over 500 members. Many live in or near Carpinteria and fly along the cliffs above the Rincon frequently. Destroying Paragliders flying site does not provide recreational opportunities for all.

7. As proposed, the Rincon Trail endpoint dangerously places pedestrians and cyclists onto an overloaded, ADA non-compliant parking lot. The project needs to be re-designed for pedestrian and cyclist safety.

8. Please preserve the Paragliders flying site in perpetuity. Preserve the integrity of the landscape, and lesson the amount of dirt extracted from the Rincon Cliffs.

9. This project destroys the natural contour of these cliffs and displaces nature. Carpinteria needs to build a Rincon Trail that includes hiking, biking and Paragliding and doesn't disturb nature especially Environmentally Sensitive Habitat Areas. (ESHA) Please, preserve the environment and habitat area for wildlife.

In closing, Carpinteria City needs to work with the Paragliding Community to find a win-win solution so all can enjoy the Rincon Trail Project.

We've provided the city with a video outlining our need to retain the flying site and how the currently proposed Rincon Trail project would destroy our flying site.

I would like to Thank you sincerely for hearing the voices of the Paragliding community.

George Jimenez

November 2, 2020

Contact Information:

Address:

George Jimenez

6379 Lagunitas Court

Carpinteria, CA 93013

Phone: 805.290.5171

Nick Bobroff

From: Jamie Bishop <jamieb805@gmail.com>
Sent: Monday, November 16, 2020 1:07 PM
To: Nick Bobroff
Cc: Jeff Longcor
Subject: Rincon Trail Bike Path

****EXTERNAL EMAIL****

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Dear Nick,

I have concerns about the Rincon Trail Bike Path. It will ruin flying at Bates, and haphazardly and only temporarily link the existing bike paths.

Alternative routes and solutions exist that would satisfy all recreational users. The current design expands access to cyclists at the exclusion of free flyers. The construction of this 0.2 mile section does not need to result in the utter deconstruction of the only soaring site in Carpinteria.

This Project needs to be reassessed from the perspective of the very groups it's trying to help.The current design is focused on providing a “blue ocean view” rather than a safe, useful, long-lasting solution.

- The current design will not last long; a railroad and highway have already failed, and we may reasonably assume that any additional projects along this eroding seawall will face a similar fate.
- The current design is not safe; linking the bike paths, but then dumping cyclists into a congested and incredibly steep Rincon Beach parking lot belies the planning and human resources that are going into this project.

I'm also in support of Planners reassessing the faulty logic that underpins the plan to take 156,000 tons of dirt away, to make the remaining dirt stay. Free flight does not require alteration to the existing natural environment, and the scope of the EIR ought to address ways to avoid massive earthwork at this site.

Thank you for your time and consideration.

Sincerely,
Jamie Bishop, Santa Barbara Soaring Association member

Nick Bobroff

From: Jamie Bishop <jamieb805@gmail.com>
Sent: Tuesday, November 17, 2020 5:20 PM
To: Nick Bobroff
Cc: Jeff Longcor
Subject: comments on Rincon Train Project scoping

****EXTERNAL EMAIL****

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Dear Nick,

I'm forwarding on my comments from this evening's scoping meeting.
Consider the history of recreation other than cycling along the bluffs. The proposed grading would destroy the site for free flight.

Consider cyclist safety. The current design dumps southbound cyclists down a steep grade, into a heavily used parking lot. The majority of cyclists and particularly those commuting by bike would gladly forgo an ocean view for 2 tenths of a mile for a safer ride.

Consider the points at which the new bike path links up with the existing bike paths. A parking lot ought not to be the top location in which to do so.

Consider the natural forces that act on the coastline. The coastline is subject to erosion, and other public projects have washed away. Despite that history, the planners would remove 94,000 tons of dirt and add 3 more drainage vias.

Consider responsible stewardship of natural resources. The proposed route seems entirely inconsistent with Carpinteria's track record. The proposed route is illogical, needlessly expensive, destructive to the natural environment as well as free flight - and it would be ugly.

Consider whether anyone stands to gain, i.e., from a contract, for the removal of 94,000 tons of earth, versus the vastly more economical, and logical solution of extending the bike path along the wide shoulder of the 101 or somewhere along the north side of the bluff. Consider potential conflicts of interest.

Thank you,
Jamie Bishop, SBSA member

Nick Bobroff

From: Jon Blake <sbkiter@gmail.com>
Sent: Monday, November 30, 2020 10:27 AM
To: Nick Bobroff
Subject: Bates bike path project

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi Nick,

I wanted to voice my concerns around the current plans for the bike path that passes through the Bates area.

As a member of the Santa Barbara Soaring Association (SBSA) I am in full support of the much needed bike path, however, I oppose the current project design because it displaces 156,000 tons of soil from the natural environment and destroys the unique geographic features that have made Bates a treasured recreational facility and world-renowned soaring site for the last 40 years. We are asking the City to redesign this 0.2 mile bike path so that it is inclusive of all users and preserves the flying potential of the area.

1. Paragliding and Hang Gliding are official sports that have been fully established at Bates for over 40 years. Bates uniquely combines Southwest facing terrain with prevailing channel winds, allowing airflow to hit the ridge like the swells hit Rincon Point. It is the only coastal soaring site in Carpinteria and the best location for consistent soaring conditions between San Diego and San Francisco. This recreational airpark is cherished by residents, tourists, and pilots alike. It deserves preservation with the City.

2. Bates is a coastal gem that allows small groups like ours to use the same natural resources for recreation as the local bikers, surfers, beachgoers, and joggers. The current design runs counter to this sentiment: the bike path expands access to one group at the exclusion of another. While bikers and joggers have many miles of recreational paths to access, the construction of this 0.2 mile section will drastically impact wind flow, ending free flight for many members of the soaring community and ruining the only soaring site in Carpinteria.

3. The scope of the EIR should address ways to avoid massive earthwork at this site. The Certified Santa Barbara County Coastal Land Use Plan adopted in 1982 states "recreational uses on oceanfront lands, both public and private, that do not require extensive alteration to the natural environment...shall have priority over uses requiring substantial alteration". According to this guidance, free flight at Bates should have priority over this massive earthwork Project because our recreational uses do not require alteration to the existing natural environment.

4. The current design is focused on providing a “blue ocean view” rather than a safe, useful, long-lasting solution. There is no plan for maintaining this bike path after it's constructed on a 100 year old eroding seawall, where a railroad and highway have already failed. There is also no plan for managing traffic in the already congested and incredibly steep Rincon Beach parking lot where the bike path terminates. This Project needs to be reassessed from the perspective of the very groups it's trying to help.

5. I request project alternatives that preserve the ridge at Bates. A possible option is constructing the Bike Path

on the Northside of the ridge, either along the highway or on the North side of the highway. The use of barriers along the highway shoulder, for example, would be consistent with the bike path design that exists from Rincon to Ventura, and would be more cost effective while preserving the natural environment.

Please ensure the EIR includes and investigates the current impact to our sport as well as to the flow of the wind that supports our flying.

Sincerely,
Jon Blake
SBSA Board of Directors, Secretary

Nick Bobroff

From: John Callender <callender.john@gmail.com>
Sent: Thursday, October 29, 2020 9:37 PM
To: Nick Bobroff
Subject: Re: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

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Is this the same project for which the city previously argued that an MND was sufficient? Is the city now taking the position that a full EIR is required? What changed since the Planning Commission voted to approve the MND?

John

On Thu, Oct 29, 2020 at 7:44 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.
>
> The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.
>
> The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
>
> https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
>
> A copy of the NOP and project description is also attached to this email.
>
> Should you have any questions about the proposed project or this NOP, please feel free to contact me.
>
> Thank you,
>
> Nick Bobroff, Principal Planner
>
> Community Development Department

(805) 755- 4407

Nick Bobroff

From: Joey Juhasz-Lukomski <joey@bikeventura.org>
Sent: Thursday, October 29, 2020 9:09 PM
To: Nick Bobroff
Subject: Re: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

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Hi Nick,

I remember the planning commission meeting where there were many public comments from "soarers," but the commission recommended against re-doing the EIR for the adjustments to the trail design. Did city council decide differently? Will this affect the timing of construction, and thus the ATP funding?

Thanks,

Joey

On Thu, Oct 29, 2020 at 7:43 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.
>
> The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.
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>
> A copy of the NOP and project description is also attached to this email.
>
> Should you have any questions about the proposed project or this NOP, please feel free to contact me.
>
> Thank you,

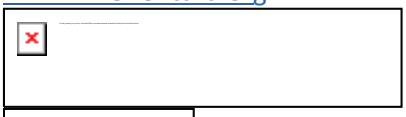
Nick Bobroff, Principal Planner

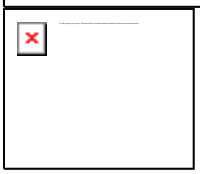
Community Development Department

(805) 755- 4407

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Joey Juhasz Lukomski (he/him)
Executive Director - BikeVentura
Office (805)641-2665
Cell (347)563-6444
www.BikeVentura.org





Nick Bobroff

From: Jeffrey A. Longcor <jlongcor@gmail.com>
Sent: Monday, November 30, 2020 2:02 PM
To: Nick Bobroff
Subject: Public Comments - EIR Scoping
Attachments: Rincon Trail Concerns - SBSA Letter 8.21.20.pdf

****EXTERNAL EMAIL****

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Hi Nick,

I appreciate your team's work on this project. As an avid cyclist and paraglider, I am hopeful that an alternative design can be engineered that meets the needs of all recreational users. I moved from Boston to Carpinteria for the biking, but I stayed for the flying because it's what makes Carpinteria truly special and unique. I feel the scope of the EIR should cover the items below in order to preserve what I deeply value in this City, and what many others care about too.

1. CEQA considers all recreational uses to be valid if established. Paragliding and Hang Gliding are official sports that have been fully established at Bates for over 40 years. This recreational airpark is cherished by residents, tourists, and pilots alike. In the MND hearing, our qualified experts stated that the Rincon Trail Project will have a significant impact on this established recreation. Additional engineering data can be generated with modeling, similar to how structures are tested for wind loading.

2. The EIR should evaluate wind flow impacts, not just for pilots, but also for soaring birds and insects. The unique geographic features that make Bates a special flying site also make it essential for coastal animal life including pelicans, gulls, and butterflies. Animals use this corridor for transportation just like we do, connecting the Bates Ridge back to the bluffs behind, soaring winds from Carpinteria to Ventura and beyond. Appropriate environmental conservation groups should be notified and consulted.

3. CEQA considers all recreational uses to be valued equally. The current design runs counter to this criteria: the bike path expands access to one group at the exclusion of another. While bikers and joggers have access to many miles of recreational paths, the construction of this 0.2 mile section will ruin the **only** soaring site in Carpinteria, significantly impacting the recreational use of countless pilots. The EIR needs to assess alternatives that avoid this impact and equally accommodates all existing and proposed recreational users.

4. The scope of the EIR should evaluate ways to avoid massive earthwork at this site. The Certified Santa Barbara County Coastal Land Use Plan asserts that "recreational uses on oceanfront lands, both public and private, that do not require extensive alteration to the natural environment...shall have priority over uses requiring substantial alteration". According to this guidance, free flight at Bates should have priority over the current proposal to displace 104,000 CY of material because our recreational uses do not require alteration to the existing natural environment. The proposed project design is significantly damaging to the coastline, infringing on the Coastal Act, while excluding current recreational users. Alternatives that avoid cutting into Bates ridge should be considered, and if these are rejected, then substantial mitigations should be implemented through the EIR to account for the massive amount of earthwork.

5. The EIR should evaluate alternatives that better serve users. The current design is too focused on providing a “blue ocean view” rather than a safe, useful, long-lasting solution. There is no plan for maintaining this bike path after it's constructed on a 100 year old eroding seawall, where a railroad and highway have already failed. There is also no plan for managing traffic in the already congested and incredibly steep Rincon Beach parking lot where the bike path terminates. This Project needs to be reassessed from the perspective of the very groups it's trying to help.

6. The EIR cannot rely on a statement of overriding consideration because alternatives clearly exist. A possible option is constructing the Bike Path on the Northside of the ridge, either along the highway or on the North side of the highway. The use of barriers along the highway shoulder, for example, would be consistent with the bike path design that exists from Rincon to Ventura, and would be more cost effective and easier for cyclists to use, while preserving the natural environment.

I've also attached a letter from the Santa Barbara Soaring Association (SBSA) that was submitted to City Council in August as a response to the MND decision. As stated at the MND hearing, we have a number of experts willing to provide testimony or technical support, including geotechnical engineers, FAA specialists, and CEQA land use attorneys. We look forward to participating in the EIR. We're not trying to cause issues, we're trying to help.

In conclusion, I am in full support of the much needed bike path, however, I oppose the current project design because it displaces 104,000 CY of soil (approximately 156,000 tons) from the natural environment and destroys the unique geographic features that have made Bates a treasured recreational facility and world-renowned soaring site for the last 40 years. I am asking the City to redesign this 0.2 mile bike path so that it is inclusive of all users and preserves the flying potential of the area.

Please consider project alternatives that avoid cutting into Bates ridge and work to achieve no impact to free flight recreation, with corroboration from scientific evidence and expert testimony.

Thank you,
Jeff Longcor
Carpinteria Resident
Biker & Paraglider

August 21, 2020

RE: Concerns Regarding the Rincont Trail Project

To the Carpinteria City Council Members,

The Santa Barbara Soaring Association (SBSA) is submitting this official letter to members of the City Council in the interest of working together to minimize the impact of the Rincon Trail Project. We are in full support of the much needed bike path, however, the current design virtually eliminates coastal soaring in Carpinteria, destroying a treasured recreational facility.

We're sending this letter in response to the MND determination made on January 6, 2020. We initially delayed transmission in order to respect the difficulties caused by Covid-19. Our hope is to use this letter in lieu of a legal appeal to convey our concerns and demonstrate our willingness to collaborate with the City and public. We are asking the City to help us implement design changes that will preserve airflow along Bates ridge and allow continued use of this widely-celebrated flying site. Bates is visited by countless pilots from around the world. It would be tragic to lose this special place because 0.2 miles of bike path couldn't be routed elsewhere.

Paragliding and Hang Gliding are established sports that have been happening regularly at Bates for over 40 years and are fully established there. It is the only coastal soaring site in Carpinteria and the best known site with consistent soaring wind between San Diego and San Francisco. Unique geographic features combine Southwest facing terrain with prevailing channel winds, allowing airflow to hit Bates ridge like the swells hit Rincon Point. This is a recreational airpark that attracts visitors from afar and deserves preservation with the City.

Our local group of 500 members is concerned the MND was rushed to avoid our inclusion. Those attempting to participate early in the Project were told it did not concern us. While this was true for the previous designs, the current proposal will significantly impact our recreational site. We were surprised to hear of this latest iteration when it was announced in November 2019, especially because the City's website still carried the outdated Alternative Proposal.

It's difficult to understand the City's lack of outreach given that the MND includes a photograph of a paraglider flying over the project site. Our frustration with this treatment is evident in the public comments of Appendix E in the MND. To push this Project past our group, last minute changes were made to the Proposed Final MND (Exhibit 2) for the purpose of denying CEQA consideration, disqualifying free flight as a form of recreation, and bypassing the EIR. These changes included inaccurate statements that we have addressed in the attached Appendix.

We are fortunate to live in Carpinteria, a place where many land uses coexist. This is especially true at Bates. This coastal gem creates pockets of diversity where small groups like ours can use the same natural resources for recreation as the local bikers, surfers, beachgoers, and joggers. The current Project design runs counter to this sentiment: the bike path expands access to one group at the exclusion of another. While bikers and joggers have many miles of recreational paths to access, the construction of this 0.2 mile path will likely end free flight for many of the soaring community members and ruin the only soaring site in Carpinteria.

Additionally, the Certified Santa Barbara County Coastal Land Use Plan adopted in 1982 states "recreational uses on oceanfront lands, both public and private, that do not require extensive alteration to the natural environment...shall have priority over uses requiring substantial alteration". According to this guidance, free flight at Bates should be given priority over this Project because our recreation requires no alteration to the existing environment.

We would like to challenge the City to design a Project that is inclusive of all users and that avoids ruining this 40-year flying site. This is the one place in Carpinteria where we can pursue our passion and practice our craft, sharing the joy of free flight with residents and tourists alike. Please consider Project alternatives that avoid cutting into Bates ridge and work to achieve no impact to free flight recreation, with corroboration from scientific evidence and expert testimony.

We look forward to building a bike path that meets everyone's needs. Rather than creating conflict around this Project, SBSA is focused on working with the City to find solutions. We have nationwide resources to support these efforts, including our membership with the United States Hang Gliding and Paragliding Association (USHPA). Please contact us to review next steps using the email addresses provided. Thank you for considering the importance of this matter.

Sincerely,

Santa Barbara Soaring Association Officers

James Zender, President
Daniel Garcken, Vice President, Hang Gliding
Derek Musashe, Vice President, Paragliding
Cort Flinchbaugh, Treasurer
Jon Blake, Secretary
Mike Harrington, Activities, Hang Gliding
Chris Heckman, Activities, Paragliding
John McMahon, Website Design and Maintenance
John Greynald, Public Relations
Rob Sporrer, Safety Officer
Aaron LaPlante, Site Preservation
Jeff Longcor, Director at Large

Appendix

Corrections to the Proposed Final MND

Appendix:
Corrections to the Proposed Final MND

1. Inaccuracy #1: free flight at Bates is an unsanctioned activity (p.133)
    a. We legally fly in this airspace as a recognized group by the Federal Aviation Administration (FAA) and United States Hang Gliding & Paragliding Association (USHPA). We have federal permission to use this airspace.
    b. Paragliding and Hang Gliding have been happening regularly at the Bates bluff for over 40 years and is fully established in this location. It is the only coastal soaring site in Carpinteria and the best known site with consistent prevailing wind soaring between San Diego and San Francisco. Unique geographic features combine Southwest facing terrain with channel winds, allowing airflow to hit Bates ridge like the swells hit Rincon Point.
    c. Bates is special in allowing cross country flight. The Project site generates lift that allows pilots to transition to the surrounding bluffs and travel dozens of miles along the coastline, making this activity suited to the “transportation corridor”.
    d. Exhibit 2 lists official rules governing free flight while also claiming it’s an unrecognized recreational activity. This is an obvious contradiction resulting from the City’s selective use of the term “unsanctioned” to fit their needs. How do activities become publicly recognized? Are bikers or surfers sanctioned? No guidelines or examples are provided to address a shared space like Bates.
    e. Exhibit 2 states there are safety hazards regarding the freeway and UPRR, yet no evidence is provided. No free flying accidents have occured in these areas. Meanwhile, the MND has no mitigation plan for the significant impact of bike traffic in Rincon Park caused by the Project. This congested area is already the site of numerous collisions that regularly occur between bikers and vehicles.
    f. Exhibit 2 states that flying at Bates is questionable because foot traffic across the UPRR is restricted. However, pilots are not crossing the tracks by foot and there are no airspace restrictions around the UPRR.
    g. FAA officials and career airline pilots provided expert testimony during the MND hearing to confirm that no aviation rules are being violated at this site.

2. Inaccuracy #2: the preferred launch site disqualifies free flight from CEQA (p.134)
    a. The Rincon Trail Project has no bearing on the current launch locations, it is outside the scope of the project and irrelevant to the MND.
    b. The ownership status of the launch location parcels is subject to change before, during, and after the project, and should not factor into the MND.
    c. Pilots have the capacity to launch from public and private locations to arrive at Bates, at times flying from National Forest property, but can only soar Bates ridge if the existing geological features remain within this unique recreational facility.
    d. On rare windy days, pilots launch from the county property portion below the bluff, which is not in the Rincon Beach County Park or any private property.

e. The Certified Santa Barbara County Coastal Land Use Plan adopted in 1982 states "recreational uses on oceanfront lands, both public and private, that do not require extensive alteration to the natural environment...shall have priority over uses requiring substantial alteration". According to this plan, whether the land is public or private, free flight at Bates should be given priority over this Project because our recreation requires no alteration to the natural environment.

3. Inaccuracy #3: the Project will not have a negative impact on uplift and airflow (p.135)
    a. During the Public Workshop and the MND hearing, SBSA provided expert testimony and evidence from engineers and FAA officials to substantiate the Project's negative impact on uplift and airflow.
    b. SBSA created a video describing in detail how the Project will drastically affect airflow. This video was provided to the Planning Commission and City Employees, and discussed at length during the MND hearing: https://www.youtube.com/watch?v=SVIdEfWHMpE&t= .
    c. Despite SBSA's efforts, Exhibit 2 states that the flying community has not provided evidence of negative impact. This assertion is made without acknowledgement of what SBSA already provided and without explanation of what more is needed. Additionally, the City fails to share the burden of proof. If a study of scaled models is required to demonstrate the before and after conditions of wind deflection, the City should take responsibility for gathering this data.
    d. The City should be responsible for proving that this Project will not change airflow and will be inclusive of all current users. Where is the proof that this project will not ruin a treasured flying site that has been lovingly used for decades?
    e. Exhibit 2 claims that the Project will not have a negative impact on airflow. No expert testimony, data, or evidence is provided. It also appears that Exhibit 2 confuses our sport with parasailing, which is a separate activity involving a boat. How can the City make assertions without even knowing the name of our sport?
    f. Exhibit 2 states that the Project will improve uplift, yet no scientific proof is provided. Wind gradient models are readily available online and SBSA is willing to further demonstrate how uplift is less productive at lower elevations and severely disrupted by benches like the two proposed for this Project. Below are two online articles that speak to soaring dynamics in areas of ridge lift.
    Ridge Lift Research: http://journals.sfu.ca/ts/index.php/ts/article/viewFile/608/571
    Ridge Soaring: https://chessintheair.com/what-conditions-produce-good-ridge-lift/
    g. Exhibit 2 wrongly suggests that uplift is equal across all seaside bluffs in the area. While pilots may launch from a lower bluff, rarely is there enough uplift to sustain flight. Pilots immediately transition to the Bates ridge, which has a steep, unobstructed face that generates adequate lift in a wide range of wind conditions.
    h. The Project will cause permanent damage to a unique, treasured flying site, yet there are no assurances it will withstand rising sea levels and increased storm activity on the unstable slopes where it's being proposed. The MND has not

demonstrated compliance with the Carpinteria Rising Sea Policy and does not account for long term maintenance or provide a plan for preventing eventual slope failure, which has already happened for the old railroad and highway.

i. The City has not provided evidence of exploring a North Side alternative on either the North or South sides of the highway. This approach would satisfy all potential end users and potentially save costs. If not for the blue view directive, this project could be replaced by a line of barriers along the 101 South to protect bikers between exits.

Nick Bobroff

From: Jeffrey A. Longcor <jlongcor@gmail.com>
Sent: Monday, November 30, 2020 4:50 PM
To: Nick Bobroff; George Jimenez
Subject: EIR Scoping - Zoom Recording

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Hi Nick,

When you get a chance, please send a link or file transfer information for the zoom recording of the EIR Scoping meeting. I know George and others may have already requested this, but I haven't seen it come through in any prior emails.

Also I wanted to make sure this video is part of the EIR Scoping as it addresses recreational issues and suggested some alternatives and mitigations, while perhaps being readily accessible for viewers.
https://www.youtube.com/watch?v=SVIdEfWHMpE

Thanks again,
Jeff

Nick Bobroff

From: J Plaehn <specialbuild4u@gmail.com>
Sent: Monday, November 16, 2020 6:35 PM
To: Nick Bobroff; gnidilg@gmail.com
Subject: Bates environmental impact study Carpinteria public meeting

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Sent my iPhone

To whom it may concern my name is Jay Plaehn I attended the public Carpinteria meeting regarding altering the Bates bluff. It is a matter of public record that my testimony before the council and many other concerned pilots from the Santa Barbara Flying Association and independently were voiced. Many of these concerns and warnings were also publicly reported in one of the local Carpinteria newspapers shortly there after further confirming testimony and further publicly documenting the concerns of many local citizens. My testimony before the council focused on the fact that Bates point is a highly sensitive geological region where wind patterns affect the micro climate north and south of the point. It is known that this micro climate provides growing conditions that allow certain plants to be farmed and grown in La Conchita. As in bananas for example, one of the few, if not the only place in California as is locally thought. Given this specificity of environmental factors there may be other plant or animal life or insects as in migrating butterflies that could be affected by altering the wind patterns, temperature and the local environment with massive earth moving. It is not unreasonable to expect that the law be followed and a proper and complete environmental study be made. This is what the law was meant to apply to as in the Bates Point. Bates Point is the definition of a micro climate. Please include my concerns in any formal review of the situation. Thank you for your considerations. Jay Plaehn

Nick Bobroff

From: throgrog@aol.com
Sent: Sunday, November 29, 2020 2:56 PM
To: Nick Bobroff
Subject: Re: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

****EXTERNAL EMAIL****

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Hi Nick,

Thank you for the opportunity to provide input for the EIR that is required for the proposed Carpinteria Rincon Multi-Use Trail. Please include this in the record.

1 The current plan has no information on alternative plans for the path other than to mention that previous version had land slide issues. Without detailed cost data on other possible routes, such as following the freeway and using existing structures, the EIR would be incomplete.

2 With the high tides and storms that are predicted to erode the bluff due to climate change, a plan to have a path on the ocean side of the bluff that will fail within the next 40 years is would be an expensive mistake without the **most current data** on the potential for serious erosion.

3 The plan to terminate the path onto steep and busy parking lot after going through all the effort to make it ADA compliant makes no sense when there are safer alternatives. Alternatives that need to be in the EIR.

4 The plan will permanently destroy an extremely rare and valuable existing recreational resource--- the bluff for soaring gliders. **There is no mitigation possible for this significant loss; therefore the project as it is currently proposed should be terminated ASAP. The regulatory entities needed for approval will never sign-off on this when they see how illegal and ill-conceived it is.**

5 **IF** more time and money **IS** to be spent on an EIR for the current plan, then the value of the bluff for soaring hang gliders and paragliders would need to be a significant section of the EIR. The need for wind tunnel testing on the planned reduced slope and angle of a 3D model of the bluff would probably not be necessary because the proposed change in the ability to soar the bluff would be significant enough to be easily calculated on paper using common wind-flow data and formulas.

It is great to see that an EIR will be used in the process. It will likely be less expense to produce a comprehensive EIR than to have the city defend a lawsuit from the Glider pilots. The fact that the pilots were so blatantly left out of the process raises questions that have yet to be answered. Did the planers really think that the soaring would not be affected? Did long small town personal conflicts create a plan that will likely never be permitted?

John Greynald

Director, Santa Barbara Soaring Association

805-886-6160

-----Original Message-----
From: Nick Bobroff <nickb@ci.carpinteria.ca.us>
To: Nick Bobroff <nickb@ci.carpinteria.ca.us>
Sent: Thu, Oct 29, 2020 7:40 pm
Subject: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.

The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.

The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
A copy of the NOP and project description is also attached to this email.

Should you have any questions about the proposed project or this NOP, please feel free to contact me.
Thank you,
Nick Bobroff, Principal Planner
Community Development Department
(805) 755- 4407

Nick Bobroff

From: Kevin Carter <xckevinc@gmail.com>
Sent: Monday, November 30, 2020 3:24 PM
To: Nick Bobroff
Subject: Bates

****EXTERNAL EMAIL****

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Hi Nick,

My name is Kevin Carter and I am a pilot. Since 2003 I have been travelling to the Santa Barbara/Carpinteria area in the winter months to fly and recreate. It saddens me to see one of the few accessible flying sites face an unnecessary demise, especially when an alternative exists that would allow all of the desired types of recreation. As an avid cyclist, rollerblader, pilot, etc I embrace all efforts to increase recreation access but as a pilot I know that access to viable flying sites in America is far more difficult to obtain and maintain then for other activities. It is ironic that flying site access is the primary and only reason I travel to your area, but now the reason that I am contacting you to voice my opinion.

Thank you for your time and consideration,
Kevin

Nick Bobroff

From: Karen Castle <karicastle@me.com>
Sent: Monday, November 30, 2020 12:46 PM
To: Nick Bobroff
Subject: Hi nick

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Sorry for not responding sooner. How can I help save Bates?? I love that flying site!!
Kari

Sent from my iPhone

Nick Bobroff

From: Karen Ensign <ensignkaren@gmail.com>
Sent: Saturday, November 28, 2020 10:09 AM
To: Steve Goggia; Nick Bobroff
Subject: Carpinteria Rincon Multi-Use Trail Project

****EXTERNAL EMAIL****

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To Whom It May Concern,

We are against the initial scope of this project. The hang gliders have been using this space for years, and they bring joy to those of us who watch them sailing over the bluffs and the ocean.

We love to ride our bikes and would appreciate a continuous trail from Carp Avenue to Rincon Beach Park, but NOT at the expense of hang gliders who have enjoyed this spot for decades.

We are concerned that an EIR is not being done; how will this project affect the hillside after steep grading? How will this project affect the local flora and fauna? We understand that there is a safety issue involved due to cyclists using the 101 freeway or rail access; why not encourage them to use Hwy 150 to Rincon Hill Road?

We are hopeful that the Carpinteria Planning Commission will listen to the voices of the soaring community, and to average citizens like us, and reconsider this project, or at least allow an EIR to be done.

Sincerely,
Karen Ensign and Steve Tonnesen

Nick Bobroff

From: Kate Faulkner <kerfaulkner@gmail.com>
Sent: Tuesday, November 17, 2020 2:38 PM
To: Nick Bobroff
Subject: Rincon Trail EIR Scoping Meeting

****EXTERNAL EMAIL****

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Hello Nick,

I am a member of the Channel Islands Bicycle Club and a frequent bicyclist between Ventura and Carpinteria. I am hoping to join the Zoom NOP meeting this afternoon. However, there is the possibility that a conflict will prevent me from joining. Will the Zoom be recorded and available on your web site?

I am really looking forward to the proposed Rincon Trail project. Rincon Beach is a terrific park and the trail should make the park more accessible to walkers and cyclists from Carpinteria.

My biggest concern is the safe accommodation of the increased numbers of bikes that will be transiting Rincon Beach County Park. The parking lot is already dicey for cars, pedestrians, and bicyclists. The proposed trail should greatly increase the number of bikes. Hopefully S.B. County Parks is engaged and will be planning better routing bikes, peds, and cars through the park.

I plan to submit a letter prior to the Nov. 30 deadline. It will be helpful if I am able to review today's discussion so that I have a full understanding of the proposed Rincon Trail project.

Thanks,
Kate Faulkner

Nick Bobroff

From: Kathleen Reddington <reddington4@verizon.net>
Sent: Monday, November 30, 2020 1:22 PM
To: Nick Bobroff
Subject: Fwd: Rincon Trail Project EIR Scoping Comments

****EXTERNAL EMAIL****

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-----Original Message-----
From: Kathleen Reddington <reddington4@verizon.net>
To: nickb@carpinteria.ca.us <nickb@carpinteria.ca.us>
Sent: Mon, Nov 30, 2020 1:17 pm
Subject: Rincon Trail Project EIR Scoping Comments

Hi Nick,

Please accept the suggestion to thoroughly investigate and research the items stated below as part of the Scoping Process within the EIR for the Rincon Trail Project.

To: Dudek Environmental Impact Report Scoping Suggestions

1. City of Carpinteria and the CCC must examine alternative routes on the North side of the Bluffs running parallel to the 101 Freeway.

2. City of Carpinteria and the CCC thoroughly research, the geology of the area and what erosion might be caused in the removal of 100,000 tons of dirt during the construction of this trail which includes bridges, concrete support systems and extensive drainage. How does this effect the stability and also the liabilities of the public falling or injuring themselves on this trail, Who is responsible for those liabilities and what safety precautions can/will be taken to prevent injury to the public?

3. Wildlife habitat,, the presence of ESHA and the overall plant and animal species native to the area should be thoroughly researched and documented. Displacing any of our native California Wildlife must be avoided at all costs. Would the Rincon Trail interrupt/destroy an established wildlife corridor? This question must be answered.

4. The Hang gliders and Para gliders launch pad can not and should not be destroyed. It's is a long established site of over 40 years and one of only three such sites in California where the wind drift allows a launch and long distance flying opportunity. The hang gliders should be included as participants in the EIR process and there must be a serious amount of research and time spent to allow the Hang and Para gliders to keep their recreational activity and their launch spot. This project needs to take the effects it will have on the hang gliders wind, document, measure and the Rincon Trail Project must be modified to not destroy the wind current from the bluffs launch.

5. The aesthetic and majestic beauty of the coastline needs to be preserved and the changes measured as to how this project will effect the view corridor looking down the coast to the Rincon.

6. The current proposal unsafely dumps cyclists, hikers and members of the public into a very congested non-ADA compliant parking lot. Other designs need to be explored to avoid this danger.

Thank-you for the opportunity to submit these suggestion for the Rincon Trail Project. I sincerely hope the preparation of the EIR will take these items in to account as part of the Scoping process.

Respectfully Submitted,

Kathleen Reddington

November 30, 2020

Nick Bobroff

From: Katharina Roesler <katroesler@gmail.com>
Sent: Friday, November 13, 2020 12:13 PM
To: Nick Bobroff
Subject: Bike path proposal

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Dear Mr. Bobroff,
As you review the proposal to create a bike path in Carpinteria, please consider the impact this would have on paragliding. I am a pilot and frequently visit Santa Barbara in order to fly there. I believe this helps the city's tourism and is a beautiful part of its character that would be a shame to lose.

Please consider finding an alternative proposal that does not destroy the ridge.

All the best,
Katharina Roesler
305-608-3457

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 30, 2020

Nick Bobroff
Principal Planner
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013
Nickb@ci.carpinteria.ca.us

Subject: Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Carpinteria Rincon Multi-Use Trail, SCH #2020060534, Santa Barbara County

Dear Mr. Bobroff:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Carpinteria Rincon Multi-Use Trail (Project). The City of Carpinteria (City) is the lead agency preparing a DEIR pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et. seq.) with the purpose of informing decision-makers and the public regarding potential environmental effects related to the Project.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & Game Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & Game

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Code, § 2050 *et seq.*) or the Native Plant Protection Act (NPPA; Fish & Game Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Location: The Project would extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria, to Rincon Beach County Park, in unincorporated Santa Barbara County. The Carpinteria Bluffs Nature Preserve lies to the east of the Project and the Project is bordered by the Rincon Bluffs Preserve.

Project Description/Objectives: The proposed Project includes the construction of a paved 16-foot-wide trail (10-foot-wide path with 3-foot-wide paved shoulder along both sides); an approximately 2,800-feet-long, a clear-span bridge over the Union Pacific Railroad alignment; parking facilities; fencing; signage; and a storm drainage collection system, with new drain outlets to the ocean. The bridge would be approximately 160-feet-long, with a width of between 14-feet and 16-feet.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Specific Comments

1) Crotch Bumble Bee. Potential for Crotch bumble bee (*Bombus crotchii*) within the Project vicinity. Project ground disturbing activities may result in crushing or filling of active bee colonies, causing the death or injury of adults, eggs, and larvae. The Project may remove bee habitat by eliminating vegetation that may support essential foraging habitat. Impacts to Crotch's bumble bee could result from ground disturbing activities. Project disturbance activities could result in mortality or injury to hibernating bees, as well as temporary or long-term loss of suitable foraging habitats. Construction during the breeding season of bees could result in the incidental loss of breeding success or otherwise lead to nest abandonment.

    a) CDFW recommends that measures be taken, primarily, to avoid Project impacts to Crotch bumble bee. On June 12, 2019, the California Fish and Game Commission accepted a petition to list the crotch bumble bee as endangered under the California Endangered Species Act ("CESA"), determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process.

    b) CDFW recommends, within one year prior to vegetation removal and/or grading, a qualified entomologist familiar with the species behavior and life history should conduct surveys to determine the presence/absence of Crotch's bumble bee. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results including negative findings should be submitted to CDFW prior to initiation of Project activities. If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the City must consult CDFW to determine if a CESA incidental take permit is required (pursuant to Fish & Game Code, § 2080 et seq.).

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2) California Endangered Species Act (CESA). A review of CNDDB indicates several occurrences within two miles of the Project vicinity of light-footed Ridgway's rail (*Rallus obsoletus levipes*), a CESA-listed and Fully-Protected species (Fish and G. Code § 3511) that is also listed under the federal Endangered Species Act. A review of CNDDB indicates several occurrences within two miles of the Project vicinity of Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), a CESA-listed species. Project related activities may adversely impact potential habitat for this species. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or State-listed rare plant species that results from the Project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

   CDFW cannot authorize the take of any fully protected species as defined by State law. State fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for its take except for collecting those species for necessary scientific research and relocation of the bird species for protection of livestock (Fish & G. Code, §§ 3511, 4700, 5050, 5515). Take of any species designated as fully protected under the Fish and Game Code is prohibited. CDFW recognizes that light-footed Ridgway's rail is documented to occur in the vicinity of the project area. CDFW recommends the City fully avoid all impacts to light-footed Ridgway's rail occupied habitat.

3) Human-Wildlife Interface. Due to the location of the Project site within coastal bluff and beach environment, CDFW recommends the lead agency evaluate the use of this trail and its potential impacts to wildlife in the adjacent open space settings.

4) Biological Baseline Assessment. A CNDDB review indicates the occurrence of several special status insect, reptile, mammal, and plant species including Coulter's saltbush (*Atriplex coulteri*), globose dune beetle (*Coelus globosus*), western snowy plover (*Charadrius alexandrinus nivosus*), Northern California legless lizard (*Anniella pulchra*), white-veined monardella (*Monardella hypoleuca ssp. hypoleuca*),Townsend's big-eared bat (*Corynorhinus townsendii*), southern tarplant (*Centromadia parryi ssp. australis*), and monarch - California overwintering population (*Danaus plexippus* pop. 1) within the Project vicinity. The majority of the Project site is open space. Undisturbed land may provide suitable habitat for special status or regionally and locally unique species. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area, with emphasis upon identifying endangered,

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threatened, sensitive, regionally and locally unique species, and sensitive habitats. Impact analysis will aid in determining any alternative trail designs that could reduce impacts to any special status species detected, as well as assess direct, indirect, and cumulative biological impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project. CDFW also considers impacts to Species of Special Concern a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. The DEIR should include the following information:

a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a state-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities;

b) A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline);

c) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should also be used to inform this mapping and assessment (Sawyer, 2008). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

d) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by the Project. CDFW's CNDDB in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp;

e) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & Game Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise

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identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the USFWS; and,

f) A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.

5) Biological Direct, Indirect, and Cumulative Impacts. Due to the proximity of the Project site to undeveloped land and open space just north of the Project site, it is essential to understand how these open spaces and the biological diversity within them may be impacted by Project activities. This should aid in identifying specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The following should be addressed in the DEIR:

a) A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish & Game Code, § 2800 *et. seq.*). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

b) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species and identification of any mitigation measures;

c) A discussion on Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included;

d) An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,

e) A cumulative effects analysis, as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

6) Nesting Birds. Project activities may impact nesting birds. Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs, or

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nestlings, or otherwise lead to nest abandonment in trees directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.

a) CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

b) Proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300-feet of the disturbance area (within 500-feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

General Comments

7) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

a) A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas; and,

b) A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. The alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

8) Wetlands Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's policies. The Wetlands Resources policy (http://www.fgc.ca.gov/policy/) of the Fish and Game Commission "…seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be 'no net loss' of either wetland

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habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values."

a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. CDFW encourages activities that would avoid the reduction of wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, the Project must include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions for the benefit to on-site and off-site wildlife populations. CDFW recommends mitigation measures to compensate for unavoidable impacts be included in the DEIR and these measures should compensate for the loss of function and value.

b) The Fish and Game Commission's Water policy guides CDFW on the quantity and quality of the waters of this state that should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this state; prevent the degradation thereof caused by pollution and contamination; and, endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. CDFW recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible (Fish & Game Code, § 5650).

9) Compensatory Mitigation. The DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.

10) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased

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human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.

11) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual from the Project site and permanently moving it to a new location. CDFW generally does not support the use of, translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.

12) Moving out of Harm's Way. The proposed Project is anticipated to result in clearing of habitats that support many species of indigenous wildlife. To avoid direct mortality, we recommend that a qualified biological monitor approved by CDFW be on-site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed, or otherwise handled, we recommend that the DEIR clearly identify that the designated entity should obtain all appropriate state and federal permits.

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City of Carpinteria in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Kelly Schmoker, Senior Environmental Scientist, at (626) 335-9092 or by email at Kelly.Schmoker@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I

Ec: CDFW
Steve Gibson, Los Alamitos – Steve.Gibson@wildlife.ca.gov
Sarah Rains, Los Alamitos – Sarah.Rains@wildlife.ca.gov
Susan Howell, San Diego – Susan.Howell@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov

State Clearinghouse, Sacramento – CEQACommentLetters@wildlife.ca.gov

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References

Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2008. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

Thorp, Robbin W., Horning Jr, Donald S., and Dunning, Lorry L. 1983. Bumble Bees and Cuckoo Bumble Bees of California. Bulletin of the California Insect Survey 23.

Nick Bobroff

From: Leon Roullard <lroullard@gmail.com>
Sent: Tuesday, November 17, 2020 9:37 AM
To: Nick Bobroff
Subject: Rincon Trail Bike Path

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hello Mr. Bobroff,

My name is Leon Roullard and I am writing this email in regards to the proposed bike path along the Rincon coast line. I am writing from the perspective of an avid Cyclist, Paraglider, and California native with a Marine Biology degree from UCSC. I am aware that many people enjoy this beautiful State and seek to find a solution that accommodates all those who choose to enjoy what it has to offer.

My love for the California coastline and all the amazing and beautiful activities it provides our citizens is difficult to quantify. I have been recreationally and competitively riding bicycles since the early 80's and intend to continue riding until my legs won't spin the gears. I have ridden large stretches of the California coast and I am well aware of the importance of safe bike paths, especially in the Rincon stretch. A bike path is essential through this section and will be a great boon to the community.

I have been an aviator for over 24 years and paragliding pilot for the past 5 years. The coastal soaring site known as Bates is a particularly special site for it's rare good conditions for all Paraglider pilots, and especially for me and my fiance.

My fiance Lena and I met paragliding in Santa Barbara in late 2017. She, a veteran of 10+ years in the sport and me, a fledgling pilot of a couple years at the time. We hit it off immediately and have traveled the world flying paragliders ever since. In 2019 on a flying trip to Santa Barbara we decided to check the conditions at Bates. In light conditions I launched and soared down to the beach. After hiking back up the ridge Lena met me at the edge of the launch. I dropped to my knee and asked the love of my life to spend the remainder of our lives together. She said yes. We both then launched into some of the best conditions I have ever experienced at Bates and flew till sunset on what is now one of the most special flying sites for us, in the entire world.

I am fully aware that all things in this life are passing and we gain little by clinging to them. However, it would be a shame to see this amazing and rare coastal soaring site destroyed when alternative solutions that accomodate all interested parties exist.

Thank you for taking the time to read this email and consider alternative solutions.

Blue Skies,

Leon Roullard

--
(831)229-6409
lroullard@gmail.com

Nick Bobroff

From: Lane <lanerubin@hotmail.com>
Sent: Monday, November 16, 2020 11:01 AM
To: Nick Bobroff
Subject: Rincon Bike trail and the effect on the Bates flying site

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Dear Nick,

As a longtime Santa Barbara resident, and hang glider pilot, I urge you and the Carpinteria city council to please consider inclusion to the EIR any impact that any grade changes will have on the airflow over the ridge at the bates road launch site. This site is a local treasure, and one of the few places remaining on the coast for hang gliding and paragliding.

The shape of the hillside, has a direct impact on our ability to fly there, and we are very concerned to hear of the possible changes being proposed.

While I love the idea of a bike path, I truly hope that consideration can be made to facilitate flying there as well. And I'm sure that there are ways to accommodate both without adversely affecting the other.

Thanks for your time and consideration.

Lane Rubin
13 San Marcos Trout Club
Santa Barbara, CA
805 637-7789

Nick Bobroff

From: Logan Walters <logan.walters@gmail.com>
Sent: Monday, November 30, 2020 2:18 PM
To: Nick Bobroff
Subject: Thunder Bowl

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Hello Nick,

My name is Logan and I grew up here in Carpinteria. For the last 29 years I have enjoyed the dirt playground and view from atop the Thunder Bowl. I am a Paraglider pilot, surfer and cyclist.

As a Paraglider pilot I am very concerned about the upcoming project and how it will destroy our flying at Bates. This site is the reason I first started flying and now it has become my lively hood. Both paragliding that lead me to flying airplanes and helicopters. The freedom of soaring at Bates is unbeatable and taking it will be a huge hit to the free flying community.

As a surfer and beach goer the current plan will not increase beach access. And will change the parking area into a more jumbled and dangerous parking area. I don't think that is the goal.

As a cyclist that has gone up and down the coast this section requires a quick trip on the shoulder of the on ramp/off ramp or going down Bates. Both have been easy options and with the new plan of dumping cyclist into the parking lot I am 100% positive the cyclist will opt to go around. This path is not for cyclist. And will hardly be used by pedestrians. Putting the path on the freeway side is of zero detriment to the plan and offers to keep the original beautify and usefulness as a multi recreational use area.

Please do the right thing, and consider different options.

Logan Walters

Nick Bobroff

From: Myles Connolly <contactmyles@yahoo.com>
Sent: Friday, November 13, 2020 6:43 PM
To: Nick Bobroff
Subject: Bates Bluffs Bike Trail

****EXTERNAL EMAIL****

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Hi Nick, just want to add my voice to the din to let you know I have real concerns about the bike path project and how it's coming together.

I feel there's a lot at stake here and hope that you will hear out all sides, follow the necessary guidance and do everything you can to ensure a fair and reasonable outcome.

Best,

M.

Myles Connolly, p.g.a.
CEO
360-MEDIA, LLC
International Mobile: +1 949 338 2987
Email: contactmyles@yahoo.com
Skype: mylesconnolly

Nick Bobroff

From: Mike Harrington <mikestoneyard@gmail.com>
Sent: Monday, November 30, 2020 11:40 AM
To: Nick Bobroff
Subject: Rincon Trails EIR

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Dear Nick, and those preparing the EIR,

I am expressing my concern that the displacement of existing dirt and rock, and consequent slope change, will irreparably harm the Rincon site. Local osprey and turkey vultures frequent this site. Will their flight patterns be impacted? Are there migratory birds that will be impacted? Are there other species that live in or near the slopes and rely on the updrafts?

Also, the recreational activities paragliding and hang gliding, which have utilized this site for more than 35 years, will be forever impacted by a slope change. I believe this warrants serious consideration. A plan that leaves the existing slope intact and routes the bike path differently would be greatly preferred.

Thank you for your consideration.

Mike Harrington
Activities Director
Santa Barbara Soaring Assoc.

--
Mike Harrington
cell 805-452-6162
store 805-962-9511
fax 805-962-7290
stoneyardbuilding.com

Nick Bobroff

From: Meng Heu <Meng.Heu@OPR.CA.GOV>
Sent: Friday, October 30, 2020 12:26 PM
To: Nick Bobroff
Subject: SCH Number 2020100582

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Your project is published and the review period has begun. Please use the "navigation" and select "published document" to view your project with attachments on CEQAnet.

Closing Letters: The State Clearinghouse (SCH) would like to inform you that our office will transition from providing close of review period acknowledgement on your CEQA environmental document, at this time. During the phase of not receiving notice on the close of review period, comments submitted by State Agencies at the close of review period (and after) are available on CEQAnet.
Please visit: https://ceqanet.opr.ca.gov/Search/Advanced

- Filter for the SCH# of your project **OR** your "Lead Agency"
  - If filtering by "Lead Agency"
    - Select the correct project
  - Only State Agency comments will be available in the "attachments" section: **bold and highlighted**

Thank you for using CEQA Submit.

Meng Heu
Office of Planning and Research (OPR)
State Clearing House

To view your submission, use the following link.
https://ceqasubmit.opr.ca.gov/Document/Index/265632/2

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nahc@nahc.ca.gov
NAHC.ca.gov

November 2, 2020

Nick Bobroff, Principal Planner
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: 2020100582, Carpinteria Rincon Trail Project, Santa Barbara County

Dear Mr. Bobroff:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

RECEIVED
NOV 09 2020
CITY OF CARPINTERIA

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Cultural Resources Analyst

cc: State Clearinghouse

November 10, 2020

Mr. Nick Bobroff, Principal Planner
Community Development Department, City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: Rincon Multi-Use-Trail (M.U.T.) Notice of Preparation (NOP), Environmental Impact Report (EIR)

Dear Mr. Bobroff:

I am responding to the proposed project, with a few questions (see attached addendum page 1), for the video conferencing meeting, scheduled for November 17, 2020 at 4:30pm. The removal of "Little Diamondhead," (see addendum page 2) which is primarily used by paraglider and hang glider pilots (addendum pages: 3, 3a, 3b, 3c, and 3d). The focused, EIR, should include the effect of air flow, due to the prevailing Southwest winds, into a venturi (which will still exist, if the M.U.T. as proposed, is built) , to traffic on the 101 Freeway. The resulting traffic noise (measured in decibels, on both sides of "Little Diamondhead," removes a sound barrier for Rincon Point residents, and beach goers. If Point Mugu Rock were to be removed, to alter the existing bike path, on the Pacific Coast Highway, to gain a Pacific Ocean view, would that be, a safer alternative, for bicyclists? "Little Diamondhead," is a landmark. It should not be removed. Please review the video link to "Preserving Free Flight at Bates Bluff." This video was made by Santa Barbara Soaring Association member and outstanding pilot and friend, Aaron LaPlante.

https://www.youtube.com/watch?v=SVIdEfWHMpE&feature=share

Highway lane closures, during the expected two-year build interval, will cause more traffic and accidents on the freeway. Beach closures can also be anticipated. Construction noise and pollution will aggravate and affect, drivers and beach goers and bicyclists and paragliders and hang gliders.

I have taken an informal survey, of 100 bicyclists, from July 2020 to September 2020, at the King property, launch area on different days of the week, and at varying times of day. I asked three questions: 1) "Would you mind, if I asked you a few questions, about the proposed bike path?"
2) "Are you local, or from out of town?"
3) "Considering the wind, would you prefer to have the bike path extended across the front of that bluff ("Little Diamondhead, " as I pointed, to it) , or on the Southbound 101 freeway side?"(see addendum 4).

In the city of Ventura, the primary users of Surfers Pointe had their concerns and suggestions, ignored. The surfers asked and suggested that the Ventura bike path extension, not be built on the Pacific Ocean side. Funds were designated, the bike path was built, and was claimed by the Pacific Ocean.

Respectfully,
Ottis Gillespie 11/10/2020
Ottis Gillespie
1945 Spyglass Trail West
Oxnard, CA 93036

RECEIVED
NOV 12 2020
CITY OF CARPINTERIA

Eight attachments ORG

Cc: Mayor and Carpinteria City Council members, Dave Durflinger, Fidela Garcia, Matt Roberts, John L. Ilasin, United States Hang gliding and Paragliding Association, Santa Barbara Soaring Association, California Coastal Commission, and others.

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If the "Little Diamondhead," bluff is destroyed, will the M.U.T. be aligned parallel, to the Southbound 101 freeway, as we, the paragliding and hang gliding pilots, have suggested, it be done, now, with the existing bluff? This preferred position and route can be implemented at less cost, less dirt removal, and less environmental impact. This will mean significantly fewer potential disruptions to Union Pacific Railroad operations, drivers on the 101 freeway, Rincon Point residents, and beach goers.

What is the "focus," of the "Focused Environmental Impact Report?" Will the primary users of "Little Diamondhead," have any input or be given, any consideration?

Will the E.I. R. include: current noise levels on both sides of "Little Diamondhead"? Can the measurement of decibels be conducted, hourly, for a one-week period, for 5 minutes, each hour, between the hours of 6 and 10am (commuter times,) and 2 and 6pm? This will measure what will be heard by residents of Rincon Point and beach goers, and M.U.T. users (Fifty feet, east of the wind sock and 15 feet above the freeway, and 20 feet away, from "Little Diamondhead?" Also, can high and low tide days, and wind speed measurement, in this E.I. R.?

If the "Little Diamondhead," bluff, is destroyed, will the amount of dirt and debris be pulverized on site? Will this undermine and/or destabilize the 101 freeway? The Union Pacific Railroad? The M.U. T.? The beach?

How will supports (drilled or impact driven into the dirt), affect the stability of the reconfigured land mass?

What will be the estimated and measured, emissions from equipment operating in the construction zone?

Did the "landslide sampling," include sampling on the north side of "Little Diamondhead?"

Will any or all of the approximately 90,000cu yds, of dirt left over, be stored or used on private property?











Addendum 3d

ORG



ORG

Addendum 4

Answers to informal survey of bicyclists from July 2020 to September 2020.

One hundred bicyclists were asked the three listed questions.

"Would you mind, if I asked you a few questions, about the proposed bike path?"

"Are you local, or from out of town?

"Considering the wind, would you prefer to have the bike path extended across the front of that bluff ("Little Diamondhead," as I pointed, to it, from the King property launch area), or on the Southbound 101 freeway side?"

1) One, "Yes," Ninety-nine, "No," answers
2) Thirty-one, "Local," bicyclists. Sixty-eight, "Out of town."
3) One respondent, did not respond,
4) One "Local," resident, preferred the Pacific Ocean side, of the bluff (Little Diamondhead).
5) Ninety-eight, of ninety-nine, bicyclists, responded that they would prefer the freeway side of "Little Diamondhead," as the route extension.

Nick Bobroff

From: Owen Searls <owen.searls@gmail.com>
Sent: Friday, November 20, 2020 8:08 AM
To: Nick Bobroff
Subject: Rincon Trail Bike Path

****EXTERNAL EMAIL****

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- What Bates means to you and why the ridge should be preserved

Ridge soaring is the sole reason I got into paragliding and my first introduction into this was at the Bates site. Seeing it from the road or at the beach changed how I saw the world and allowed me to join a sport that has brought me endless joy. I have even turned down moving out of state for my job due to the fact that I could not paraglide and paraglide at the Bates site. If this site is destroyed i would have no reason to stay in the area and would most likely sell my house and move. That is how much this site means to me and i hope the severity of it is not lost on you or the economic impacts of a small change that will affect a community of very dedicated individuals.

- Why the EIR needs to assess impacts to wind and recreation

Please review what happened in Sand City, Ca. They removed a dune next to the coast and the environmental impacts have been felt ever since not to mention a permanent scar on the land. The arrogance of cities to structurally change nature to meet their needs is something I expect to see in parts of the country like Texas not in California where we hold ourselves to a hire environmental continuous standard.

I don't believe the walking trail will be used that much but the environmental impacts will have far reaching impacts that i don't believe have been looked into. Please reconsider this action

- Why the City should consider alternatives like the North side of Bates.

It is a win win, the community gets there walking trail (which i suspect will not even be used that much) and the site/dune will be preserved.

--
Owen Searls
501-773-7668
Owen.Searls@gmail.com

Nick Bobroff

From: natchumash@yahoo.com
Sent: Tuesday, November 17, 2020 8:12 AM
To: Nick Bobroff
Subject: Carp. Zoom meeting

****EXTERNAL EMAIL****

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Nick, If you don't mind in my behalf could you speak for me. The Bridge is a very sensitive site and from what I have been told there's a recorded site nearby. I would definitely recommend a Native monitor on site for any earth disturbing activity. I would like to be the one to monitor this project when it does happen.Thank you, and have a great day.
Sincerely,

Patrick Tumamait

Rob and Christi Hudson
6180 Via Real #98
Carpinteria, CA 93013

To: Nick Bobroff
Contact Person for the Carpinteria/Rincon Multi-Use Trail Project
Carpinteria City Hall

November 24, 2020

Dear Mr. Bobroff,

My husband, Rob, and I have lived in Carpinteria since 2007, and currently live in the Vista de Santa Barbara Mobile Home Park directly across from the Bluffs. We love our town and cherish the open spaces that we are privileged to enjoy! We fully support the idea of finishing a trail connection between Rincon Beach and the Carpinteria Coastal Trail. We love to ride our bikes on and around the Bluffs and frequently use both sections of the existing trail. Having a completed trail would be a great asset to many people.

We attended the virtual meeting held on November 17 in which the plan for the new trail section was discussed in preparation for an upcoming Environmental Impact Report, and we have a few questions, concerns, and requests.

First, we are concerned that the current plan involves the removal of so much dirt and land. Perhaps we are joining the conversation about this new trail segment too late, but have all other possible routes truly been considered and evaluated? Is the purpose of this segment to provide a practical and efficient completion of the trail, using existing corridors and structures, and being less invasive into natural habitat, or is it to provide a scenic experience for the hiker or biker?

We, personally, would be willing to sacrifice a great view as we ride along a short segment of the trail, if it meant that we could preserve a larger portion of the Bluffs undisturbed.

As I am sure you are aware, our Bluffs are a repository of many rapidly vanishing native species. If there is truly no other route option other than the one that is being presented, we request that every precaution be taken to evaluate and protect the plant and animal species that would be impacted by the location of the new trail and the digging and construction that would it would involve.

A Certificated California Botanist is needed to evaluate any plant species that would be impacted. A scientist with this certification would have specialized knowledge of plants and biomes that are specific to the Bluffs, and be able to determine if any lasting harm to a native plant species might be a result of this project. In the same manner, a biologist with specific training in the animal life of California habitats, especially coastal habitats, should be included in the upcoming EIR.

We are also concerned about the use of the Rincon Beach parking lot as a part of the new trail segment. This parking lot is extremely busy on almost every day of the year! This part of the proposal did not seem to be well thought-out, or perhaps was just not very clear. Will there be a way to separate and protect trail users from beach users and cars in the entire parking lot area extending down towards Bates Road?

We certainly recognize that there are numerous details, opinions, and desires to be taken into consideration as you move forward. We thank you in advance for using caution and care for the native species of plants and animals that live in the Bluffs as you make decisions regarding the completion of the Carpinteria/ Rincon Multi-Use Trail.

Sincerely,
Christi and Rob Hudson

Nick Bobroff

From: Richard Graham <richard.h.graham@gmail.com>
Sent: Friday, October 30, 2020 6:41 AM
To: Nick Bobroff
Subject: Re: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

****EXTERNAL EMAIL****

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Thank you for the information.

On Thu, Oct 29, 2020 at 7:43 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.
>
> The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.
>
> The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
>
> https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
>
> A copy of the NOP and project description is also attached to this email.
>
> Should you have any questions about the proposed project or this NOP, please feel free to contact me.
>
> Thank you,
>
> Nick Bobroff, Principal Planner
>
> Community Development Department
>
> (805) 755- 4407

Nick Bobroff

From: Richard Graham <richard.h.graham@gmail.com>
Sent: Monday, November 30, 2020 2:35 PM
To: Nick Bobroff
Subject: Bates terrain modifications

****EXTERNAL EMAIL****

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Nick,
Please seriously consider redirecting the bike lane to the highway side of the ridge. Sending it through the parking lot will be grossly problematic for bicyclist safety.
Also, when they move all that earth, consider directing the use of the soil to build up the paraglider launch vertically, or lengthwise, since it is a bunch of fill there anyway. The taller/longer the launch site can be made, the greater utility it has, basically forever. Hauling off 4K trucks full of soil is a waste of resources and generates CO2 which persists in the atmosphere for 100 years. Use the soil to make the launch site better, I'd say.
Thanks!
Rich Graham

Additional notes below:

1. Paragliding and Hang Gliding are official sports that have been fully established at Bates for over 40 years. Bates uniquely combines Southwest facing terrain with prevailing channel winds, allowing airflow to hit the ridge like the swells hit Rincon Point. It is the only coastal soaring site in Carpinteria and the best location for consistent soaring conditions between San Diego and San Francisco. This recreational airpark is cherished by residents, tourists, and pilots alike. It deserves preservation with the City.

2. Bates is a coastal gem that allows small groups like ours to use the same natural resources for recreation as the local bikers, surfers, beachgoers, and joggers. The current design runs counter to this sentiment: the bike path expands access to one group at the exclusion of another. While bikers and joggers have many miles of recreational paths to access, the construction of this 0.2 mile section will drastically impact wind flow, ending free flight for many members of the soaring community and ruining the only soaring site in Carpinteria.

3. The scope of the EIR should address ways to avoid massive earthwork at this site. The Certified Santa Barbara County Coastal Land Use Plan adopted in 1982 states "recreational uses on oceanfront lands, both public and private, that do not require extensive alteration to the natural environment...shall have priority over uses requiring substantial alteration". According to this guidance, free flight at Bates should have priority over this massive earthwork Project because our recreational uses do not require alteration to the existing natural environment.

4. The current design is focused on providing a “blue ocean view” rather than a safe, useful, long-lasting solution. There is no plan for maintaining this bike path after it's constructed on a 100 year old eroding seawall, where a railroad and highway have already failed. There is also no plan for managing traffic in the already congested and incredibly steep Rincon Beach parking lot where the bike path terminates. This Project needs to be reassessed from the perspective of the very groups it's trying to help.

5. We request project alternatives that preserve the ridge at Bates. A possible option is constructing the Bike Path on the Northside of the ridge, either along the highway or on the North side of the highway. The use of barriers along the highway shoulder, for

example, would be consistent with the bike path design that exists from Rincon to Ventura, and would be more cost effective while preserving the natural environment.

edited

Nick Bobroff

From: Randy Liggett <rliggett1960@icloud.com>
Sent: Monday, November 09, 2020 11:43 AM
To: Nick Bobroff
Subject: Bates flying site

EXTERNAL EMAIL

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Dear sir I am weighting in support of the local flying community to save the bates cliff flying site I have flown from that spot since 1975 when I began flying at age fifteen. I have seen many sites be taken from the flying community over the years. Please don't let happen to this one. If you look at what Torrey Pines has done for the cities of Del Mar and La Jolla. It draws pilots from all over the world and bates has the potential to do the same. Thank you for your consideration, Randall Liggett 707-391-4516

Sent from my iPad

Nick Bobroff

From: Ramon Roullard <roullard11@gmail.com>
Sent: Tuesday, November 17, 2020 10:12 AM
To: Nick Bobroff
Subject: Bates

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Save Bates! Don't level it for a bike path!

Thank you!

-Ramón

Nick Bobroff

From: Stephen Crye <stevecrye@gmail.com>
Sent: Monday, November 30, 2020 12:16 PM
To: Nick Bobroff
Subject: Please work with us to allow flying at Bates

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi,

I'm confident that if CalTrans will work with the free flight community we can have both a bike path and a hill that will still provide the airflow we need to continue flying at Bates.

But the proposed design as it stands right now will completely ruin the lift at Bates. So I'm begging you, let's take the time to make this work for pilots and cyclists alike.

Thanks,

Steve Crye
El Paso, TX

•○•○•○•○•○•○•○•○•○•○•○•○•○•○•○•○•
Stephen T. Crye
915-412-5769 (Google Voice)
sent from phablet, please excuse typos and brevity.

Nick Bobroff

From: Shanon Lea Searls <lea.shanon@gmail.com>
Sent: Tuesday, November 17, 2020 4:41 PM
To: Nick Bobroff
Subject: Objection to Rincon Bike Path Project

****EXTERNAL EMAIL****

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Hi Nick,

I am writing to quickly say how much I love Bates and I don't agree with the proposed project for the Rincon Bike Path. Please accept this email as my formal objection as it will displace 156,000 tons of soil effectively ruining the flight ridge. What studies have been conducted to estimate the negative effects this will have?

Why don't you build stairs instead so folks can enjoy the sand and walk on the beach? Or please consider the north side of Bates for the flight path.

Kind regards,
Shanon

Shanon Lea Searls
303.887.7346

Nick Bobroff

From: Sarah Saturday <saturday.sarah@gmail.com>
Sent: Monday, November 30, 2020 3:22 PM
To: Nick Bobroff
Subject: Comments on Bike Path Project at Bates

EXTERNAL EMAIL

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Hello,
My name is Sarah Saturday and I am a paragliding pilot that learned how to fly in Santa Barbara. Bates was my first ever coastal flight and it was extremely memorable and an invaluable learning opportunity. I have since returned and flown the site multiple times. Santa Barbara is a paragliding Mecca that brings pilots from all over the world, contributing to the tourism economy and expanding opportunities for coastal recreation. Building a bike path that will drastically reshape the bluff will create a dangerous or non-flyable zone for all pilots who wish to fly here. I am emailing to express my concern that a bike path will drastically reduce the visitors to this area and harm the paragliding community. Thank you for taking the time to read this message.

Regards,
Sarah Saturday

Nick Bobroff

From: Scott Schoenfeld <scottschoenfeld@hotmail.com>
Sent: Saturday, November 21, 2020 6:13 AM
To: Nick Bobroff
Subject: Bates Beach Bike Path

****EXTERNAL EMAIL****

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Good Day Nick,

I grew up in Carp and regularly come home to enjoy family, friends, beach, and a little paragliding.

A bike path to Rincon is a fine idea and I fully support this. Certainly, I remember the days when Rincon was little known to non-locals and only accessible by car. Riding to the beach from town by bike seems something I would do with my family, and this may attract both locals and tourists to a great spot on the California Coast. BUT, I do hope the impact to the Bates ridge soaring for Paragliders will be considered. With a little careful planning, by either dropping the path toward the water before the launch area or keeping at the top of the bluff till past the launch may allow both bicyclists and Paragliders to enjoy that great spot together.

Please engage with the local pilots to work on a plan to meet both uses.

Thanks,
Scott Schoenfeld
Carp High ‘91

Get Outlook for iOS

Nick Bobroff

From: Sangwon Suh <sangwon@ucsb.edu>
Sent: Monday, November 30, 2020 10:11 AM
To: Nick Bobroff
Subject: Bates bike path

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Dear Mr. Bobroff,

I hope that this email finds you well despite the circumstances. This is Sangwon Suh, living in Goleta. I am sending you this email to share my humble opinion on the new proposal to construct a bike path around the Bates / Rincon bluff area.

As an environmental scientist and a nature lover, I applaud the effort to make the site more accessible to the public. Over the past years, I learned to appreciate the beauty of the view from Bates / Rincon bluff, while I thought that the remnants of the cement concrete blocks on the slope were an eyesore.

I happened to be a paragliding pilot and I am sure that you are aware of the concerns raised by some of my fellow paragliding pilots. There certainly is a wide-spread concern among paragliders, as the proposed plan may permanently damage the soarability of the site.

In my view, however, no development project can satisfy every single stakeholders and I trust that whatever the authority decides for the benefits of the public, it will be an improvement. I am writing this to you not as an attempt to sway the decision from one to another but to support and appreciate the transparent and open dialogue amongst all stakeholders.

I believe that the committee will make the decision taking all the voices into their consideration. Thank you for your willingness to listen to us.

Best, Sangwon

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_/ _/ _/ _/ _/ _/ _/ _/ _/ _/ _/ _/
Sangwon Suh, Ph.D.
Professor

Director, CLiCC Initiative | Suhstainability Lab
3422 Bren Hall
Bren School of Environmental Science and Management
University of California

Santa Barbara, CA 93106-5131
Phone: (805) 893-7185
Fax: (805) 893-7612

2018 Highly Cited Researcher
LinkedIn | Google Scholar | Publons

Sent from my iPhone

apcd air pollution control district
SANTA BARBARA COUNTY

November 25, 2020

Nick Bobroff
City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: Santa Barbara County Air Pollution Control District Response to Notice of Preparation of a Draft Environmental Impact Report for Rincon Trail Project, 19-2015-CUP/CDP

Dear Nick Bobroff:

The Santa Barbara County Air Pollution Control District (District) appreciates the opportunity to provide comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Rincon Trail Project. The applicant proposes to construct and operate a multi-use trail approximately 2,800 feet long and 16 feet wide with a 160 feet long bridge over the railroad tracks. Grading is estimated at 104,000 cubic yards (CY) of cut, 10,300 CY of fill, and 94,100 CY of export. It is anticipated that construction of the proposed project would commence in March 2022 and reach completion by March 2024, for a total construction window of approximately two years. The project site is located at the end of Carpinteria Avenue in the City of Carpinteria and Rincon Beach County Park in the County of Santa Barbara.

District staff reviewed the NOP of a Draft EIR and concurs that air quality impacts should be addressed in the EIR. The District's guidance document, entitled *Scope and Content of Air Quality Sections in Environmental Documents* (updated June 2017), is available online at www.ourair.org/land-use. This document should be referenced for general guidance in assessing air quality impacts in the Draft EIR.

The EIR should evaluate the following potential impacts related to the Rincon Trail Project:

1. **Construction Impacts.** The proposed project will involve air quality impacts associated with heavy equipment use for earth-moving activities and bridge construction, as well as truck trips associated with the export of soils, equipment and materials delivery, and employee commute. Common earthwork equipment, such as dozer, excavator, dump truck, roller, skid steer, and tractor, will be used for trail construction, v-trench construction, and installation of fencing. Two cranes will be required for the installation of the prefabricated bridge. The bridge foundation will be constructed using deep piles. The EIR should include a description and quantification of potential air quality impacts, including criteria pollutant emissions and greenhouse gas emissions, associated with construction activities for the proposed project. The District's June, 2017 *Scope and Content* document, Section 6, presents recommended mitigation measures for fugitive dust and equipment exhaust emissions associated with construction projects. Construction mitigation measures should be enforced as conditions of approval for the project. The Draft EIR should

include a Mitigation Monitoring and Reporting Plan that explicitly states the required mitigation and establishes a mechanism for enforcement.

In addition, please be advised that the project will be subject to the following **regulatory requirements**:

1. All portable diesel-fired construction engines rated at 50 bhp or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or District permits prior to grading/building permit issuance. **Construction engines with PERP certificates are exempt from the District permit, provided they will be on-site for less than 12 months.** If a District permit is required, proof of receipt of the District permits shall be submitted by the applicant to planning staff. *The District permit process can take several months*. *To avoid delay, the applicant is encouraged to submit their Authority to Construct permit application to the District as soon as possible, see www.ourair.org/permit-applications to download the necessary permit application(s).*

2. Two engine cranes are subject to CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation. For more information on applicable requirements of the Off-Road Regulation, please visit the following website: www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. In addition, the upper engine on a crane must have either a statewide Portable Equipment Registration Program (PERP) certificates or District permits prior to grading/building permit issuance. Two engine cranes are eligible for registration in PERP provided they will be on-site for less than 12 months.

3. The application of architectural coatings, such as paints, primers, and sealers that are applied to buildings or stationary structures, shall comply with District Rule 323.1, *Architectural Coatings* that places limits on the VOC-content of coating products.

4. Asphalt paving activities shall comply with District Rule 329, *Cutback and Emulsified Asphalt Paving Materials*.

5. Construction/demolition activities are subject to District Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities*. This rule establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites, includes measures for minimizing fugitive dust from on-site activities, and from trucks moving on- and off-site. Please see www.ourair.org/wp-content/uploads/rule345.pdf. Activities subject to Rule 345 are also subject to Rule 302 (*Visible Emissions*) and Rule 303 (*Nuisance*).

6. If the project area to be disturbed: a) is located in a geographic ultramafic rock unit; b) has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the owner/operator; or c) is discovered by the owner/operator, a registered geologist, or the Air Pollution Control Officer to have naturally-occurring asbestos, serpentine, or ultramafic rock after the start of any construction or grading; then appropriate abatement measures must be undertaken pursuant to the requirements of the Air Resources Board Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations (see www.arb.ca.gov/toxics/asbestos/asbestos.htm).

7. At all times, idling of heavy-duty diesel trucks should be minimized; auxiliary power units should be used whenever possible. State law requires that:
   - Drivers of diesel-fueled commercial vehicles shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location.
   - Drivers of diesel-fueled commercial vehicles shall not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle. Trucks with 2007 or newer model year engines must meet additional requirements (verified clean APS label required).
   - See www.arb.ca.gov/noidle for more information.

In addition, the District recommends that the following **best practices** be applied to the project as appropriate:

1. To reduce the potential for violations of District Rule 345 *(Control of Fugitive Dust from Construction and Demolition Activities)*, Rule 302 *(Visible Emissions)*, and Rule 303 *(Nuisance)*, standard dust mitigations (**Attachment A**) are recommended for all construction and/or grading activities. The name and telephone number of an on-site contact person must be provided to the District prior to grading/building permit issuance.

2. The State of California considers particulate matter emitted by diesel engines carcinogenic. Therefore, during project grading, construction, and hauling, construction contracts must specify that contractors shall adhere to the requirements listed in **Attachment B** to reduce emissions of particulate matter (as well as of ozone precursors) from diesel equipment. Recommended measures shall be implemented to the maximum extent feasible. Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans, and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles onsite and have it available for inspection.

We hope you find our comments useful. We look forward to reviewing the Draft EIR. Please contact me at 961-8873 or by e-mail at HoD@sbcapcd.org if you have questions.

Sincerely,

Desmond Ho

Desmond Ho
Air Quality Specialist
Planning Division

Attachments: Fugitive Dust Control Measures
Diesel Particulate and NO_x Emission Measures

cc: Planning Chron File

air pollution control district
SANTA BARBARA COUNTY

ATTACHMENT A
FUGITIVE DUST CONTROL MEASURES

These measures are required for all projects involving earthmoving activities regardless of the project size or duration. Projects are expected to manage fugitive dust emissions such that emissions do not exceed APCD's visible emissions limit (APCD Rule 302), create a public nuisance (APCD Rule 303), and are in compliance with the APCD's requirements and standards for visible dust (APCD Rule 345).

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60 minute period. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required when sustained wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- Onsite vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than one day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, OR using roll-compaction, OR revegetating, OR by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved should be completed as soon as possible.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by onsite operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to grading/building permit issuance and/or map clearance.

PLAN REQUIREMENTS: All requirements shall be shown on grading and building plans and/or as a separate information sheet listing the conditions of approval to be recorded with the map. **Timing**: Requirements shall be shown on plans prior to grading/building permit issuance and/or recorded with the map during map recordation. Conditions shall be adhered to throughout all grading and construction periods.

MONITORING: The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

air pollution control district
SANTA BARBARA COUNTY

ATTACHMENT B
DIESEL PARTICULATE AND NO_x EMISSION REDUCTION MEASURES

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible.

The following measures are required by state law:

- All portable diesel-powered construction equipment greater than 50 brake horsepower (bhp) shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- Fleet owners of diesel-powered mobile construction equipment greater than 25 hp are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation (Title 13, California Code of Regulations (CCR), §2449), the purpose of which is to reduce oxides of nitrogen (NOx), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
- Fleet owners of diesel-fueled heavy-duty trucks and buses are subject to CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (Title 13, CCR, §2025), the purpose of which is to reduce DPM, NOx and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. For more information, see www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.
- All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Off-road vehicles subject to the State Off-Road Regulation are limited to idling no more than five minutes. Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes, unless the truck engine meets the optional low-NOx idling emission standard, the truck is labeled with a clean-idle sticker, and it is not operating within 100 feet of a restricted area.

The following measures are recommended:

- Diesel equipment meeting the CARB Tier 3 or higher emission standards for off-road heavy-duty diesel engines should be used to the maximum extent feasible.
- On-road heavy-duty equipment with model year 2010 engines or newer should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible. Electric auxiliary power units should be used to the maximum extent feasible.
- Equipment/vehicles using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, should be used on-site where feasible.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.
- Construction truck trips should be scheduled during non-peak hours to reduce peak hour emissions whenever feasible.
- Proposed truck routes should minimize to the extent feasible impacts to residential communities and sensitive receptors.
- Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows.

PLAN REQUIREMENTS AND TIMING: Prior to grading/building permit issuance and/or map recordation, all requirements shall be shown as conditions of approval on grading/building plans, and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout all grading and construction periods. The contractor shall retain the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles onsite and have it available for inspection.

MONITORING: The Lead Agency shall ensure measures are on project plans and/or recorded with maps. The Lead Agency staff shall ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

Nick Bobroff

From: todd.crowley@yahoo.com
Sent: Monday, November 16, 2020 8:23 PM
To: Nick Bobroff
Subject: Bates

****EXTERNAL EMAIL****

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Dear Mr. Bobroff:

I write to voice sincere opposition to the proposed development that would change the topography of the Bates bluff.

The Bates free flight site is unique on the California Coast, and historically important for development of hang gliding and paragliding techniques that have improved performance, safety, and enjoyment for thousands locally and around the world.

I live in Utah, yet enjoy visiting Ventura annually to fly Bates.

Altering the slope will impair severely the wind currents and patterns such that not only will Bates be less flyable, if flyable at all, but since launching and ascending at Bates is necessary to access the ridges to the East, access to the ridge will be lost also.

I support property rights and also public access to the Coast.

I urge you to seek and implement a solution that enables the proposed access and use, but without altering Bates such that free flight use and enjoyment is lost forever.

Thank you for your consideration of this point of view.

Sincerely,

Todd Crowley, J.D.
United States Hang Gliding and Oaragliding Association Pilot #102302
(801) 910-8093

Nick Bobroff

From: Thomas Livingstone <tlphoto@frontier.net>
Sent: Tuesday, November 17, 2020 3:25 PM
To: Nick Bobroff
Subject: Bates/Rincon Bike path

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Good Afternoon,

As a part time resident of Carpinteria, I would like to chime in on the current proposal for the bike path extension. I am all for connecting the paths togethers through the Bates/Rincon area, However, as a paraglider pilot who has be flying at Bates for almost 30 years, I wish and hope that you consider what an incredible resource that having a ridge soaring site in Carpinteria is.
I know that paragliding is a relatively small fringe sport but its the small things that add to the greater whole which make Carpinteria so special. I'm not sure if there is a work around but once its gone it will be gone for good!

Thanks for your hard work on the project!

Sincerely, Thomas Livingstone

Nick Bobroff

From: Vince Semonsen <vsemonsen@gmail.com>
Sent: Tuesday, November 17, 2020 10:00 AM
To: Nick Bobroff
Subject: Re: Reminder: Rincon Trail EIR Scoping Meeting, Tuesday, November 17th at 4:30 p.m.

****EXTERNAL EMAIL****

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thanks Nick!
My only comment would be to request that the EIR try to address the hang gliders concerns with cutting back the hillsides.
Vince Semonsen

On Mon, Nov 16, 2020 at 4:52 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

> Good evening,
>
> This is a reminder that the City of Carpinteria will be hosting an environmental scoping meeting tomorrow afternoon (Tuesday, November 17th) beginning at 4:30 p.m. for the Rincon Multi-Use Trail Environmental Impact Report (EIR).
>
> If you would like additional information on the proposed project or information about your options for how to join the Zoom Webinar for the scoping meeting, please refer to the Notice of Preparation (NOP) released for this effort, available on the City's website at the following location:
>
> https://carpinteriaca.gov/wp-content/uploads/2020/10/FINAL_Carpinteria_Rincon_Trail-NOP__Attachment_A.pdf
>
> Alternatively, you may also join the Zoom Webinar directly through this link:
>
> https://us02web.zoom.us/j/85412486344
>
> Thank you,
>
> Nick Bobroff, Principal Planner
>
> Community Development Department
>
> (805) 755- 4407

Nick Bobroff

From: Ciuffetelli, Anthony <Anthony.Ciuffetelli@ventura.org>
Sent: Monday, November 30, 2020 10:07 AM
To: Nick Bobroff
Subject: Ventura County Agency Comments for Rincon Multi-Use Trail
Attachments: RMA 19-012-1_APCD.pdf; RMA 19-012-1_WPD.pdf; RMA 19-012-1_Cult_Heritage.pdf; RMA 19-012-1_EHD.pdf

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hello Mr. Bobroff,

Attached to this e-mail are the following comments regarding the Notice of EIR preparation:
-VC Air Pollution Control District
-VC Watershed Protection District
-VC Environmental Health Division
-VC Planning Division (Cultural Heritage section)

Please feel free to contact me with any questions regarding this submission. Responses to these comments should be sent directly to the commenter with a copy to me.

Regards,

Anthony Ciuffetelli
Ventura County Planning Division
Planning Programs
(805)654-2443

Ventura County
Air Pollution
Control District

669 County Square Dr
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

Dr. Laki Tisopulos, P.E.
Air Pollution Control Officer

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Nick Bobroff, Principal Planner

DATE: November 24, 2020

FROM: Nicole Collazo, Air Quality Specialist

SUBJECT: Comment Letter on Notice of Preparation of EIR for the Carpinteria Rincon Multi-Use Trail Project

Air Pollution Control District (APCD) staff has reviewed the subject Notice of Preparation (NOP) of a draft environmental impact report (EIR), which will identify any potential environmental impacts, for the construction and operation of the project mentioned above. The Lead Agency for the project is the City of Carpinteria.

GENERAL COMMENTS

The project lies within the jurisdiction of Santa Barbara County and the Santa Barbara County Air Pollution Control District (SBCAPCD). However, due to the construction operations occurring immediately adjacent to a residential community within Ventura County, it is suggested that emission reduction measures and fugitive dust control measures are recommended for construction operations occurring on the eastern end of the construction site to avoid dust-driven or odor-driven violations from complaints within Ventura County.

A reference document such as the Ventura County Air Quality Assessment Guidelines (AQAG), or SBCAPCD's guidelines for emission reduction measures for construction emissions are encouraged. We note that the AQAG has not been updated since 2003, serves as a guidance document, and greater reduction measures can be recommended for construction mitigation, including using newer, cleaner diesel Tier 3 or Tier 4 off-road engines and/or using on-road construction vehicles of year 2010 model or greater. These reduction measures can serve as a standard condition of approval for discretionary permit with Lead Agency in the case there are many sensitive receptors in the vicinity and/or if construction is expected to occur over several months. The diesel particulate matter (DPM) emissions from diesel-powered construction and grading equipment is a considered a toxic

air contaminant by the EPA and accounts for 70-80% of the overall cancer risk from mobile source emissions (CARB 2005 Land Use Handbook, MATES IV Study, respectively).

Thank you for the opportunity to comment on the project NOP. If you have any questions, you may reach me at nicole@vcapcd.org.

CULTURAL HERITAGE BOARD

county of ventura

November 6, 2020

Anthony Ciuffetelli
Ventura County Planning Division
Sent via email: Anthony.Ciuffetelli@ventura.org

Subject: **Request for Comment on Carpinteria Rincon Multi-Use Trail Project RMA Reference #19-012-1**

Dear Mr. Ciuffetelli,

Ventura County Cultural Heritage Board (CHB) Staff are in receipt of the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the above-referenced projects. Thank you for the opportunity to review and comment on the proposed telecommunications tower. We have researched the subject site, as well as property within the vicinity, and found the following:

- No listed or known historic resources eligible for listing are located on or near the subject site;
- Areas in the vicinity of the subject site do exhibit a low potential to contain paleontological resources;
- Areas in the vicinity of the subject site exhibits a high likelihood of containing archaeological resources (very sensitive).

A previous survey of the northern half of Ventura County indicated that "year-round settlements of Native Americans are located in areas of moderate winter climate, perennial water, and major plant communities for sustenance. […] Areas rich in natural resources, especially foods and implement materials, were sites of seasonal camp and food preparation sites."[1] We understand the subject area for the proposed project is located in the vicinity of natural waterways, including the Pacific Ocean and Rincon Creek. Due to the aforementioned historical practices, combined with the project site's proximity to these features, these activities could result in the subject area having a high sensitivity for tribal cultural resources. Therefore, it is recommended that outreach be conducted with relevant Native American tribes pursuant to federal and State law.

[1] James, Susanne M., *The North Half of Ventura County: Scenic, Biological and Cultural Resources*, April 1986.

Due to the potential paleontological and archaeological sensitivity of the subject site, implementation of the project could encounter previously undiscovered or unrecorded paleontological and archaeological sites, materials, and resources. Ground-disturbing activities have the potential to damage or destroy previously undiscovered or unrecorded paleontological and archaeological resources. Therefore, the following measures are recommended to reduce impacts to paleontological resources to the greatest extent feasible:

- The Applicant should retain a paleontological consultant or professional geologist to monitor all subsurface grading, trenching, or construction activities on the subject site;
- If any paleontological remains are uncovered during ground disturbance or construction activities, the Applicant should:
    a. Cease operations and ensure the preservation of the area in which the discovery was made;
    b. Notify the Lead Agency immediately;
    c. Obtain the services of a qualified paleontological consultant or professional geologist to assess the find and provide a report that assesses the resources and sets forth recommendations on the proper disposition of the site;
    d. Provide the paleontological report to the Lead Agency;
    e. Obtain the Lead Agency's written concurrence with the recommended disposition of the site before resuming development; and
    f. Implement the agreed upon recommendations.

Additionally, based on the subject site's high degree of sensitivity related to archeological resources, the following measures are recommended to reduce impacts to archaeological resources to the greatest extent feasible. Moreover, it is recommended that outreach be conducted with relevant Native American tribes to determine if known tribal cultural resources are present in the subject site area.

- The Applicant should retain a Native American monitor to monitor all subsurface grading, trenching, or construction activities on the subject site;
- If any archaeological or historical artifacts are uncovered during ground disturbance or construction activities, the Applicant should:
    a. Cease operations and ensure the preservation of the area in which the discovery was made;
    b. Notify the Lead Agency immediately;
    c. Obtain the services of a qualified archaeologist who shall assess the find and provide recommendations on the proper disposition of the site in a written report format;
    d. Provide the report to the Lead Agency;

e. Obtain the Lead Agency's written concurrence with the recommended disposition of the site before resuming development; and
f. Implement the agreed upon recommendations.

- Consistent with Section 7050.5 of the California Health and Safety Code, if any human burial remains are encountered during ground disturbance or construction activities, the Applicant should:
    a. Cease operations and ensure the preservation of the area in which the discovery was made;
    b. Immediately notify the County Coroner and the Lead Agency;
    c. Obtain the services of a qualified archaeologist and, if necessary, Native American Monitor(s), who shall assess the find and provide recommendations on the proper disposition of the site in a written report format;
    d. Provide the report to the Lead Agency;
    e. Obtain the Lead Agency's written concurrence with the recommended disposition of the site before resuming development; and
    f. Implement the agreed upon recommendations.

Thank you again for the opportunity to comment on the proposed project. If you require anything further or have questions regarding our findings, please do not hesitate to contact Dillan Murray at (805) 654-5042 or at Dillan.Murray@ventura.org.

Sincerely,



Dillan Murray
Cultural Heritage Program Planner

CC: Denice Thomas, Planning Programs Manager, Ventura County Planning Division
Case File

RESOURCE MANAGEMENT AGENCY
county of ventura

Environmental Health Division
Charles R. Genkel
Director

November 25, 2020

City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013
ATTN: Nick Bobroff, Principal Planner

Carpinteria Rincon Trail, Environmental Document Review – Notice of EIR Preparation, (RMA REF # 19-012-1)

Ventura County Environmental Health Division (Division) staff reviewed the information submitted for the subject project.

Proposed Carpinteria Rincon Multi-Use Trail (Project) includes the construction of:

- A shared use trail;
- A clear-span bridge;
- A stormwater drainage collection system with new drain outlets to the ocean up to the western end of Rincon Beach County Park and the Ventura County Line in Santa Barbara County.

The Division provides the following comments:

1. Project includes the construction and use of three new stormwater drainage outlets south of the Union Pacific Railroad alignment and adjacent to the Rincon Creek outlet, which is a sampling point for the Division's Ocean Water Quality Monitoring Program (OWQMP). The additional drainage outlets near the Division's OWQMP sampling point at Rincon Creek outlet may result in potentially significant impacts, both during and after construction, due to exceedances of bacteriological standards.

2. The construction and use of the stormwater drainage outlets have the potential for proliferation of vectors of disease, including mosquitoes. Stormwater structures should be designed and maintained to prevent the harborage and breeding of vectors such as mosquitoes, as well as to minimize the potential health impacts created by these vectors. The Division's Vector Control and Mosquito Abatement Program staff respond to any complaints related to these potential vectors on the Ventura County side of Rincon Point.

800 South Victoria Avenue, Ventura, CA 93009-1730 (805) 654-2813 FAX (805) 654-2480
Internet Web Site Address: www.vcrma.org/divisions/environmental-health

If you have any questions, please contact me at (805) 654-2830 or Ashley.Kennedy@ventura.org.



Ashley Kennedy, R.E.H.S.
Land Use Section
Environmental Health Division

PUBLIC WORKS
VENTURA COUNTY

WATERSHED PROTECTION
WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

M E M O R A N D U M

DATE: November 13, 2020

TO: Anthony Ciuffetelli RMA Case Planner
County of Ventura

FROM: Alex Hill, Engineer II – Advanced Planning Section

SUBJECT: RMA19-012 Carpinteria Rincon Trail
Zone 4
Watershed Protection Project Number: WC2019-0081

Pursuant to your request dated October 30, 2020, this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue in the City of Carpinteria to the western end of Rincon Beach County Park and the Ventura County Line in Santa Barbara County.

PROJECT DESCRIPTION:

Watershed Protection previously provided a “No Comment” response on 11/6/2019 and the following comments provide context for that rationale. The proposed Carpinteria Rincon Trail would extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria, to Rincon Beach County Park, in Santa Barbara County. The proposed shared-use trail would be 16-feet wide (10- foot wide path with 3-foot wide paved shoulder along both sides) and approximately 2,800-feet long and would include a clear-span bridge over the UPRR alignment. The bridge would be approximately 160-feet-long, with a width of between 14-feet and 16- feet (clear width, measured inside the bridge rails). Earthwork for the trail construction would involve 104,000 cubic yards of cut, 10,300 cubic yards of which would be used for fill on-site and 94,100 cubic yards would be exported off-site. A storm drainage collection system is proposed, with new drain outlets to the ocean. The new, shared-use trail would provide a strategic addition to Carpinteria's Coastal Vista Trail that upon completion, would connect Padaro Lane to the west and Rincon Beach County Park to the east. In addition to providing critical improvements in public safety, the completion of this trail segment would provide improved public coastal access and recreational opportunities, and enhancement of non-vehicular travel alternatives to the region’s significant coastal resources.

WATERSHED PROTECTION DISTRICT COMMENTS:

The following comments are intended to provide context for the application review process, and they require no further action.

Flood Control Facilities / Watercourses – Ventura County Watershed Protection District

1. The project is located to the West of Highway 101 within Santa Barbara and Ventura Counties. There are no proposed direct connections to any Ventura County Watershed Protection District Jurisdictional redline channel. Project drainage will be conveyed to three (3) existing and three (3) proposed storm drains that will discharge into the Pacific Ocean, therefore there is no impact to WP facilities.

Hydraulic Hazards – FEMA

2. The project site is in a location identified by the Federal Emergency Management Agency (FEMA) as an area of minimal flood hazard Zone X unshaded. This is evidenced on FEMA Map Panel 06083C1438H effective September 28, 2018. The proposed development is therefore, deemed to be Less than Significant for Hydraulic Hazards - FEMA.

If you have any questions, please feel free to contact me by email at Alexander.Hill@ventura.org or by phone at (805) 654-3795.

END OF TEXT

Nick Bobroff

From: Horn, Wesley@Coastal <Wesley.Horn@coastal.ca.gov>
Sent: Wednesday, November 04, 2020 1:00 PM
To: Nick Bobroff
Subject: Rincon Trail NOP

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hi Nick,

I hope you have been doing well. I know you are really busy but I received your email about the NOP for the Rincon Trail and had a chance to review and I was hoping to talk to you real quick about the project. Are you possibly free sometime over the next few days to talk about this real quick?

I have an item on the Commission agenda for tomorrow, but it will likely go consent. I'm generally free Thursday and Friday so if there is a time that works best for you let me know.

Thanks,
Wes

Nick Bobroff

From: Horn, Wesley@Coastal <Wesley.Horn@coastal.ca.gov>
Sent: Monday, November 30, 2020 3:02 PM
To: Nick Bobroff
Subject: RE: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)
Attachments: CCC Comments Carpinteria Trail SMND.pdf

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hello Nick,

Thank you for providing the opportunity to comment on the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project. Commission staff had the opportunity to review this NOP and the project here is the same project reviewed and commented on by Commission staff back in December 2019. Commission staff's concerns regarding grading and landform alteration, environmentally sensitive habitat area (ESHA), public access, and water quality are still relevant and as such our December 2019 comment letter is attached to this email for consideration for this NOP.

Commission staff would appreciate the opportunity to meet with City staff and further discuss our concerns what possible revisions can be made to the project to minimize impacts to coastal resources.

A hard copy of this email correspondence and attached letter will be sent by mail and should be arriving shortly.

Please let us know if you have any questions,

Wesley Horn
Transportation Program Analyst | California Coastal Commission
89 South California Street, Ventura, CA 93001
Wesley.Horn@coastal.ca.gov| (805) 585-1800

Every Californian should conserve water. Find out how at:
SaveOurWater.com · Drought.CA.gov

From: Nick Bobroff <nickb@ci.carpinteria.ca.us>
Sent: Thursday, October 29, 2020 7:40 PM
To: Nick Bobroff <nickb@ci.carpinteria.ca.us>
Subject: Notice of Preparation (NOP) for Carpinteria Rincon Multi-Use Trail Environmental Impact Report (EIR)

The City of Carpinteria has released a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Rincon Multi-Use Trail project.

The City is soliciting comments from the public concerning the contents and analysis to be considered in the EIR for the proposed project. The scoping comment period will run from October 30, 2020 to November 30, 2020 at 5:00 p.m. A virtual public scoping meeting will be held online on Tuesday, November 17th at 4:30 p.m. via Zoom Webinar. Information on how to attend the virtual scoping meeting is included in the NOP.

The Notice of Preparation and detailed project description are available on the City's Rincon Trail project webpage at:
https://carpinteria.ca.us/public-works/engineering-division/rincon-multi-use-trail/
A copy of the NOP and project description is also attached to this email.

Should you have any questions about the proposed project or this NOP, please feel free to contact me.
Thank you,
Nick Bobroff, Principal Planner
Community Development Department
(805) 755- 4407

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT OFFICE
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

December 2, 2019

Nick Bobroff, Senior Planner
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

RE: Draft Subsequent Mitigated Negative Declaration for the Carpinteria Rincon Trail (Conditional Use Permit/Coastal Development Permit 19-2015-CUP/CDP)

Dear Mr. Bobroff:

Commission staff has reviewed the Draft Subsequent Mitigated Negative Declaration (SMND) regarding the proposed realignment and redesign of the Carpinteria Rincon Trail located within the City of Carpinteria and Santa Barbara County, and we appreciate the opportunity to provide comments for your consideration. The subject SMND modifies the previously circulated Mitigated Negative Declaration (MND) for the Rincon Trail, which was subsequently approved by the City through CDP No. 15-1760, and included a 12 foot wide and 4,000 foot long shared-use trail, a 110 foot long clear-span bridge over the Union Pacific Rail Road (UPRR) alignment, 17 public parking spaces and a rest area with three picnic tables, signage, lighting and a storm drainage collection system including an on-site bioswale and a 5,000 gallon cistern to provide water for native landscaping during dry months. The original project also included 30,000 cubic yards of cut, 7,000 cubic yards of fill and 23,000 cubic yards of export. As described within the SMND, the previously approved project is proposed to be modified to include a 16 foot wide and approximately 2,800 foot long shared-use trail, a 160 foot long clear-span bridge over the UPRR alignment, and a storm drainage collection system including new drain outlets to the ocean. The project, as proposed to be amended, would also include 104,000 cubic yards of cut, 10,300 cubic yards of fill and 94,100 cubic yards of export.

The SMND states that the proposed realignment is necessary to avoid areas with historic landslides, to eliminate the need for retaining walls, to shorten the path length, and to ensure accessibility of the trail for persons with disabilities pursuant to Americans with Disabilities Act (ADA) and Architectural Barriers Act requirements. Despite these improvements, the proposed project to realign and redesign the Rincon Trail raises issues regarding grading and landform alteration, native vegetation communities, public access, and water quality. The entire project is located in the Coastal Zone, but spans both the jurisdiction of the City of Carpinteria (City) and County of Santa Barbara (County). Because the Commission has certified a LCP for both the City and County, the standard of review for the proposed project would be the respective LCP policies and provisions.

Grading and Landform Alteration

The previously approved project included 30,000 cubic yards of cut, 7,000 cubic yards of fill, and 23,000 cubic yards of export while the proposed realignment and redesign includes 104,000 cubic yards of cut, 10,300 cubic yards of fill and 94,100 cubic yards of export. This is a 77,300 cubic yard increase in the total amount of grading. The City's LCP contains Coastal Act Section 30251, which requires that

the scenic and visual qualities of coastal areas shall be considered and protected and that new development is sited and designed to minimize alteration of natural land forms and also subordinate to the character of its setting. The proposed project would significantly increase the amount of grading and landform alteration at the subject site. While grading impacts were analyzed in the draft SMND, it was determined that with the incorporation of mitigation measures the proposed project would not result in any significant impacts as a result of grading. However, in order to determine consistency with the certified LCP, siting and design alternatives to minimize grading and landform alteration must be analyzed. Furthermore, because the previously approved project would require significantly less grading, it appears that there are other feasible design alternatives that minimize the amount of grading and landform alteration consistent with Coastal Act Section 30251.

ESHA

Coastal Act Section 30240, which is incorporated into the City's LCP, requires that Environmentally Sensitive Habitat Areas (ESHA) be protected to the maximum extent feasible. The draft SMND includes an analysis of temporary and permanent impacts to various vegetation communities; however, the analysis should specifically identify and analyze potential impacts to ESHA and should evaluate project alternatives that would avoid impacts to the maximum extent feasible. Only if no feasible project alternative exists for avoidance then the alternative that minimizes impacts to the maximum extent feasible should be selected and mitigation should be required.

Public Access

The previously approved project included the construction of 17 public parking spaces and a rest area with picnic tables at the western terminus of the Rincon Trail, located along Carpinteria Avenue. However, the proposed redesign and realignment does not include the construction of these public access amenities, and the draft SMND indicates that instead, the existing dirt lot would continue to provide informal parking. However, based upon the information included within the SMND, it is unclear which portions of the dirt areas along Carpinteria Avenue are intended to function as parking for the proposed trail, and if those areas are actually available for public use. In order to facilitate maximum public access to the Rincon Trail, and to ensure consistency with the public access policies of the LCP, the final SMND should analyze project alternatives that include construction of the previously approved, or similar, public access components.

Water Quality

The draft SMND states that because there are no parking lots or other facilities that would result in the creation of impervious surfaces , the project would be considered exempt from post-construction water quality control requirements pursuant to California Central Coast Regional Water Quality Control Board Resolution No. R3-2013-0032. As such, the previously approved storm drainage collection system, including the on-site bioswale and a 5,000 gallon cistern, are no longer proposed. Instead, the proposed project would include a drainage system that would convey storm water run-off from the trail surface to the ocean via outfalls. No storm water treatment components are proposed. Section 30231 of the Coastal Act, as incorporated into the City's LCP, requires development to maintain the quality of coastal waters through minimizing the adverse effects of waste water discharges and entrainment and controlling runoff. In order to ensure consistency with the City's LCP, the final SMND should include an analysis of project alternatives that incorporate storm water treatment components that would prevent untreated storm water from being released directly into the marine environment.

Each of the issues identified in this letter, as well as other impacts identified in the environmental review process, should be analyzed in the context of alternative project designs. As described above, an analysis of project alternatives is critical to ensure that adverse impacts to coastal resources are avoided to the maximum extent feasible, and that unavoidable impacts are minimized and mitigated. Please note that the comments provided herein are preliminary in nature. More specific comments may be appropriate as the project develops, and Coastal Commission staff requests notification of any future activity associated with this project or related projects. Again, thank you for the opportunity to comment.

Thank you for your consideration of our comments.

Sincerely,

Wesley Horn
Coastal Program Analyst

County Of Santa Barbara

Mona Miyasato
County Executive Officer

105 East Anapamu Street
Room 406
Santa Barbara, California 93101
805-568-3400 • Fax 805-568-3414
www.countyofsb.org



Executive Office

Assistant County Executive Officers
Nancy Anderson
Jeff Frapwell
Bernard Melekian
Terri Nisich

November 30, 2020

Nick Bobroff, Principal Planner
City of Carpinteria
Community Development Department
5775 Carpinteria Ave
Carpinteria, CA 93103
Email: nickb@ci.carpinteria.ca.us

RE: Notice of EIR Preparation for the Carpinteria Rincon Multi-Use Trail

Dear Mr. Bobroff:

Thank you for the opportunity to comment on the Notice of Preparation for a Environmental Impact Report for the Carpinteria Rincon Multi-Use Trail. At this time, the County submits comments from the Planning and Development Department, and Community Services Department.

If you should have further questions, please do not hesitate to contact my office directly, or Lisa Plowman, Director of the Planning and Development Department, at (805) 568-2086 or, Jeff Lindgren, Park Superintendent for the Parks Division of the Community Services Department, at (805) 568-2475.

Sincerely,

Nancy Anderson
Assistant County Executive Officer

cc: Lisa Plowman, Director of the Planning and Development Department
Jeff Lindgren, Park Superintendent, Community Services Department, Parks Division

Enclosure: Planning and Development Department Letter, dated November 23, 2020
Community Services Department Letter, dated November 24, 2020



County of Santa Barbara
Planning and Development

Lisa Plowman, Director
Jeff Wilson, Assistant Director
Steve Mason, Assistant Director

November 23, 2020

Nick Bobroff, City of Carpinteria
5775 Carpinteria Avenue,
Carpinteria, CA 9301
Email: nickb@ci.carpinteria.ca.us

Re: Carpinteria Rincon Multi-Use Trail Notice of Preparation for an Environmental Impact Report

Dear Mr. Bobroff:

The County of Santa Barbara Planning and Development Department reviewed the Notice of Preparation (NOP) for the Carpinteria Rincon Multi-Use Trail and appreciates the opportunity to provide the comments listed below.

1. **Project Description**
   - The project description should include a list of agencies and permit approvals necessary to implement the proposed project.
   - Please include the expected parking demand and proposed parking improvements. If none are proposed, please substantiate this decision.
   - Please outline the proposed maintenance plan and/or agreement between jurisdictions for the trail.
   - Please describe how bike and pedestrian trail users will safely traverse through the Rincon Beach parking lot and avoid conflict with vehicles in the parking lot (i.e. separated pathway for bikes and pedestrians, striping, etc.). Consider a pathway connection parallel to the parking lot.

2. **Trail Location**
   - The alternatives analysis should include alternative trail alignments, and weigh the ocean view versus required earthwork for the proposed alignment.
   - Provide any quantitative analysis for the impacts to wind patterns and best alternatives, if any.

3. **Landscape**
   - Please outline a basic landscape and irrigation plan and confirm how irrigation will be provided.
   - Identify an anticipated native plant palette for landscaping.

4. General

- Please ensure the EIR is circulated to UPPR for their review and comments.
- Please provide the anticipated impacts to existing vegetation and habitat communities resulting from the project.
- Please confirm that local and County Emergency services have reviewed and are satisfied with the proposed project plan, including the proposed bridge.
- Please provide additional detail in the EIR on the proposed storm drains to address visual impacts, including photosimulations and/or further aesthetic analysis. Please indicate their size, length and any other relevant information.
- The EIR should use the Santa Barbara County Environmental Thresholds in addition to those used by the City of Carpinteria. The County Environmental Thresholds Manual can be found here: https://www.countyofsb.org/plndev/permitting/environmentalreview.sbc
- The County's permit will include a policy consistency analysis with the County's Comprehensive Plan. The EIR should provide information throughout the document, and specifically in the Land Use section, to address the relevant County policies, including:

Recreation

- **Coastal Land Use Plan Policy 7-33**: To encourage walking and biking as alternatives to travel by automobile, the County shall strongly encourage development of new pedestrian and/or bicycle-friendly paths along the highway corridor. Improvements to Highway 101 shall not remove existing bikeways or pedestrian paths or preclude the development of proposed bikeways or pedestrian paths that are identified in the County's Comprehensive Plan, Coastal Land Use Plan and community plans, without providing comparable or better replacement facilities.

- **Coastal Act 30211**. Development shall not interfere with the public's right of access to the sea where acquired through use, custom, or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

- **Coastal Act Policy 30252**. The location and amount of new development should maintain and enhance public access to the coast by: (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation; (5) assuring the potential for public transit for high-intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not- overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

- **Coastal Act Policy 30210**. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners and natural resource areas from overuse.

- **Coastal Act Policy 30212.5** Wherever appropriate and feasible, public-facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

- **Coastal Act Policy 30213**. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

- **CLUP Policy 7-8**: Increased opportunities for beach access shall be provided in the Carpinteria planning area.

Geologic:

- **CLUP Policy 3-13:** Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

- **CLUP Policy 3-14:** All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Environmentally Sensitive Habitat:

- **Coastal Act Policy 30240 (b).** Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Visual:

- **Coastal Act Policy 30251.** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

- **CLUP Policy 4-3:** In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Transportation:

- **Circulation Element Policy 5C:** The County shall continue to develop programs that encourage the use of alternative modes of transportation including, but not limited to, an updated bicycle route plan, park and ride facilities, and transportation demand management ordinances.

5. Future Notices

- When they become available, please send a copy of the Draft EIR Notice of Completion, all notices of City decision-maker hearings regarding the project, and Final EIR Notice of Determination to:
    - Dan Klemann, Deputy Director of Long Range Planning, via email at dklemann@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101.
    - Ciara Ristig, Senior Planner, via email at cristig@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101
    - Tess Harris, Supervising Planner, via email at tharris@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101

Thank you for the opportunity to provide comments on the NOP. If you have any questions or require further information, please contact me at (805) 568-2086 or Mr. Klemann at (805) 568-2072.

Regards,

Lisa Plowman

Lisa Plowman, Director
Planning & Development Department

cc: Dan Klemann, Deputy Director, Long Range Planning Division
Zoe Carlson, Senior Planner, Planning and Development Department
Ciara Ristig, Senior Planner, Planning and Development Department
File

Community Services Department
Connecting People to Opportunities

George Chapjian, Director, Community Services
Sarah York Rubin, Executive Director, Office of Arts & Culture
Ryder Bailey, CPA, Chief Financial Officer, Community Services
Dinah Lockhart, Deputy Director, Housing & Community Development
Jeff Lindgren, Superintendent, Park Division
Ashley Watkins, Division Chief, Sustainability Division

November 24, 2020

Nick Bobroff, Principal Planner
City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

Subject: Carpinteria Rincon Multi-Use Trail
NOP Comments

Dear Mr. Bobroff,

Thank you for the opportunity to comment on the Notice of Preparation for the draft Environmental Impact Report for the Carpinteria Rincon Multi-Use Trail. Santa Barbara County Parks Division looks forward to the implementation of this key link in the California Coastal Trail between Carpinteria and Rincon Beach County Park. The Parks Division also looks forward in partnering with the City of Carpinteria and the Santa Barbara County Association of Governments in planning the continuation of this path to close a gap between this project and the multi-use path that begins at the Bates Road Highway 101 southbound onramp and continues south alongside the highway toward Ventura.

The County Parks Division comments on the NOP are as follows:

Transportation Section:
Upper Rincon Parking Lot
Although this project will provide significant benefit of direct bike and ped access between Carpinteria and Rincon Beach County Park, it will leave a gap in path continuity between the eastern endpoint of the project and the existing path that originates near the Bates Road southbound onramp and continues into Ventura County. The County Parks Rincon upper parking lot is situated between the two path endpoints however it is not intended nor designed to be a throughway for bicyclists and other trail users connecting through, particularly with the two paths at each end serving as key links in the popular California Coastal Trail. Accordingly, the Parks Division requests the DEIR require development of a plan that includes milestones and identifies responsible parties to implement a multi-use path that would parallel the parking lot to provide a separate route for trail users.

Also, for clarity, the Existing Trail Network figure should be revised to demarcate the segment along the upper Rincon parking lot as "Future Trail" rather than as part of the project as "Proposed Trail."

Emergency Access
The Parks Division requests the DEIR indicate the type of emergency vehicles that can utilize the proposed bridge. If it is not proposed to be rated for all standard types of emergency vehicles, the impact analysis should assess response times including the ability to access an emergency from either

the Carpinteria Ave trailhead or from the Rincon Parking lot depending on the location of the emergency along the path whether it be an accident, crime activity or fire.

Air Quality, Noise, Recreation and Transportation Sections:
The NOP indicates 94,100 cubic yards of earth material will need to be exported off site for construction activities which according to the proposed final MND will require approximately 5,880 dump truck round trips. It is assumed doubling that number to 11,760 would account for the total number of one way dump truck trips to be either entering or leaving the project site.

In order to assess the impact of truck trips that will use the upper Rincon parking lot, the Parks Division requests this figure be split between total number of trips necessary to access the project site west of the railroad (City jurisdiction) and of total number of truck trips necessary to access east of the railroad (County jurisdiction) through the Rincon parking lot. The impact analysis should also include assessing the expected number of days of the week (if possible) and which months of the year the dump trucks will need to access the project site through the Rincon parking lot.

The analysis should evaluate the impact of dump truck trips on users of the Rincon Park grassy recreational picnic area located adjacent to the upper parking lot and to beach goers using the beach below with respect to air quality, noise, recreation including beach access and transportation (parking) and how it can be mitigated. If parking stalls are proposed to be used for staging if no other staging location is possible, Parks Division also requests the analysis assess the impacts with mitigations of potentially increased parking demand to the lower Rincon Point Parking lot and the parking along Bates Road as a result.

The Parks Division requests mitigation include not allowing construction to occur during the weekends during the busier November to March months and assessing the use of larger dump trucks if possible to lessen the amount of overall trips.

Aesthetics Section:
The NOP indicates that three vertical storm drains are proposed to be installed down the County Park bluff face below the proposed path in addition to the two other storm drains that already exist. The Parks Division requests the DEIR assess the aesthetic impacts and mitigations of the storm drains to trail users, beachgoers and those recreating in the ocean (e.g., surfers, boaters). Photo renditions should include directly facing the bluff, farther down the beach such as to the east near Rincon Point and to the west at the beach below the Carpinteria Bluffs Nature Preserve, and from a trail user's view walking east along the higher grade toward the proposed bridge to ascertain the level of impact.

Utilities and Service Systems:
Regarding the dumping of excess earth material from excavation, please note that Rincon Beach cannot be used as a dumping site due to the popular use of the beach.

I can be reached at (805) 568-2475 if you have any questions.

Sincerely

Jeffrey Lindgren

Jeff Lindgren
Park Superintendent, Community Services Department, Parks Division

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
David Shabazian, Director
801 K Street, MS 18-05
Sacramento, CA 95814
T: (916) 445-9686

11/25/2020

City: Carpinteria - Community Development Department
Nick Bobroff
5775 Carpinteria Avenue, Carpinteria, CA 93013, USA
nickb@ci.carpinteria.ca.us

Construction Site Well Review (CSWR) ID: 1012181

Assessor Parcel Number(s): 001220100, 001010032, 001220092, 001220101

Property Owner(s): Mulitple property owners

Project Location Address: City of Carpinteria/County of Santa Barbara, California, 93013

Project Title: Carpinteria Rincon Multi-Use Trail SCH Number 2020100582

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The Division of Oil, Gas, and Geothermal Resources (Division) has received and reviewed the above referenced project dated 11/6/2020. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in Santa Barbara County, within the boundaries of the following fields:

Any Field

One well is currently projected to be built over, "Dr. R. W. Hill" 1 (API: 0408304847). CalGEM recommends locating this well and leak testing it prior to any development.

Please note CalGEM well locations are approximate. "Well No." 1 (API: 0408304324) is currently shown to be under Highway 101, 150 feet northeast of the proposed project. This well may be closer to the project location.

Our records indicate there are 1 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 1
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

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- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

The Division categorically advices against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all

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rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation,

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maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Coastal district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (805) 937-7246 or via email at Pat.Abel@conservation.ca.gov

Sincerely,

Pat Abel
Coastal District Deputy

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Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Projected to be Built Over or Have Future Access Impeded

The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are projected to be built over or have future access impeded. **The Division expects these wells to be reabandoned in compliance with current California law, prior to development activities.**

API	Well Designation	Operator	Well Evaluations
0408304847	1	Dr. R. W. Hill	Based on current well location and the currently planned trail location this well is projected to have the multi-use trail constructed over it. Based on well records: 1. There is no record of an oil/gas zone plug (CCR § 1723.1) 2. There is no record of a freshwater plug (CCR § 1723.2) 3. There is no record of a casing shoe plug (CCR § 1723.3) 4. There is no record of a surface plug (CCR § 1723.5)

Appendix B

Air Quality and Greenhouse Gas Emissions Calculations

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Carpinteria Rincon Trail

Santa Barbara-South of Santa Ynez Range County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.15	1000sqft	0.14	6,150.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Annual

Project Characteristics -

Land Use -

Construction Phase - Based on project description.

Off-road Equipment - CalEEmod defaults.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Trips and VMT - CalEEMod defaults. Odd trips were rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on City provided data.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - For maintenance, assumption of one trip per week.

Energy Use - No energy use.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - In accordance with SBCAPCD Rule 345.

Operational Off-Road Equipment - NA

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	32.00
tblConstructionPhase	NumDays	4.00	224.00
tblConstructionPhase	NumDays	200.00	96.00

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Annual

tblConstructionPhase	NumDays	200.00	10.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	10.00	20.00
tblEnergyUse	LightingElect	0.35	0.00
tblGrading	MaterialExported	0.00	94,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trail Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	11,763.00	11,764.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00

tblVehicleTrips	ST_TR	22.75	1.43
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1415	2.4975	1.0291	5.3600e-003	0.2978	0.0523	0.3501	0.0862	0.0482	0.1344	0.0000	522.4596	522.4596	0.0842	0.0000	524.5635
2023	0.0706	0.8524	0.5333	1.9500e-003	0.1980	0.0253	0.2233	0.0355	0.0234	0.0589	0.0000	182.6620	182.6620	0.0359	0.0000	183.5604
Maximum	**0.1415**	**2.4975**	**1.0291**	**5.3600e-003**	**0.2978**	**0.0523**	**0.3501**	**0.0862**	**0.0482**	**0.1344**	**0.0000**	**522.4596**	**522.4596**	**0.0842**	**0.0000**	**524.5635**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1415	2.4975	1.0291	5.3600e-003	0.1899	0.0523	0.2421	0.0539	0.0482	0.1021	0.0000	522.4594	522.4594	0.0842	0.0000	524.5633
2023	0.0706	0.8524	0.5333	1.9500e-003	0.1411	0.0253	0.1664	0.0292	0.0234	0.0526	0.0000	182.6619	182.6619	0.0359	0.0000	183.5603
Maximum	**0.1415**	**2.4975**	**1.0291**	**5.3600e-003**	**0.1899**	**0.0523**	**0.2421**	**0.0539**	**0.0482**	**0.1021**	**0.0000**	**522.4594**	**522.4594**	**0.0842**	**0.0000**	**524.5633**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.24**	**0.00**	**28.75**	**31.72**	**0.00**	**19.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	0.6833	0.6833
2	6-1-2022	8-31-2022	0.8283	0.8283
3	9-1-2022	11-30-2022	0.8209	0.8209
4	12-1-2022	2-28-2023	0.6781	0.6781
5	3-1-2023	5-31-2023	0.2380	0.2380
6	6-1-2023	8-31-2023	0.2616	0.2616
7	9-1-2023	9-30-2023	0.0200	0.0200
		Highest	0.8283	0.8283

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1900e-003	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	7.0000e-005	2.4000e-004	6.6000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1656	0.1656	1.0000e-005	0.0000	0.1658
Waste						0.0000	0.0000		0.0000	0.0000	0.0249	0.0000	0.0249	1.2400e-003	0.0000	0.0558
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.8602	1.8602	8.0000e-005	2.0000e-005	1.8669
Total	**1.2600e-003**	**2.4000e-004**	**7.3000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0249**	**2.0259**	**2.0508**	**1.3300e-003**	**2.0000e-005**	**2.0886**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1900e-003	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	7.0000e-005	2.4000e-004	6.6000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1656	0.1656	1.0000e-005	0.0000	0.1658
Waste						0.0000	0.0000		0.0000	0.0000	0.0249	0.0000	0.0249	1.2400e-003	0.0000	0.0558
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.8602	1.8602	8.0000e-005	2.0000e-005	1.8669
Total	**1.2600e-003**	**2.4000e-004**	**7.3000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0249**	**2.0259**	**2.0508**	**1.3300e-003**	**2.0000e-005**	**2.0886**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2022	4/13/2022	5	32	
2	Grading	Grading	4/14/2022	2/21/2023	5	224	
3	Trail Construction	Building Construction	2/22/2023	7/5/2023	5	96	
4	Bridge Construction	Building Construction	7/6/2023	7/19/2023	5	10	
5	Paving	Paving	7/20/2023	9/1/2023	5	32	
6	Architectural Coating	Architectural Coating	9/2/2023	9/29/2023	5	20	

Acres of Grading (Site Preparation Phase): 16

Acres of Grading (Grading Phase): 182

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 369 (Architectural Coating – sqft)

OffRoad Equipment

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Crawler Tractors	1	7.00	212	0.43
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trail Construction	Cranes	0	6.00	231	0.29
Trail Construction	Crawler Tractors	1	7.00	212	0.43
Trail Construction	Forklifts	0	6.00	89	0.20
Trail Construction	Generator Sets	0	8.00	84	0.74
Trail Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trail Construction	Welders	0	8.00	46	0.45
Bridge Construction	Cranes	1	8.00	231	0.29
Bridge Construction	Forklifts	0	6.00	89	0.20
Bridge Construction	Generator Sets	0	8.00	84	0.74
Bridge Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Bridge Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Crawler Tractors	1	8.00	212	0.43
Paving	Pavers	0	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	11,764.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Trail Construction	2	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Construction	5	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0928	0.0000	0.0928	0.0473	0.0000	0.0473	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.2340	0.1135	2.8000e-004		9.9600e-003	9.9600e-003		9.1600e-003	9.1600e-003	0.0000	24.1844	24.1844	7.8200e-003	0.0000	24.3800
Total	**0.0210**	**0.2340**	**0.1135**	**2.8000e-004**	**0.0928**	**9.9600e-003**	**0.1028**	**0.0473**	**9.1600e-003**	**0.0564**	**0.0000**	**24.1844**	**24.1844**	**7.8200e-003**	**0.0000**	**24.3800**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.8000e-004	2.5000e-003	1.0000e-005	7.9000e-004	0.0000	8.0000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6015	0.6015	2.0000e-005	0.0000	0.6019
Total	**3.5000e-004**	**2.8000e-004**	**2.5000e-003**	**1.0000e-005**	**7.9000e-004**	**0.0000**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.6015**	**0.6015**	**2.0000e-005**	**0.0000**	**0.6019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0418	0.0000	0.0418	0.0213	0.0000	0.0213	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.2340	0.1135	2.8000e-004		9.9600e-003	9.9600e-003		9.1600e-003	9.1600e-003	0.0000	24.1844	24.1844	7.8200e-003	0.0000	24.3800
Total	**0.0210**	**0.2340**	**0.1135**	**2.8000e-004**	**0.0418**	**9.9600e-003**	**0.0517**	**0.0213**	**9.1600e-003**	**0.0304**	**0.0000**	**24.1844**	**24.1844**	**7.8200e-003**	**0.0000**	**24.3800**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.8000e-004	2.5000e-003	1.0000e-005	7.9000e-004	0.0000	8.0000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6015	0.6015	2.0000e-005	0.0000	0.6019
Total	**3.5000e-004**	**2.8000e-004**	**2.5000e-003**	**1.0000e-005**	**7.9000e-004**	**0.0000**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.6015**	**0.6015**	**2.0000e-005**	**0.0000**	**0.6019**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1035	0.0000	0.1035	0.0115	0.0000	0.0115	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.9973	0.4932	1.3600e-003		0.0377	0.0377		0.0346	0.0346	0.0000	119.4881	119.4881	0.0386	0.0000	120.4543
Total	**0.0828**	**0.9973**	**0.4932**	**1.3600e-003**	**0.1035**	**0.0377**	**0.1411**	**0.0115**	**0.0346**	**0.0461**	**0.0000**	**119.4881**	**119.4881**	**0.0386**	**0.0000**	**120.4543**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0352	1.2643	0.4053	3.6700e-003	0.0962	4.6100e-003	0.1008	0.0260	4.4100e-003	0.0304	0.0000	374.6704	374.6704	0.0376	0.0000	375.6097
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.6100e-003	0.0146	4.0000e-005	4.6200e-003	3.0000e-005	4.6500e-003	1.2300e-003	3.0000e-005	1.2500e-003	0.0000	3.5151	3.5151	1.0000e-004	0.0000	3.5176
Total	**0.0373**	**1.2659**	**0.4199**	**3.7100e-003**	**0.1008**	**4.6400e-003**	**0.1054**	**0.0272**	**4.4400e-003**	**0.0317**	**0.0000**	**378.1855**	**378.1855**	**0.0377**	**0.0000**	**379.1273**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0466	0.0000	0.0466	5.1600e-003	0.0000	5.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.9973	0.4932	1.3600e-003		0.0377	0.0377		0.0346	0.0346	0.0000	119.4880	119.4880	0.0386	0.0000	120.4541
Total	**0.0828**	**0.9973**	**0.4932**	**1.3600e-003**	**0.0466**	**0.0377**	**0.0842**	**5.1600e-003**	**0.0346**	**0.0398**	**0.0000**	**119.4880**	**119.4880**	**0.0386**	**0.0000**	**120.4541**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0352	1.2643	0.4053	3.6700e-003	0.0962	4.6100e-003	0.1008	0.0260	4.4100e-003	0.0304	0.0000	374.6704	374.6704	0.0376	0.0000	375.6097
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.6100e-003	0.0146	4.0000e-005	4.6200e-003	3.0000e-005	4.6500e-003	1.2300e-003	3.0000e-005	1.2500e-003	0.0000	3.5151	3.5151	1.0000e-004	0.0000	3.5176
Total	**0.0373**	**1.2659**	**0.4199**	**3.7100e-003**	**0.1008**	**4.6400e-003**	**0.1054**	**0.0272**	**4.4400e-003**	**0.0317**	**0.0000**	**378.1855**	**378.1855**	**0.0377**	**0.0000**	**379.1273**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1035	0.0000	0.1035	0.0115	0.0000	0.0115	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1724	0.0959	2.7000e-004		6.5400e-003	6.5400e-003		6.0100e-003	6.0100e-003	0.0000	23.6305	23.6305	7.6400e-003	0.0000	23.8216
Total	**0.0150**	**0.1724**	**0.0959**	**2.7000e-004**	**0.1035**	**6.5400e-003**	**0.1100**	**0.0115**	**6.0100e-003**	**0.0175**	**0.0000**	**23.6305**	**23.6305**	**7.6400e-003**	**0.0000**	**23.8216**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.1300e-003	0.1882	0.0751	7.0000e-004	0.0798	4.6000e-004	0.0803	0.0201	4.4000e-004	0.0205	0.0000	72.2054	72.2054	7.4400e-003	0.0000	72.3913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.9000e-004	2.6400e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.6695	0.6695	2.0000e-005	0.0000	0.6700
Total	**5.5100e-003**	**0.1885**	**0.0777**	**7.1000e-004**	**0.0807**	**4.7000e-004**	**0.0812**	**0.0203**	**4.5000e-004**	**0.0208**	**0.0000**	**72.8749**	**72.8749**	**7.4600e-003**	**0.0000**	**73.0613**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0466	0.0000	0.0466	5.1600e-003	0.0000	5.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1724	0.0959	2.7000e-004		6.5400e-003	6.5400e-003		6.0100e-003	6.0100e-003	0.0000	23.6305	23.6305	7.6400e-003	0.0000	23.8215
Total	**0.0150**	**0.1724**	**0.0959**	**2.7000e-004**	**0.0466**	**6.5400e-003**	**0.0531**	**5.1600e-003**	**6.0100e-003**	**0.0112**	**0.0000**	**23.6305**	**23.6305**	**7.6400e-003**	**0.0000**	**23.8215**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.1300e-003	0.1882	0.0751	7.0000e-004	0.0798	4.6000e-004	0.0803	0.0201	4.4000e-004	0.0205	0.0000	72.2054	72.2054	7.4400e-003	0.0000	72.3913
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.9000e-004	2.6400e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.6695	0.6695	2.0000e-005	0.0000	0.6700
Total	**5.5100e-003**	**0.1885**	**0.0777**	**7.1000e-004**	**0.0807**	**4.7000e-004**	**0.0812**	**0.0203**	**4.5000e-004**	**0.0208**	**0.0000**	**72.8749**	**72.8749**	**7.4600e-003**	**0.0000**	**73.0613**

3.4 Trail Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2705	0.1746	4.4000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	38.7406	38.7406	0.0125	0.0000	39.0538
Total	**0.0241**	**0.2705**	**0.1746**	**4.4000e-004**		**0.0111**	**0.0111**		**0.0102**	**0.0102**	**0.0000**	**38.7406**	**38.7406**	**0.0125**	**0.0000**	**39.0538**

3.4 Trail Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3700e-003	0.0462	0.0165	1.3000e-004	3.3500e-003	7.0000e-005	3.4200e-003	9.7000e-004	7.0000e-005	1.0400e-003	0.0000	12.9763	12.9763	9.9000e-004	0.0000	13.0009
Worker	3.4800e-003	2.6000e-003	0.0239	7.0000e-005	8.3000e-003	5.0000e-005	8.3500e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.0798	6.0798	1.6000e-004	0.0000	6.0839
Total	**4.8500e-003**	**0.0488**	**0.0405**	**2.0000e-004**	**0.0117**	**1.2000e-004**	**0.0118**	**3.1800e-003**	**1.2000e-004**	**3.2900e-003**	**0.0000**	**19.0561**	**19.0561**	**1.1500e-003**	**0.0000**	**19.0848**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2705	0.1746	4.4000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	38.7405	38.7405	0.0125	0.0000	39.0538
Total	**0.0241**	**0.2705**	**0.1746**	**4.4000e-004**		**0.0111**	**0.0111**		**0.0102**	**0.0102**	**0.0000**	**38.7405**	**38.7405**	**0.0125**	**0.0000**	**39.0538**

3.4 Trail Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3700e-003	0.0462	0.0165	1.3000e-004	3.3500e-003	7.0000e-005	3.4200e-003	9.7000e-004	7.0000e-005	1.0400e-003	0.0000	12.9763	12.9763	9.9000e-004	0.0000	13.0009
Worker	3.4800e-003	2.6000e-003	0.0239	7.0000e-005	8.3000e-003	5.0000e-005	8.3500e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.0798	6.0798	1.6000e-004	0.0000	6.0839
Total	**4.8500e-003**	**0.0488**	**0.0405**	**2.0000e-004**	**0.0117**	**1.2000e-004**	**0.0118**	**3.1800e-003**	**1.2000e-004**	**3.2900e-003**	**0.0000**	**19.0561**	**19.0561**	**1.1500e-003**	**0.0000**	**19.0848**

3.5 Bridge Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1400e-003	0.0461	0.0427	8.0000e-005		1.9100e-003	1.9100e-003		1.8200e-003	1.8200e-003	0.0000	6.3840	6.3840	1.4600e-003	0.0000	6.4205
Total	**6.1400e-003**	**0.0461**	**0.0427**	**8.0000e-005**		**1.9100e-003**	**1.9100e-003**		**1.8200e-003**	**1.8200e-003**	**0.0000**	**6.3840**	**6.3840**	**1.4600e-003**	**0.0000**	**6.4205**

3.5 Bridge Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.8100e-003	1.7200e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3517	1.3517	1.0000e-004	0.0000	1.3543
Worker	3.6000e-004	2.7000e-004	2.4900e-003	1.0000e-005	8.6000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6333	0.6333	2.0000e-005	0.0000	0.6337
Total	**5.0000e-004**	**5.0800e-003**	**4.2100e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.9850**	**1.9850**	**1.2000e-004**	**0.0000**	**1.9880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1400e-003	0.0461	0.0427	8.0000e-005		1.9100e-003	1.9100e-003		1.8200e-003	1.8200e-003	0.0000	6.3840	6.3840	1.4600e-003	0.0000	6.4205
Total	**6.1400e-003**	**0.0461**	**0.0427**	**8.0000e-005**		**1.9100e-003**	**1.9100e-003**		**1.8200e-003**	**1.8200e-003**	**0.0000**	**6.3840**	**6.3840**	**1.4600e-003**	**0.0000**	**6.4205**

3.5 Bridge Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.8100e-003	1.7200e-003	1.0000e-005	3.5000e-004	1.0000e-005	3.6000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3517	1.3517	1.0000e-004	0.0000	1.3543
Worker	3.6000e-004	2.7000e-004	2.4900e-003	1.0000e-005	8.6000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6333	0.6333	2.0000e-005	0.0000	0.6337
Total	**5.0000e-004**	**5.0800e-003**	**4.2100e-003**	**2.0000e-005**	**1.2100e-003**	**2.0000e-005**	**1.2300e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.9850**	**1.9850**	**1.2000e-004**	**0.0000**	**1.9880**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8400e-003	0.1076	0.0768	1.9000e-004		4.4300e-003	4.4300e-003		4.0700e-003	4.0700e-003	0.0000	16.7320	16.7320	5.4100e-003	0.0000	16.8672
Paving	1.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0100**	**0.1076**	**0.0768**	**1.9000e-004**		**4.4300e-003**	**4.4300e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**16.7320**	**16.7320**	**5.4100e-003**	**0.0000**	**16.8672**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	1.7100e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4343	0.4343	1.0000e-005	0.0000	0.4346
Total	**2.5000e-004**	**1.9000e-004**	**1.7100e-003**	**0.0000**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4343**	**0.4343**	**1.0000e-005**	**0.0000**	**0.4346**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8400e-003	0.1076	0.0768	1.9000e-004		4.4300e-003	4.4300e-003		4.0700e-003	4.0700e-003	0.0000	16.7319	16.7319	5.4100e-003	0.0000	16.8672
Paving	1.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0100**	**0.1076**	**0.0768**	**1.9000e-004**		**4.4300e-003**	**4.4300e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**16.7319**	**16.7319**	**5.4100e-003**	**0.0000**	**16.8672**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	1.7100e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4343	0.4343	1.0000e-005	0.0000	0.4346
Total	**2.5000e-004**	**1.9000e-004**	**1.7100e-003**	**0.0000**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4343**	**0.4343**	**1.0000e-005**	**0.0000**	**0.4346**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**4.0600e-003**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.0700e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2714	0.2714	1.0000e-005	0.0000	0.2716
Total	**1.6000e-004**	**1.2000e-004**	**1.0700e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2714**	**0.2714**	**1.0000e-005**	**0.0000**	**0.2716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**4.0600e-003**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.0700e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2714	0.2714	1.0000e-005	0.0000	0.2716
Total	**1.6000e-004**	**1.2000e-004**	**1.0700e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2714**	**0.2714**	**1.0000e-005**	**0.0000**	**0.2716**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.0000e-005	2.4000e-004	6.6000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1656	0.1656	1.0000e-005	0.0000	0.1658
Unmitigated	7.0000e-005	2.4000e-004	6.6000e-004	0.0000	1.7000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1656	0.1656	1.0000e-005	0.0000	0.1658

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	2.00	0.00	459	459
Parking Lot	0.00	0.00	0.00		
Total	0.00	2.00	0.00	459	459

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.60	5.50	6.40	33.00	48.00	19.00	66	28	6
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873
Parking Lot	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1900e-003	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Unmitigated	1.1900e-003	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	**1.1900e-003**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	**1.1900e-003**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0000**	**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8602	8.0000e-005	2.0000e-005	1.8669
Unmitigated	1.8602	8.0000e-005	2.0000e-005	1.8669

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.66807	1.8602	8.0000e-005	2.0000e-005	1.8669
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.8602**	**8.0000e-005**	**2.0000e-005**	**1.8669**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.66807	1.8602	8.0000e-005	2.0000e-005	1.8669
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.8602**	**8.0000e-005**	**2.0000e-005**	**1.8669**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0249	1.2400e-003	0.0000	0.0558
Unmitigated	0.0249	1.2400e-003	0.0000	0.0558

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0249	1.2400e-003	0.0000	0.0558
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0249**	**1.2400e-003**	**0.0000**	**0.0558**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0249	1.2400e-003	0.0000	0.0558
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0249**	**1.2400e-003**	**0.0000**	**0.0558**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Carpinteria Rincon Trail

Santa Barbara-South of Santa Ynez Range County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.15	1000sqft	0.14	6,150.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Summer

Project Characteristics -

Land Use -

Construction Phase - Based on project description.

Off-road Equipment - CalEEmod defaults.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Trips and VMT - CalEEMod defaults. Odd trips were rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on City provided data.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - For maintenance, assumption of one trip per week.

Energy Use - No energy use.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - In accordance with SBCAPCD Rule 345.

Operational Off-Road Equipment - NA

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	32.00
tblConstructionPhase	NumDays	4.00	224.00
tblConstructionPhase	NumDays	200.00	96.00

tblConstructionPhase	NumDays	200.00	10.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	10.00	20.00
tblEnergyUse	LightingElect	0.35	0.00
tblGrading	MaterialExported	0.00	94,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trail Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	11,763.00	11,764.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00

tblVehicleTrips	ST_TR	22.75	1.43
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.3337	23.9289	9.6900	0.0545	5.8501	0.6228	6.4729	2.9671	0.5730	3.5401	0.0000	5,894.1741	5,894.1741	0.8960	0.0000	5,916.5748
2023	1.3266	19.3246	9.3649	0.0533	5.3957	0.3841	5.7738	1.2267	0.3667	1.5755	0.0000	5,776.9197	5,776.9197	0.8964	0.0000	5,799.3296
Maximum	**1.3337**	**23.9289**	**9.6900**	**0.0545**	**5.8501**	**0.6228**	**6.4729**	**2.9671**	**0.5730**	**3.5401**	**0.0000**	**5,894.1741**	**5,894.1741**	**0.8964**	**0.0000**	**5,916.5748**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.3337	23.9289	9.6900	0.0545	2.6603	0.6228	3.2832	1.3426	0.5730	1.9156	0.0000	5,894.1741	5,894.1741	0.8960	0.0000	5,916.5748
2023	1.3266	19.3246	9.3649	0.0533	4.8877	0.3841	5.2658	1.1704	0.3667	1.5192	0.0000	5,776.9197	5,776.9197	0.8964	0.0000	5,799.3296
Maximum	**1.3337**	**23.9289**	**9.6900**	**0.0545**	**4.8877**	**0.6228**	**5.2658**	**1.3426**	**0.5730**	**1.9156**	**0.0000**	**5,894.1741**	**5,894.1741**	**0.8964**	**0.0000**	**5,916.5748**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.88**	**0.00**	**30.19**	**40.08**	**0.00**	**32.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.7600e-003	9.0100e-003	0.0243	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		7.1577	7.1577	3.4000e-004		7.1662
Total	**9.3200e-003**	**9.0200e-003**	**0.0251**	**7.0000e-005**	**6.8400e-003**	**6.0000e-005**	**6.9000e-003**	**1.8300e-003**	**6.0000e-005**	**1.8900e-003**		**7.1593**	**7.1593**	**3.4000e-004**	**0.0000**	**7.1680**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.7600e-003	9.0100e-003	0.0243	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		7.1577	7.1577	3.4000e-004		7.1662
Total	**9.3200e-003**	**9.0200e-003**	**0.0251**	**7.0000e-005**	**6.8400e-003**	**6.0000e-005**	**6.9000e-003**	**1.8300e-003**	**6.0000e-005**	**1.8900e-003**		**7.1593**	**7.1593**	**3.4000e-004**	**0.0000**	**7.1680**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2022	4/13/2022	5	32	
2	Grading	Grading	4/14/2022	2/21/2023	5	224	
3	Trail Construction	Building Construction	2/22/2023	7/5/2023	5	96	
4	Bridge Construction	Building Construction	7/6/2023	7/19/2023	5	10	
5	Paving	Paving	7/20/2023	9/1/2023	5	32	
6	Architectural Coating	Architectural Coating	9/2/2023	9/29/2023	5	20	

Acres of Grading (Site Preparation Phase): 16

Acres of Grading (Grading Phase): 182

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 369 (Architectural Coating – sqft)

OffRoad Equipment

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Crawler Tractors	1	7.00	212	0.43
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trail Construction	Cranes	0	6.00	231	0.29
Trail Construction	Crawler Tractors	1	7.00	212	0.43
Trail Construction	Forklifts	0	6.00	89	0.20
Trail Construction	Generator Sets	0	8.00	84	0.74
Trail Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trail Construction	Welders	0	8.00	46	0.45
Bridge Construction	Cranes	1	8.00	231	0.29
Bridge Construction	Forklifts	0	6.00	89	0.20
Bridge Construction	Generator Sets	0	8.00	84	0.74
Bridge Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Bridge Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Crawler Tractors	1	8.00	212	0.43
Paving	Pavers	0	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	11,764.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Trail Construction	2	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Construction	5	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**5.7996**	**0.6225**	**6.4221**	**2.9537**	**0.5727**	**3.5264**		**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0154	0.1548	4.3000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		42.3628	42.3628	1.2000e-003		42.3929
Total	**0.0216**	**0.0154**	**0.1548**	**4.3000e-004**	**0.0505**	**3.0000e-004**	**0.0508**	**0.0134**	**2.8000e-004**	**0.0137**		**42.3628**	**42.3628**	**1.2000e-003**		**42.3929**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**2.6098**	**0.6225**	**3.2323**	**1.3292**	**0.5727**	**1.9019**	**0.0000**	**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0154	0.1548	4.3000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		42.3628	42.3628	1.2000e-003		42.3929
Total	**0.0216**	**0.0154**	**0.1548**	**4.3000e-004**	**0.0505**	**3.0000e-004**	**0.0508**	**0.0134**	**2.8000e-004**	**0.0137**		**42.3628**	**42.3628**	**1.2000e-003**		**42.3929**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9237	0.0000	0.9237	0.1024	0.0000	0.1024			0.0000			0.0000
Off-Road	0.8858	10.6663	5.2750	0.0146		0.4026	0.4026		0.3704	0.3704		1,408.6966	1,408.6966	0.4556		1,420.0866
Total	**0.8858**	**10.6663**	**5.2750**	**0.0146**	**0.9237**	**0.4026**	**1.3263**	**0.1024**	**0.3704**	**0.4729**		**1,408.6966**	**1,408.6966**	**0.4556**		**1,420.0866**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3727	13.2472	4.2603	0.0395	1.0497	0.0488	1.0984	0.2833	0.0467	0.3299		4,443.1147	4,443.1147	0.4392		4,454.0954
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0154	0.1548	4.3000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		42.3628	42.3628	1.2000e-003		42.3929
Total	**0.3943**	**13.2627**	**4.4151**	**0.0400**	**1.1002**	**0.0491**	**1.1493**	**0.2967**	**0.0470**	**0.3436**		**4,485.4775**	**4,485.4775**	**0.4404**		**4,496.4882**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4157	0.0000	0.4157	0.0461	0.0000	0.0461			0.0000			0.0000
Off-Road	0.8858	10.6663	5.2750	0.0146		0.4026	0.4026		0.3704	0.3704	0.0000	1,408.6966	1,408.6966	0.4556		1,420.0866
Total	**0.8858**	**10.6663**	**5.2750**	**0.0146**	**0.4157**	**0.4026**	**0.8183**	**0.0461**	**0.3704**	**0.4165**	**0.0000**	**1,408.6966**	**1,408.6966**	**0.4556**		**1,420.0866**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3727	13.2472	4.2603	0.0395	1.0497	0.0488	1.0984	0.2833	0.0467	0.3299		4,443.1147	4,443.1147	0.4392		4,454.0954
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0154	0.1548	4.3000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		42.3628	42.3628	1.2000e-003		42.3929
Total	**0.3943**	**13.2627**	**4.4151**	**0.0400**	**1.1002**	**0.0491**	**1.1493**	**0.2967**	**0.0470**	**0.3436**		**4,485.4775**	**4,485.4775**	**0.4404**		**4,496.4882**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9237	0.0000	0.9237	0.1024	0.0000	0.1024			0.0000			0.0000
Off-Road	0.8087	9.3175	5.1851	0.0145		0.3533	0.3533		0.3250	0.3250		1,408.0086	1,408.0086	0.4554		1,419.3930
Total	**0.8087**	**9.3175**	**5.1851**	**0.0145**	**0.9237**	**0.3533**	**1.2770**	**0.1024**	**0.3250**	**0.4275**		**1,408.0086**	**1,408.0086**	**0.4554**		**1,419.3930**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2745	9.9933	4.0031	0.0383	4.4215	0.0246	4.4461	1.1109	0.0235	1.1344		4,328.1318	4,328.1318	0.4399		4,339.1304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0201	0.0138	0.1414	4.1000e-004	0.0505	2.9000e-004	0.0508	0.0134	2.7000e-004	0.0137		40.7793	40.7793	1.0700e-003		40.8062
Total	**0.2946**	**10.0071**	**4.1446**	**0.0387**	**4.4720**	**0.0249**	**4.4969**	**1.1243**	**0.0238**	**1.1481**		**4,368.9111**	**4,368.9111**	**0.4410**		**4,379.9366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4157	0.0000	0.4157	0.0461	0.0000	0.0461			0.0000			0.0000
Off-Road	0.8087	9.3175	5.1851	0.0145		0.3533	0.3533		0.3250	0.3250	0.0000	1,408.0086	1,408.0086	0.4554		1,419.3930
Total	**0.8087**	**9.3175**	**5.1851**	**0.0145**	**0.4157**	**0.3533**	**0.7690**	**0.0461**	**0.3250**	**0.3711**	**0.0000**	**1,408.0086**	**1,408.0086**	**0.4554**		**1,419.3930**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2745	9.9933	4.0031	0.0383	4.4215	0.0246	4.4461	1.1109	0.0235	1.1344		4,328.1318	4,328.1318	0.4399		4,339.1304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0201	0.0138	0.1414	4.1000e-004	0.0505	2.9000e-004	0.0508	0.0134	2.7000e-004	0.0137		40.7793	40.7793	1.0700e-003		40.8062
Total	**0.2946**	**10.0071**	**4.1446**	**0.0387**	**4.4720**	**0.0249**	**4.4969**	**1.1243**	**0.0238**	**1.1481**		**4,368.9111**	**4,368.9111**	**0.4410**		**4,379.9366**

3.4 Trail Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5022	5.6358	3.6367	9.1900e-003		0.2308	0.2308		0.2123	0.2123		889.6701	889.6701	0.2877		896.8636
Total	**0.5022**	**5.6358**	**3.6367**	**9.1900e-003**		**0.2308**	**0.2308**		**0.2123**	**0.2123**		**889.6701**	**889.6701**	**0.2877**		**896.8636**

3.4 Trail Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9535	0.3281	2.7500e-003	0.0711	1.5000e-003	0.0726	0.0204	1.4300e-003	0.0219		301.0654	301.0654	0.0222		301.6204
Worker	0.0705	0.0484	0.4950	1.4300e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		142.7277	142.7277	3.7600e-003		142.8216
Total	**0.0983**	**1.0019**	**0.8232**	**4.1800e-003**	**0.2479**	**2.5300e-003**	**0.2504**	**0.0674**	**2.3800e-003**	**0.0697**		**443.7930**	**443.7930**	**0.0260**		**444.4420**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5022	5.6358	3.6367	9.1900e-003		0.2308	0.2308		0.2123	0.2123	0.0000	889.6701	889.6701	0.2877		896.8636
Total	**0.5022**	**5.6358**	**3.6367**	**9.1900e-003**		**0.2308**	**0.2308**		**0.2123**	**0.2123**	**0.0000**	**889.6701**	**889.6701**	**0.2877**		**896.8636**

3.4 Trail Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9535	0.3281	2.7500e-003	0.0711	1.5000e-003	0.0726	0.0204	1.4300e-003	0.0219		301.0654	301.0654	0.0222		301.6204
Worker	0.0705	0.0484	0.4950	1.4300e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		142.7277	142.7277	3.7600e-003		142.8216
Total	**0.0983**	**1.0019**	**0.8232**	**4.1800e-003**	**0.2479**	**2.5300e-003**	**0.2504**	**0.0674**	**2.3800e-003**	**0.0697**		**443.7930**	**443.7930**	**0.0260**		**444.4420**

3.5 Bridge Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2283	9.2289	8.5417	0.0158		0.3816	0.3816		0.3643	0.3643		1,407.4348	1,407.4348	0.3218		1,415.4796
Total	**1.2283**	**9.2289**	**8.5417**	**0.0158**		**0.3816**	**0.3816**		**0.3643**	**0.3643**		**1,407.4348**	**1,407.4348**	**0.3218**		**1,415.4796**

3.5 Bridge Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9535	0.3281	2.7500e-003	0.0711	1.5000e-003	0.0726	0.0204	1.4300e-003	0.0219		301.0654	301.0654	0.0222		301.6204
Worker	0.0705	0.0484	0.4950	1.4300e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		142.7277	142.7277	3.7600e-003		142.8216
Total	**0.0983**	**1.0019**	**0.8232**	**4.1800e-003**	**0.2479**	**2.5300e-003**	**0.2504**	**0.0674**	**2.3800e-003**	**0.0697**		**443.7930**	**443.7930**	**0.0260**		**444.4420**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2283	9.2289	8.5417	0.0158		0.3816	0.3816		0.3643	0.3643	0.0000	1,407.4348	1,407.4348	0.3218		1,415.4796
Total	**1.2283**	**9.2289**	**8.5417**	**0.0158**		**0.3816**	**0.3816**		**0.3643**	**0.3643**	**0.0000**	**1,407.4348**	**1,407.4348**	**0.3218**		**1,415.4796**

3.5 Bridge Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	0.9535	0.3281	2.7500e-003	0.0711	1.5000e-003	0.0726	0.0204	1.4300e-003	0.0219		301.0654	301.0654	0.0222		301.6204
Worker	0.0705	0.0484	0.4950	1.4300e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		142.7277	142.7277	3.7600e-003		142.8216
Total	**0.0983**	**1.0019**	**0.8232**	**4.1800e-003**	**0.2479**	**2.5300e-003**	**0.2504**	**0.0674**	**2.3800e-003**	**0.0697**		**443.7930**	**443.7930**	**0.0260**		**444.4420**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6149	6.7275	4.8004	0.0119		0.2767	0.2767		0.2546	0.2546		1,152.7388	1,152.7388	0.3728		1,162.0593
Paving	0.0115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6263**	**6.7275**	**4.8004**	**0.0119**		**0.2767**	**0.2767**		**0.2546**	**0.2546**		**1,152.7388**	**1,152.7388**	**0.3728**		**1,162.0593**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	0.0104	0.1061	3.1000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		30.5845	30.5845	8.0000e-004		30.6046
Total	**0.0151**	**0.0104**	**0.1061**	**3.1000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**30.5845**	**30.5845**	**8.0000e-004**		**30.6046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6149	6.7275	4.8004	0.0119		0.2767	0.2767		0.2546	0.2546	0.0000	1,152.7388	1,152.7388	0.3728		1,162.0593
Paving	0.0115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6263**	**6.7275**	**4.8004**	**0.0119**		**0.2767**	**0.2767**		**0.2546**	**0.2546**	**0.0000**	**1,152.7388**	**1,152.7388**	**0.3728**		**1,162.0593**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	0.0104	0.1061	3.1000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		30.5845	30.5845	8.0000e-004		30.6046
Total	**0.0151**	**0.0104**	**0.1061**	**3.1000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**30.5845**	**30.5845**	**8.0000e-004**		**30.6046**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.4055**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	0.0104	0.1061	3.1000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		30.5845	30.5845	8.0000e-004		30.6046
Total	**0.0151**	**0.0104**	**0.1061**	**3.1000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**30.5845**	**30.5845**	**8.0000e-004**		**30.6046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.4055**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0151	0.0104	0.1061	3.1000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		30.5845	30.5845	8.0000e-004		30.6046
Total	**0.0151**	**0.0104**	**0.1061**	**3.1000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**30.5845**	**30.5845**	**8.0000e-004**		**30.6046**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7600e-003	9.0100e-003	0.0243	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		7.1577	7.1577	3.4000e-004		7.1662
Unmitigated	2.7600e-003	9.0100e-003	0.0243	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		7.1577	7.1577	3.4000e-004		7.1662

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	2.00	0.00	459	459
Parking Lot	0.00	0.00	0.00		
Total	0.00	2.00	0.00	459	459

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.60	5.50	6.40	33.00	48.00	19.00	66	28	6
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873
Parking Lot	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Unmitigated	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Total	**6.5600e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6500e-003**	**1.6500e-003**	**0.0000**		**1.7600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Total	**6.5600e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6500e-003**	**1.6500e-003**	**0.0000**		**1.7600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Carpinteria Rincon Trail

Santa Barbara-South of Santa Ynez Range County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.15	1000sqft	0.14	6,150.00	0
City Park	1.40	Acre	1.40	60,984.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Winter

Project Characteristics -

Land Use -

Construction Phase - Based on project description.

Off-road Equipment - CalEEmod defaults.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Off-road Equipment - Based on modeling from the Supplemental MND.

Trips and VMT - CalEEMod defaults. Odd trips were rounded up to account for whole round trips.

On-road Fugitive Dust - CalEEMod defaults.

Grading - Based on City provided data.

Architectural Coating - CalEEMod defaults.

Vehicle Trips - For maintenance, assumption of one trip per week.

Energy Use - No energy use.

Water And Wastewater - CalEEMod defaults.

Solid Waste - CalEEMod defaults.

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - In accordance with SBCAPCD Rule 345.

Operational Off-Road Equipment - NA

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	2.00	32.00
tblConstructionPhase	NumDays	4.00	224.00
tblConstructionPhase	NumDays	200.00	96.00

tblConstructionPhase	NumDays	200.00	10.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	10.00	20.00
tblEnergyUse	LightingElect	0.35	0.00
tblGrading	MaterialExported	0.00	94,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trail Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	11,763.00	11,764.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	VendorTripNumber	11.00	12.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00

tblVehicleTrips	ST_TR	22.75	1.43
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.3366	23.9918	9.8705	0.0540	5.8501	0.6228	6.4729	2.9671	0.5730	3.5401	0.0000	5,831.3715	5,831.3715	0.9046	0.0000	5,853.9863
2023	1.3377	19.3520	9.4630	0.0527	5.3957	0.3842	5.7744	1.2267	0.3667	1.5761	0.0000	5,714.5038	5,714.5038	0.9038	0.0000	5,737.0996
Maximum	**1.3377**	**23.9918**	**9.8705**	**0.0540**	**5.8501**	**0.6228**	**6.4729**	**2.9671**	**0.5730**	**3.5401**	**0.0000**	**5,831.3715**	**5,831.3715**	**0.9046**	**0.0000**	**5,853.9863**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.3366	23.9918	9.8705	0.0540	2.6603	0.6228	3.2832	1.3426	0.5730	1.9156	0.0000	5,831.3715	5,831.3715	0.9046	0.0000	5,853.9863
2023	1.3377	19.3520	9.4630	0.0527	4.8877	0.3842	5.2664	1.1704	0.3667	1.5198	0.0000	5,714.5038	5,714.5038	0.9038	0.0000	5,737.0996
Maximum	**1.3377**	**23.9918**	**9.8705**	**0.0540**	**4.8877**	**0.6228**	**5.2664**	**1.3426**	**0.5730**	**1.9156**	**0.0000**	**5,831.3715**	**5,831.3715**	**0.9046**	**0.0000**	**5,853.9863**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.88**	**0.00**	**30.19**	**40.08**	**0.00**	**32.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.7000e-003	9.2800e-003	0.0263	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		6.9924	6.9924	3.5000e-004		7.0013
Total	**9.2600e-003**	**9.2900e-003**	**0.0270**	**7.0000e-005**	**6.8400e-003**	**6.0000e-005**	**6.9000e-003**	**1.8300e-003**	**6.0000e-005**	**1.8900e-003**		**6.9941**	**6.9941**	**3.5000e-004**	**0.0000**	**7.0030**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.7000e-003	9.2800e-003	0.0263	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		6.9924	6.9924	3.5000e-004		7.0013
Total	**9.2600e-003**	**9.2900e-003**	**0.0270**	**7.0000e-005**	**6.8400e-003**	**6.0000e-005**	**6.9000e-003**	**1.8300e-003**	**6.0000e-005**	**1.8900e-003**		**6.9941**	**6.9941**	**3.5000e-004**	**0.0000**	**7.0030**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2022	4/13/2022	5	32	
2	Grading	Grading	4/14/2022	2/21/2023	5	224	
3	Trail Construction	Building Construction	2/22/2023	7/5/2023	5	96	
4	Bridge Construction	Building Construction	7/6/2023	7/19/2023	5	10	
5	Paving	Paving	7/20/2023	9/1/2023	5	32	
6	Architectural Coating	Architectural Coating	9/2/2023	9/29/2023	5	20	

Acres of Grading (Site Preparation Phase): 16

Acres of Grading (Grading Phase): 182

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 369 (Architectural Coating – sqft)

OffRoad Equipment

Carpinteria Rincon Trail - Santa Barbara-South of Santa Ynez Range County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Crawler Tractors	1	7.00	212	0.43
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trail Construction	Cranes	0	6.00	231	0.29
Trail Construction	Crawler Tractors	1	7.00	212	0.43
Trail Construction	Forklifts	0	6.00	89	0.20
Trail Construction	Generator Sets	0	8.00	84	0.74
Trail Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trail Construction	Welders	0	8.00	46	0.45
Bridge Construction	Cranes	1	8.00	231	0.29
Bridge Construction	Forklifts	0	6.00	89	0.20
Bridge Construction	Generator Sets	0	8.00	84	0.74
Bridge Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Bridge Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Crawler Tractors	1	8.00	212	0.43
Paving	Pavers	0	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	11,764.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Trail Construction	2	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Construction	5	28.00	12.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**5.7996**	**0.6225**	**6.4221**	**2.9537**	**0.5727**	**3.5264**		**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0244	0.0177	0.1600	4.2000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		41.3836	41.3836	1.2000e-003		41.4136
Total	**0.0244**	**0.0177**	**0.1600**	**4.2000e-004**	**0.0505**	**3.0000e-004**	**0.0508**	**0.0134**	**2.8000e-004**	**0.0137**		**41.3836**	**41.3836**	**1.2000e-003**		**41.4136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**2.6098**	**0.6225**	**3.2323**	**1.3292**	**0.5727**	**1.9019**	**0.0000**	**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0244	0.0177	0.1600	4.2000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		41.3836	41.3836	1.2000e-003		41.4136
Total	**0.0244**	**0.0177**	**0.1600**	**4.2000e-004**	**0.0505**	**3.0000e-004**	**0.0508**	**0.0134**	**2.8000e-004**	**0.0137**		**41.3836**	**41.3836**	**1.2000e-003**		**41.4136**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9237	0.0000	0.9237	0.1024	0.0000	0.1024			0.0000			0.0000
Off-Road	0.8858	10.6663	5.2750	0.0146		0.4026	0.4026		0.3704	0.3704		1,408.6966	1,408.6966	0.4556		1,420.0866
Total	**0.8858**	**10.6663**	**5.2750**	**0.0146**	**0.9237**	**0.4026**	**1.3263**	**0.1024**	**0.3704**	**0.4729**		**1,408.6966**	**1,408.6966**	**0.4556**		**1,420.0866**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3823	13.3079	4.4355	0.0390	1.0497	0.0501	1.0998	0.2833	0.0479	0.3312		4,381.2913	4,381.2913	0.4478		4,392.4860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0244	0.0177	0.1600	4.2000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		41.3836	41.3836	1.2000e-003		41.4136
Total	**0.4067**	**13.3255**	**4.5955**	**0.0394**	**1.1002**	**0.0504**	**1.1506**	**0.2967**	**0.0482**	**0.3449**		**4,422.6749**	**4,422.6749**	**0.4490**		**4,433.8996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4157	0.0000	0.4157	0.0461	0.0000	0.0461			0.0000			0.0000
Off-Road	0.8858	10.6663	5.2750	0.0146		0.4026	0.4026		0.3704	0.3704	0.0000	1,408.6966	1,408.6966	0.4556		1,420.0866
Total	**0.8858**	**10.6663**	**5.2750**	**0.0146**	**0.4157**	**0.4026**	**0.8183**	**0.0461**	**0.3704**	**0.4165**	**0.0000**	**1,408.6966**	**1,408.6966**	**0.4556**		**1,420.0866**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3823	13.3079	4.4355	0.0390	1.0497	0.0501	1.0998	0.2833	0.0479	0.3312		4,381.2913	4,381.2913	0.4478		4,392.4860
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0244	0.0177	0.1600	4.2000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.8000e-004	0.0137		41.3836	41.3836	1.2000e-003		41.4136
Total	**0.4067**	**13.3255**	**4.5955**	**0.0394**	**1.1002**	**0.0504**	**1.1506**	**0.2967**	**0.0482**	**0.3449**		**4,422.6749**	**4,422.6749**	**0.4490**		**4,433.8996**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9237	0.0000	0.9237	0.1024	0.0000	0.1024			0.0000			0.0000
Off-Road	0.8087	9.3175	5.1851	0.0145		0.3533	0.3533		0.3250	0.3250		1,408.0086	1,408.0086	0.4554		1,419.3930
Total	**0.8087**	**9.3175**	**5.1851**	**0.0145**	**0.9237**	**0.3533**	**1.2770**	**0.1024**	**0.3250**	**0.4275**		**1,408.0086**	**1,408.0086**	**0.4554**		**1,419.3930**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2812	10.0187	4.1321	0.0378	4.4215	0.0252	4.4467	1.1109	0.0241	1.1350		4,266.6581	4,266.6581	0.4474		4,277.8427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0228	0.0158	0.1458	4.0000e-004	0.0505	2.9000e-004	0.0508	0.0134	2.7000e-004	0.0137		39.8372	39.8372	1.0700e-003		39.8639
Total	**0.3041**	**10.0345**	**4.2779**	**0.0382**	**4.4720**	**0.0255**	**4.4975**	**1.1243**	**0.0244**	**1.1487**		**4,306.4952**	**4,306.4952**	**0.4485**		**4,317.7066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4157	0.0000	0.4157	0.0461	0.0000	0.0461			0.0000			0.0000
Off-Road	0.8087	9.3175	5.1851	0.0145		0.3533	0.3533		0.3250	0.3250	0.0000	1,408.0086	1,408.0086	0.4554		1,419.3930
Total	**0.8087**	**9.3175**	**5.1851**	**0.0145**	**0.4157**	**0.3533**	**0.7690**	**0.0461**	**0.3250**	**0.3711**	**0.0000**	**1,408.0086**	**1,408.0086**	**0.4554**		**1,419.3930**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2812	10.0187	4.1321	0.0378	4.4215	0.0252	4.4467	1.1109	0.0241	1.1350		4,266.6581	4,266.6581	0.4474		4,277.8427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0228	0.0158	0.1458	4.0000e-004	0.0505	2.9000e-004	0.0508	0.0134	2.7000e-004	0.0137		39.8372	39.8372	1.0700e-003		39.8639
Total	**0.3041**	**10.0345**	**4.2779**	**0.0382**	**4.4720**	**0.0255**	**4.4975**	**1.1243**	**0.0244**	**1.1487**		**4,306.4952**	**4,306.4952**	**0.4485**		**4,317.7066**

3.4 Trail Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5022	5.6358	3.6367	9.1900e-003		0.2308	0.2308		0.2123	0.2123		889.6701	889.6701	0.2877		896.8636
Total	**0.5022**	**5.6358**	**3.6367**	**9.1900e-003**		**0.2308**	**0.2308**		**0.2123**	**0.2123**		**889.6701**	**889.6701**	**0.2877**		**896.8636**

3.4 Trail Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0295	0.9485	0.3583	2.6800e-003	0.0711	1.5700e-003	0.0726	0.0204	1.5000e-003	0.0219		293.7724	293.7724	0.0232		294.3511
Worker	0.0799	0.0553	0.5104	1.4000e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		139.4301	139.4301	3.7400e-003		139.5237
Total	**0.1094**	**1.0038**	**0.8687**	**4.0800e-003**	**0.2479**	**2.6000e-003**	**0.2505**	**0.0674**	**2.4500e-003**	**0.0698**		**433.2025**	**433.2025**	**0.0269**		**433.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5022	5.6358	3.6367	9.1900e-003		0.2308	0.2308		0.2123	0.2123	0.0000	889.6701	889.6701	0.2877		896.8636
Total	**0.5022**	**5.6358**	**3.6367**	**9.1900e-003**		**0.2308**	**0.2308**		**0.2123**	**0.2123**	**0.0000**	**889.6701**	**889.6701**	**0.2877**		**896.8636**

3.4 Trail Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0295	0.9485	0.3583	2.6800e-003	0.0711	1.5700e-003	0.0726	0.0204	1.5000e-003	0.0219		293.7724	293.7724	0.0232		294.3511
Worker	0.0799	0.0553	0.5104	1.4000e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		139.4301	139.4301	3.7400e-003		139.5237
Total	**0.1094**	**1.0038**	**0.8687**	**4.0800e-003**	**0.2479**	**2.6000e-003**	**0.2505**	**0.0674**	**2.4500e-003**	**0.0698**		**433.2025**	**433.2025**	**0.0269**		**433.8748**

3.5 Bridge Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2283	9.2289	8.5417	0.0158		0.3816	0.3816		0.3643	0.3643		1,407.4348	1,407.4348	0.3218		1,415.4796
Total	**1.2283**	**9.2289**	**8.5417**	**0.0158**		**0.3816**	**0.3816**		**0.3643**	**0.3643**		**1,407.4348**	**1,407.4348**	**0.3218**		**1,415.4796**

3.5 Bridge Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0295	0.9485	0.3583	2.6800e-003	0.0711	1.5700e-003	0.0726	0.0204	1.5000e-003	0.0219		293.7724	293.7724	0.0232		294.3511
Worker	0.0799	0.0553	0.5104	1.4000e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		139.4301	139.4301	3.7400e-003		139.5237
Total	**0.1094**	**1.0038**	**0.8687**	**4.0800e-003**	**0.2479**	**2.6000e-003**	**0.2505**	**0.0674**	**2.4500e-003**	**0.0698**		**433.2025**	**433.2025**	**0.0269**		**433.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2283	9.2289	8.5417	0.0158		0.3816	0.3816		0.3643	0.3643	0.0000	1,407.4348	1,407.4348	0.3218		1,415.4796
Total	**1.2283**	**9.2289**	**8.5417**	**0.0158**		**0.3816**	**0.3816**		**0.3643**	**0.3643**	**0.0000**	**1,407.4348**	**1,407.4348**	**0.3218**		**1,415.4796**

3.5 Bridge Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0295	0.9485	0.3583	2.6800e-003	0.0711	1.5700e-003	0.0726	0.0204	1.5000e-003	0.0219		293.7724	293.7724	0.0232		294.3511
Worker	0.0799	0.0553	0.5104	1.4000e-003	0.1768	1.0300e-003	0.1779	0.0469	9.5000e-004	0.0479		139.4301	139.4301	3.7400e-003		139.5237
Total	**0.1094**	**1.0038**	**0.8687**	**4.0800e-003**	**0.2479**	**2.6000e-003**	**0.2505**	**0.0674**	**2.4500e-003**	**0.0698**		**433.2025**	**433.2025**	**0.0269**		**433.8748**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6149	6.7275	4.8004	0.0119		0.2767	0.2767		0.2546	0.2546		1,152.7388	1,152.7388	0.3728		1,162.0593
Paving	0.0115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6263**	**6.7275**	**4.8004**	**0.0119**		**0.2767**	**0.2767**		**0.2546**	**0.2546**		**1,152.7388**	**1,152.7388**	**0.3728**		**1,162.0593**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	0.0119	0.1094	3.0000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		29.8779	29.8779	8.0000e-004		29.8979
Total	**0.0171**	**0.0119**	**0.1094**	**3.0000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**29.8779**	**29.8779**	**8.0000e-004**		**29.8979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6149	6.7275	4.8004	0.0119		0.2767	0.2767		0.2546	0.2546	0.0000	1,152.7388	1,152.7388	0.3728		1,162.0593
Paving	0.0115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6263**	**6.7275**	**4.8004**	**0.0119**		**0.2767**	**0.2767**		**0.2546**	**0.2546**	**0.0000**	**1,152.7388**	**1,152.7388**	**0.3728**		**1,162.0593**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	0.0119	0.1094	3.0000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		29.8779	29.8779	8.0000e-004		29.8979
Total	**0.0171**	**0.0119**	**0.1094**	**3.0000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**29.8779**	**29.8779**	**8.0000e-004**		**29.8979**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.4055**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	0.0119	0.1094	3.0000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		29.8779	29.8779	8.0000e-004		29.8979
Total	**0.0171**	**0.0119**	**0.1094**	**3.0000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**29.8779**	**29.8779**	**8.0000e-004**		**29.8979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2138					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.4055**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0171	0.0119	0.1094	3.0000e-004	0.0379	2.2000e-004	0.0381	0.0101	2.0000e-004	0.0103		29.8779	29.8779	8.0000e-004		29.8979
Total	**0.0171**	**0.0119**	**0.1094**	**3.0000e-004**	**0.0379**	**2.2000e-004**	**0.0381**	**0.0101**	**2.0000e-004**	**0.0103**		**29.8779**	**29.8779**	**8.0000e-004**		**29.8979**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7000e-003	9.2800e-003	0.0263	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		6.9924	6.9924	3.5000e-004		7.0013
Unmitigated	2.7000e-003	9.2800e-003	0.0263	7.0000e-005	6.8400e-003	6.0000e-005	6.9000e-003	1.8300e-003	6.0000e-005	1.8900e-003		6.9924	6.9924	3.5000e-004		7.0013

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	2.00	0.00	459	459
Parking Lot	0.00	0.00	0.00		
Total	0.00	2.00	0.00	459	459

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.60	5.50	6.40	33.00	48.00	19.00	66	28	6
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873
Parking Lot	0.572071	0.027190	0.206810	0.117824	0.018361	0.005136	0.017629	0.020081	0.002790	0.002084	0.006580	0.002569	0.000873

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Unmitigated	6.5600e-003	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Total	**6.5600e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6500e-003**	**1.6500e-003**	**0.0000**		**1.7600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6500e-003	1.6500e-003	0.0000		1.7600e-003
Total	**6.5600e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6500e-003**	**1.6500e-003**	**0.0000**		**1.7600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Project Name

Vegetation

Land Use Change - Net Sequestered Carbon

The project's changes in land use results in changes in CO_2 sequestration from the atmosphere which would not have been captured had there been no land-type change.

Future planting of trees within the project site will sequester CO_2 and is considered to result in a one-time carbon-stock change. Trees sequester CO_2 while they are actively growing.

Summary:

Carbon Loss				
Project Vegetation Land Use	**Vegetation Land Use Category Subtype**	**Net Loss (acres)**	**Loss of Sequestered CO_2 (MT CO_2)**
Forest Land	Scrub	10.70	153.01
Total			**153.01**

Carbon Gain				
Project Vegetation Land Use	**Vegetation Land Use Category Subtype**	**Net Loss (acres)**	**Loss of Sequestered CO_2 (MT CO_2)**
Forest Land	Scrub	11.45	163.74
Total			**163.74**

Total CO_2E emissions released (loss) (MT)	**153.01**
CO_2E sequestered from Net New Vegetation (gain) (MT)	**163.74**
Total CO_2E Released (loss - gain) (MT)	**-10.73**
Amortized Net Change of CO_2E over 30 years (MT/year)	**-0.36**

Project Name

Vegetation

Land Use Change - Loss of Sequestered Carbon

A development which changes land use type results in changes in CO_2 sequestration from the atmosphere which would not have been captured had there been no land-type change.

Equation:

Sequestered CO_2 (MT CO_2) = Σ_f ($SeqCO_2$)$_f$ x (area)$_f$ - Σ_i (SeqCO2)$_i$ x (area)$_i$

Where:

$SeqCO_2$ = mass of sequestered CO_2 per unit area (MT CO_2/acre)

area = area of land for specific land use type (acre)

f = index for final land use type

I = index for initial land use type

Default CalEEMod Factors

The mass of sequestered CO_2 per unit area (MT CO_2/acre) is dependent on the specific land use type. The program uses default CO_2 sequestration values from the California Climate Action Registry for each land use that will be preserved or created:

Vegetation Land Use Type	Vegetation Land Use Subtype	Biogenic CO_2 Emissions (MT CO_2/Acre)
Cropland	Cropland	6.2
Forest Land	Scrub	14.3
Forest Land	Trees	111
Grassland	Grassland	4.31
Wetlands	Wetlands	0
Others	Others	0

Notes:

Based on values indicated in IPCC Guidelines for National Greenhouse Gas Inventories (IPCC Guidelines). Available online at http://www.ipcc-nggip.iges.or.jp/public/2006gl/

Reference:

CalEEMod Users Guide, Appendix A Calculation Details (Section 11 Vegetation, pages 50-52)

Project Name

Calculations:

Project Vegetation Land Use	Vegetation Land Use Category	Vegetation Land Use Category Subtype	Initial Acres (acres)	Final Acres (acres)	Net Loss (acres)	Biogenic CO_2 Emissions (MT CO_2/Acre)	Sequestered CO_2 (MT CO_2)
Non-Native Woodland	Forest Land	Scrub	10.70	0.00	10.70	14.3	153.01
Total			**10.70**	**0.00**	**10.70**		**153.01**

Notes:

The default annual CO2 is calculated by multiplying total biomass (MT dry matter/acre) from IPCC data by the carbon fraction in plant material (0.47), then using the ratio of molecular weights (44/12) to convert from MT of carbon (C) to MT of carbon dioxide (CO2).

Vegetation Type

Vegetation types are defined by IPCC as follows:

Forest Land

This category includes all land with woody vegetation consistent with thresholds used to define Forest Land in the national greenhouse gas inventory. It also includes systems with a vegetation structure that currently fall below, but *in situ* could potentially reach the threshold values used by a country to define the Forest Land category.

Cropland

This category includes cropped land, including rice fields, and agro-forestry systems where the vegetation structure falls below the thresholds used for the Forest Land category.

Grassland

This category includes rangelands and pasture land that are not considered Cropland. It also includes systems with woody vegetation and other non-grass vegetation such as herbs and brushes that fall below the threshold values used in the Forest Land category. The category also includes all grassland from wild lands to recreational areas as well as agricultural and silvi-pastural systems, consistent with national definitions.

Wetlands

This category includes areas of peat extraction and land that is covered or saturated by water for all or part of the year (e.g., peatlands) and that does not fall into the Forest Land, Cropland, Grassland or Settlements categories. It includes reservoirs as a managed sub-division and natural rivers and lakes as unmanaged sub-divisions.

Area

The user must specify area of land in acres for specific final and initial land use types. These area changes include not only the area of land that will be converted to buildings, but also areas disrupted by the construction of utility corridors, water tank sites, and associated borrow and grading areas. Areas temporarily disturbed that will eventually recover to become vegetated will not be counted as vegetation removed as there is no net change in vegetation or land use.

This assumption facilitates the calculation as a yearly growth rate and CO2 removal rate does not have to be calculated. As long as the disturbed land will indeed return to its original state, this assumption is valid for time periods over 20 years.

Project Name

Vegetation

Land Use Change - Sequestered Carbon

A development which changes land use type results in changes in CO_2 sequestration from the atmosphere which would not have been captured had there been no land-type change.

Equation:

Sequestered CO_2 (MT CO_2) = Σ_f ($SeqCO_2$)$_f$ x (area)$_f$ - Σ_i (SeqCO2)$_i$ x (area)$_i$

Where:

$SeqCO_2$ = mass of sequestered CO_2 per unit area (MT CO_2/acre)

area = area of land for specific land use type (acre)

f = index for final land use type

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Default CalEEMod Factors

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Grassland	Grassland	4.31
Wetlands	Wetlands	0
Others	Others	0

Notes:

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Reference:

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Project Name

Calculations:

Project Vegetation Land Use	Vegetation Land Use Category	Vegetation Land Use Category Subtype	Initial Acres (acres)	Final Acres (acres)	Net Loss (acres)	Biogenic CO_2 Emissions (MT CO_2/Acre)	Sequestered CO_2 (MT CO_2)
Non-Native Woodland	Forest Land	Scrub	11.45	0.00	11.45	14.3	163.74
Total			**11.45**	**0.00**	**11.45**		**163.74**

Notes:

The default annual CO2 is calculated by multiplying total biomass (MT dry matter/acre) from IPCC data by the carbon fraction in plant material (0.47), then using the ratio of molecular weights (44/12) to convert from MT of carbon (C) to MT of carbon dioxide (CO2).

Vegetation Type

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Area

The user must specify area of land in acres for specific final and initial land use types. These area changes include not only the area of land that will be converted to buildings, but also areas disrupted by the construction of utility corridors, water tank sites, and associated borrow and grading areas. Areas temporarily disturbed that will eventually recover to become vegetated will not be counted as vegetation removed as there is no net change in vegetation or land use.

This assumption facilitates the calculation as a yearly growth rate and CO2 removal rate does not have to be calculated. As long as the disturbed land will indeed return to its original state, this assumption is valid for time periods over 20 years.

Appendix C1

Plant and Wildlife Compendium

Plant Species

Eudicots – Vascular Species

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

AIZOACEAE—FIG-MARIGOLD FAMILY

* *Carpobrotus chilensis*—sea fig
* *Carpobrotus edulis*—hottentot fig
* *Mesembryanthemum crystallinum*—common iceplant
* *Tetragonia tetragonoides*—New Zealand spinach

AMARANTHACEAE—AMARANTH FAMILY

* *Amaranthus albus*—prostrate pigweed
Amaranthus blitoides—mat amaranth

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

Rhus integrifolia—lemonade berry
* *Schinus terebinthifolius*—Brazilian peppertree

APIACEAE—CARROT FAMILY

Apiastrum angustifolium—mock parsley
* *Conium maculatum*—poison hemlock
* *Foeniculum vulgare*—fennel

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed
Artemisia californica—California sagebrush
Baccharis pilularis—coyote brush
Baccharis salicifolia—mulefat
Brickellia californica—California brickellbush
* *Carduus pycnocephalus*—Italian plumeless thistle
* *Centaurea melitensis*—Maltese star-thistle
Corethrogyne filaginifolia—sand-aster
* *Delairea odorata*—Cape-ivy
Encelia californica—California brittle bush
* *Erigeron bonariensis*—asthmaweed
Erigeron canadensis—Canadian horseweed
* *Erigeron sumatrensis*—asthmaweed
Eriophyllum confertiflorum—golden-yarrow
Hazardia squarrosa—sawtooth golden bush

* *Helminthotheca echioides*—bristly oxtongue
Heterotheca grandiflora—telegraphweed
Heterotheca sessiliflora—sessileflower false goldenaster
Isocoma menziesii—Menzies's golden bush
* *Lactuca serriola*—prickly lettuce
Malacothrix saxatilis var. *saxatilis*—cliff malacothrix
Pseudognaphalium beneolens—Wright's cudweed
Pseudognaphalium biolettii—two-color rabbit-tobacco
Pseudognaphalium californicum—ladies' tobacco
* *Pseudognaphalium luteoalbum*—Jersey cudweed
Pseudognaphalium ramosissimum—pink cudweed
* *Silybum marianum*—blessed milkthistle
* *Sonchus asper*—spiny sowthistle
* *Sonchus oleraceus*—common sowthistle
Venegasia carpesioides—canyon sunflower

BORAGINACEAE—BORAGE FAMILY

Amsinckia menziesii—Menzies' fiddleneck
Eriodictyon crassifolium—thick leaf yerba santa
Eucrypta chrysanthemifolia—spotted hideseed
Phacelia ramosissima var. *austrolitoralis*—south coast branching phacelia

BRASSICACEAE—MUSTARD FAMILY

* *Brassica nigra*—black mustard
* *Brassica rapa*—field mustard
* *Brassica tournefortii*—Tournefort's mustard
* *Cakile maritima*—European searocket
* *Capsella bursa-pastoris*—shepherd's purse
Descurainia pinnata—western tansymustard
* *Hirschfeldia incana*—shortpod mustard
Lepidium nitidum—shining pepperweed
* *Lobularia maritima*—sweet alyssum
* *Raphanus sativus*—cultivated radish
* *Sisymbrium irio*—London rocket
* *Sisymbrium orientale*—Indian hedgemustard

CACTACEAE—CACTUS FAMILY

Opuntia littoralis—coast prickly pear

CARYOPHYLLACEAE—PINK FAMILY

* *Spergularia bocconi*—Boccone's sandspurry

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex lentiformis—quailbush
* *Atriplex semibaccata*—Australian saltbush
* *Bassia hyssopifolia*—fivehorn smotherweed
* *Chenopodium album*—lambsquarters
* *Chenopodium murale*—nettleleaf goosefoot
* *Salsola tragus*—prickly Russian thistle
Suaeda taxifolia—woolly seablite

CONVOLVULACEAE—MORNING-GLORY FAMILY

Calystegia macrostegia ssp. *cyclostegia*—island false bindweed
* *Convolvulus arvensis*—field bindweed

EUPHORBIACEAE—SPURGE FAMILY

Croton californicus—California croton
Croton setiger—dove weed
* *Euphorbia peplus*—petty spurge
* *Ricinus communis*—castorbean

FABACEAE—LEGUME FAMILY

Acmispon americanus—Spanish clover
Acmispon glaber—deer weed
* *Medicago polymorpha*—burclover
* *Melilotus indicus*—annual yellow sweetclover
* *Melilotus officinalis*—sweetclover

FAGACEAE—OAK FAMILY

Quercus agrifolia—coast live oak

GERANIACEAE—GERANIUM FAMILY

* *Erodium botrys*—longbeak stork's bill
* *Erodium cicutarium*—redstem stork's bill
* *Erodium moschatum*—musky stork's bill

LAMIACEAE—MINT FAMILY

* *Marrubium vulgare*—horehound
Stachys bullata—California hedgenettle

MALVACEAE—MALLOW FAMILY

* *Malva nicaeensis*—bull mallow
* *Malva parviflora*—cheeseweed mallow

MYRSINACEAE—MYRSINE FAMILY

* *Lysimachia arvensis*—scarlet pimpernel

MYRTACEAE—MYRTLE FAMILY

* *Eucalyptus camaldulensis*—river redgum

NYCTAGINACEAE—FOUR O'CLOCK FAMILY

Mirabilis laevis var. *crassifolia*—California four o'clock

ONAGRACEAE—EVENING PRIMROSE FAMILY

Camissoniopsis bistorta—southern suncup

OXALIDACEAE—OXALIS FAMILY

* *Oxalis pes-caprae*—Bermuda buttercup

PHRYMACEAE—LOPSEED FAMILY

Diplacus aurantiacus—bush monkeyflower

PLANTAGINACEAE—PLANTAIN FAMILY

Plantago erecta—dwarf plantain

* *Plantago lanceolata*—narrowleaf plantain

PLATANACEAE—PLANE TREE, SYCAMORE FAMILY

Platanus racemosa—California sycamore

PLUMBAGINACEAE—LEADWORT FAMILY

* *Limonium perezii*—Perez's sea lavender

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum parvifolium—seacliff buckwheat

* *Polygonum aviculare*—prostrate knotweed

RHAMNACEAE—BUCKTHORN FAMILY

Rhamnus crocea—redberry buckthorn

SALICACEAE—WILLOW FAMILY

Salix laevigata—red willow

Salix lasiolepis—arroyo willow

SCROPHULARIACEAE—FIGWORT FAMILY

* *Myoporum laetum*—myoporum

Scrophularia californica—California figwort

SOLANACEAE—NIGHTSHADE FAMILY

Datura wrightii—sacred thorn-apple
* *Nicotiana glauca*—tree tobacco
Solanum americanum—American black nightshade
Solanum douglasii—greenspot nightshade
Solanum xanti—chaparral nightshade

TROPAEOLACEAE—NASTURTIUM FAMILY

* *Tropaeolum majus*—nasturtium

URTICACEAE—NETTLE FAMILY

* *Urtica urens*—dwarf nettle

VERBENACEAE—VERVAIN FAMILY

Verbena lasiostachys—western vervain

Gymnosperms and Gnetophytes – Vascular Species

ARAUCARIACEAE— ARAUCARIANS FAMILY

Araucaria heterophylla—Norfolk Island pine

CUPRESSACEAE—CYPRESS FAMILY

Hesperocyparis macrocarpa—Monterey cypress

PINACEAE—PINE FAMILY

Pinus sp.—Pine tree

Monocots – Vascular Species

ASPHODELACEAE—ASPHODEL FAMILY

* *Asphodelus fistulosus*—onionweed

POACEAE—GRASS FAMILY

* *Avena barbata*—slender oat
* *Brachypodium distachyon*—purple false brome
* *Bromus diandrus*—ripgut brome
* *Bromus hordeaceus*—soft brome
* *Bromus madritensis*—compact brome
* *Cortaderia jubata*—purple pampas grass
* *Cynodon dactylon*—Bermudagrass
* *Ehrharta calycina*—perennial veldtgrass
Elymus condensatus—giant wild rye

* *Festuca myuros*—rat-tail fescue
* *Festuca perennis*—perennial rye grass
* *Hordeum murinum*—mouse barley
* *Lamarckia aurea*—goldentop grass
  Melica imperfecta—smallflower melicgrass
* *Pennisetum setaceum*—fountain grass
* *Pennisetum villosum*—feathertop
* *Poa annua*—annual bluegrass
* *Polypogon monspeliensis*—annual rabbitsfoot grass
* *Schismus arabicus*—Arabian schismus
* *Stipa miliacea*—no common name

* signifies introduced (non-native) species

Wildlife Species

Birds

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

CARDINALIDAE—CARDINALS AND ALLIES

Pheucticus melanocephalus—black-headed grosbeak

FALCONIDAE—CARACARAS AND FALCONS

Falco peregrinus anatum—American peregrine falcon

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

Spinus psaltria—lesser goldfinch

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe

Sayornis saya—Say's phoebe

ACCIPITRIDAE—HAWKS, KITES, EAGLES AND ALLIES

Buteo jamaicensis—red-tailed hawk

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

CORVIDAE—CROWS AND JAYS

Corvus brachyrhynchos—American crow

CATHARTIDAE—NEW WORLD VULTURES

Cathartes aura—turkey vulture

SYLVIIDAE—SYLVIID WARBLERS

Polioptila caerulea—blue-gray gnatcatcher

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

* *Streptopelia decaocto*—Eurasian collared-dove

CUCULIDAE—CUCKOOS, ROADRUNNERS AND ANIS

Geococcyx californianus—greater roadrunner

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Toxostoma redivivum—California thrasher

PASSERIDAE—OLD WORLD SPARROWS

* *Passer domesticus*—house sparrow

POLIOPTILIDAE—GNATCATCHERS

Polioptila caerulea—blue-gray gnatcatcher

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

HIRUNDINIDAE—SWALLOWS

Hirundo rustica—barn swallow

LARIDAE—GULLS, TERNS AND SKIMMERS

Larus occidentalis—western gull

TROGLODYTIDAE—WRENS

Thryomanes bewickii—Bewick's wren

TIMALIIDAE—BABBLERS

Chamaea fasciata—wrentit

PASSERELLIDAE—NEW WORLD SPARROWS

Melospiza melodia—song sparrow

Melozone crissalis—California towhee

Zonotrichia leucophrys—white-crowned sparrow

Invertebrates

LYCAENIDAE—BLUES, HAIRSTREAKS AND COPPERS

Brephidium exile—western pygmy-blue

PIERIDAE—WHITES AND SULFURS

Pieris rapae—cabbage white

Mammals

LEPORIDAE—HARES AND RABBITS

Sylvilagus bachmani—brush rabbit

SCIURIDAE—SQUIRRELS

Spermophilus (*Otospermophilus*) *beecheyi*—California ground squirrel

CRICETIDAE—RATS, MICE AND VOLES

Neotoma sp.—woodrat

Reptiles

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis—western fence lizard

Uta stansburiana—common side-blotched lizard

* signifies introduced (non-native) species

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Appendix C2

Plant and Wildlife Species Not Expected to Occur within the Biological Study Area

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/10–560	Not expected to occur. Suitable marsh or swamp habitat is not present.
Astragalus pycnostachyus var. *lanosissimus*	Ventura marsh milk-vetch	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/perennial herb/(June)Aug–Oct/3–115	Not expected to occur. While suitable coastal scrub habitat is present, this species rarely occurs on sandy bluffs as compared to within coastal salt marsh margins or coastal dunes (CDFW 2020). There is only one occurrence in the region[2] which is considered possibly extirpated (CDFW 2020).
Calochortus fimbriatus	late-flowered mariposa lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; often serpentinite/perennial bulbiferous herb/June–Aug/902–6,250	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Calochortus palmeri var. *palmeri*	Palmer's mariposa lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; mesic/perennial bulbiferous herb/Apr–July/2,325–7,840	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. Suitable dune, marsh, or swamp habitat is not present.
Delphinium umbraculorum	umbrella larkspur	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/Apr–June/1,310–5,245	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Fritillaria ojaiensis	Ojai fritillary	None/None/1B.2	Broadleafed upland forest (mesic), Chaparral, Cismontane woodland, Lower montane coniferous forest; rocky/perennial bulbiferous herb/Feb–May/738–3,270	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/3–4,000	Not expected to occur. Suitable vernal pool, playa, marsh, or swamp habitat is not present.
Layia heterotricha	pale-yellow layia	None/None/1B.1	Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; alkaline or clay/annual herb/Mar–June/984–5,590	Not expected to occur. The site is outside of the species' known elevation range. Additionally, only marginally suitable habitat is present.
Monardella hypoleuca ssp. *hypoleuca*	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug(Sep–Dec)/164–5,000	Not expected to occur. No suitable chaparral or woodland habitat present. Although this species is mapped along Rincon Creek all the way to the ocean just behind the project site, it is associated with the riparian habitat of the creek which is not present on site (CDFW 2020).
Nasturtium gambelii	Gambel's water cress	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/16–1,080	Not expected to occur. Suitable marsh or swamp habitat is not present.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/98–2,145	Not expected to occur. Although chenopod scrub habitat is present, vernal pools are absent within the project site. This species is not known to occur within the region[2] (CDFW 2020).

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Navarretia ojaiensis	Ojai navarretia	None/None/1B.1	Chaparral (openings), Coastal scrub (openings), Valley and foothill grassland/annual herb/May–July/902–2,030	Not expected to occur. The site is outside of the species' known elevation range.
Navarretia peninsularis	Baja navarretia	None/None/1B.2	Chaparral (openings), Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; mesic/annual herb/(May)June–Aug/4,920–7,545	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Nolina cismontana	chaparral nolina	None/None/1B.2	Chaparral, Coastal scrub; sandstone or gabbro/perennial evergreen shrub/(Mar)May–July/459–4,180	Not expected to occur. The site is outside of the species' known elevation range.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/49–2,165	Not expected to occur. Suitable vernal pool habitat is absent within the project site. Additionally, this species is not known to occur within the region[2] (CDFW 2020).
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	Marshes and swamps (assorted shallow freshwater)/perennial rhizomatous herb (emergent)/May–Oct(Nov)/0–2,130	Not expected to occur. Suitable marsh or swamp habitat is not present. Additionally, the only one occurrence in the region[2] is considered extirpated (CDFW 2020).

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/49–5,015	Low potential to occur. Suitable coastal scrub habitat is present, however mesic habitats such as springs or marshes are absent. The only occurrence in the region[2] was last confirmed in 1962 and is located in Oak View (CDFW 2020). This species was not detected during 2018 or 2019 special-status plant species surveys.
Streptanthus campestris	southern jewelflower	None/None/1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; rocky/perennial herb/(Apr)May–July/2,950–7,545	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Thelypteris puberula var. *sonorensis*	Sonoran maiden fern	None/None/2B.2	Meadows and seeps (seeps and streams)/perennial rhizomatous herb/Jan–Sep/164–2,000	Not expected to occur. Suitable meadow or seep habitat is not present.

1 **Status Legend:**
FE: Federally listed as endangered
SE: State listed as endangered
CRPR 1A: Plants presumed extinct in California
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants rare, threatened, or endangered in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Plants about which more information is needed – a review list
CRPR 4: Plants of limited distribution – a watch list
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

2 **Region:** "Region" refers to species recorded in the USGS 7.5-minute White Ledge Peak quadrangle, as well as the surrounding coastal quadrangles including Carpinteria, Pitas Point, Ventura, and Matilija (CDFW 2020; CNPS 2020).

CDFW (California Department of Fish and Wildlife). 2020. Rarefind 5: Commercial version. Online database. California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed December 2020. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

CNPS (California Native Plant Society). 2020. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). Sacramento, California: California Native Plant Society. Accessed December 6, 2020 at www.rareplants.cnps.org.

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. No suitable wash, riparian, or chaparral habitat present.
Rana boylii	foothill yellow-legged frog	None/SSC, SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. No suitable stream, river, forest, or chaparral habitat present.
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. No suitable stream, wetland, woodland, or pond habitat present.
Taricha torosa (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur. No suitable forest, chaparral, or grassland habitat present.
Reptiles				
Actinemys marmorata	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No suitable stream, pond, or lake habitat present.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. No suitable stream, creek, or pool habitat present.

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to occur. No suitable freshwater wetland habitat present.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. No suitable open scrub, grassland, or agricultural habitat present.
Brachyramphus marmoratus (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests, forages in subtidal and pelagic habitats	Not expected to occur. No suitable old-growth forest habitat present.
Charadrius alexandrinus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. No suitable marine/estuarine sandy shore, flat, lake, pond, or reservoir habitat present.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. No suitable riparian or wetland habitat present.
Falco peregrinus anatum (nesting)	American peregrine falcon	FDL, BCC/FP, SDL	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present	Not expected to nest. Suitable cliff nesting habitat is present, however the slopes and cliffs within the project area are subject to a high amount of human disturbance with walking trails and popular paragliding sites. This species has been known to nest along the south coast, with former nest sites including Gaviota Pass; San Onofre Canyon near Gaviota; Las Flores

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
				Canyon; upper Mission Canyon, Santa Barbara; and Santa Monica Canyon behind Carpinteria (Lehman 2020).
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (Sequoiadendron giganteus); forages in relatively open habitats where large animal carcasses can be detected	Not expected to occur. This species is not known to occur in coastal Santa Barbara County in recent history, and since the last resident pair in the County in the early 1980s, this species is largely restricted to the rural interior of the County primarily within the San Rafael Wilderness and in Sierra Madre. (Lehman 2020).
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.)	Not expected to occur. No suitable saltmarsh habitat present.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. While coastal scrub habitat is present, this species is only known from one occurrence in the region[2] which was last observed in 1906 near Ventura (CDFW 2020).
Rallus obsoletus levipes	Ridgway's rail	FE/SE, FP	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No suitable wetland present.
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. No suitable riparian, woodland, forest, or chaparral habitat present.

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. No suitable estuary or lagoon foraging habitat, or suitable beach nesting habitat present.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. No suitable riparian habitat present.
Fishes				
Eucyclogobius newberryi	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	Not expected to occur. No suitable aquatic habitat present.
Oncorhynchus mykiss irideus pop. 10	southern steelhead - southern California DPS	FE/None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	Not expected to occur. No suitable aquatic habitat present.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Not expected to occur. While marginally suitable habitat is present, this species is known from only one occurrence in the region[2] which was recorded in 1906 (CDFW 2020).
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Not expected to occur. The site is outside this species known geographic range, and is only known to occur as west as Ojai and/or Weldon (CDFW 2020).
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	Not expected to occur. No suitable desert habitat present.

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Lasiurus cinereus	hoary bat	None/None	Forest, woodland riparian, and wetland habitats; also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes	Not expected to occur. No suitable trees for roosting habitat or wetland, woodland, riparian, or desert habitat for foraging present.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. While marginally suitable coastal scrub is present, the species is known from only one occurrence in the region[2] which is located inland near Foster Park and not along the coast (CDFW 2020).
Invertebrates				
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur. No suitable vernal pool, vernal swale, or ephemeral freshwater habitat present.
Cicindela hirticollis gravida	sandy beach tiger beetle	None/None	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico	Not expected to occur. No suitable non-brackish aquatic habitat present or nearby.
Coelus globosus	globose dune beetle	None/None	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico	Not expected to occur. No suitable dune habitat present.
Panoquina errans	wandering skipper	None/None	Saltmarsh	Not expected to occur. No suitable saltmarsh habitat present.

Special-Status Wildlife Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable vernal or ephemeral pool habitat present.

1 **Federal Designations:**
FC Candidate for federal listing as threatened or endangered
(FD) Federally delisted; monitored for five years
FE Federally listed Endangered
FT Federally listed as Threatened
FDL Federally delisted
BCC Bird of Conservation Concern
State Designations:
SC Candidate for state listing as endangered
SSC Species of Special Concern
FP California Department of Fish and Game Protected and Fully Protected Species
SE State listed as Endangered
ST State listed as Threatened
SDL State delisted
WL Watch List

2 **Region:** "Region" refers to species recorded in the USGS 7.5-minute White Ledge Peak quadrangle, as well as the surrounding coastal quadrangles including Carpinteria, Pitas Point, Ventura, and Matilija (CDFW 2020; USFWS 2020).

CDFW (California Department of Fish and Wildlife). 2020. Rarefind 5: Commercial version. Online database. California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed December 2020. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

USFWS (United States Fish and Wildlife Service). 2020. Information for Planning and Consulting (IPaC). Accessed December 2020: https://ecos.fws.gov/ipac/

Appendix D

Cultural Appendix – CONFIDENTIAL

Appendix E

Geotechnical Report

THIS COPY OF THE REPORT ACCOMPANIES THE EIR;
APPENDICES ARE NOT INCLUDED WITH THIS VERSION IN ORDER TO
AVOID AN EXTENSIVE LENGTH DOCUMENT, FULL COPY ON FILE AT CITY

GEOTECHNICAL REPORT

FOR

THE PROPOSED RINCON BEACH MULTI-USE TRAIL



January 11, 2019

Prepared for:

City of Carpinteria, Parks and Recreation Department
ATTN: Mr. Matthew Roberts, Parks and Recreation Director
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1.0 EXECUTIVE SUMMARY

Located in southeastern Santa Barbara County at the Ventura County line, the proposed Rincon Multi-Use Trail project consists of the construction of a 10-foot wide (meaning the width of travelled-way, not including paved shoulders), 2,750-foot long multi-use trail connecting the eastern terminus of Carpinteria Avenue to Rincon Beach County Park. The majority of the proposed trail route is located along and above southbound Highway 101, within the railroad track corridor, and along an existing coastal bluff bench (abandoned railroad bed) that is used as an unofficial trail on County property. Bengal explored and evaluated the subsurface soil conditions along the project trail alignment to provide geotechnical design and construction recommendations for the proposed multi-use trail improvements.

Our study focused on the following elements: field investigation, laboratory testing of soil and rock samples, remote sensing analysis, review of data from previous soils investigations within and adjacent to the project limits, data reduction, slope stability analyses, preparing design recommendations for the proposed trail, and preparation of this study report.

Site exploration was conducted by Bengal Engineering, Inc. in April, 2013 and March & August, 2018. Our field investigation consisted of geologic mapping within the project limits and subsurface investigation. A total of nine (9) backhoe test trenches, twenty-four (24) hand-dug test pits, and eight (8) large-diameter borings were excavated within the proposed Rincon Multi-Use Trail corridor. Representative samples of the earth materials encountered were obtained for subsequent laboratory testing.

The majority of the proposed trail alignment will traverse the face of relatively steep slopes consisting of a range of earth-materials, ranging from relatively high strength, granular soil or soil-like marine terrace deposits and Santa Barbara Formation to relatively low strength and slope failure prone Monterey and Sisquoc Formation bedrock.

The proposed trail will cross the surface trace of the Carpinteria fault, a high-angle, south-dipping reverse fault which trends north of west through the northern portion of the project limits. Work by others on the adjacent parcel(s) to the west suggests that additional faults may be present, though no evidence has been found to suggest that these faults or suspected faults have been active in the Holocene. The City of Carpinteria (2003) and other sources suggest that the Carpinteria Fault be considered “potentially active” (faults which show evidence of Quaternary displacement) for planning purposes. It is our opinion that the potential for fault surface rupture during the lifetime of the project is considered low.

Due to its location within a highly active seismic region with several large active faults nearby, the trail alignment is susceptible to relatively high ground motions due to earthquakes. The design PGA is estimated to be about 0.8g with a causative earthquake of moment magnitude, M_w=7.4.

Based on our field exploration and geologic mapping, the coastal bluff portion of the slope to be traversed by the proposed trail, especially the slope areas existing below the unsanctioned County trail (approx. Sta. 30+00 to 45+00) are most problematic. Areas of landslide debris and questionable landslide debris have been mapped along this section of the proposed trail corridor.

Construction of the proposed trail alignment involve cut and fill of the existing slopes. Our subsurface investigation, geologic mapping, laboratory testing and results of slope stability analyses indicate that, following the implementation of the remedial/stabilization measures recommended herein, the as-built slopes and trail alignment will be adequately stable against overall and surficial slope failures under the static or normal service conditions, in both short- and long-term conditions.

The recommended remedial/stabilization measures include: (1) cutting to flatten the slopes above the trail alignment, (2) removal and replacement of unsuitable surficial soils prior to placing new fill, (3) keying and benching the new fills into competent slope materials, (4) enhancing the stability of new fills by means of buttress and geotextile reinforcement, and (5) reducing surficial erosion hazards by controlling the collection and disposal of surface run-off via non-erosive surface drainage facilities and hydro-seeding.

Due to the relatively low shear strength of the constituent earth materials, the overall slope height, gradients and slope orientation, and the high design ground motion, the ocean-facing slope within the proposed trail alignment limits is considered susceptible to limited downslope sliding movement, estimated to be on the order of about twelve (12) inches in the event shaken by the design earthquake ground motion event.

The lower portion of the slope below the existing unsanctioned dirt trail, located outside the proposed grading area for the trail construction, is considered susceptible to further local/surficial instability in the future. Continued monitoring and maintenance of this portion of the slope, which if left unattended may progress with time and affect the stability of the subject trail in the future, is recommended.

A minimum pavement section consisting of five inches (5”) of Portland Cement Concrete (PCC) over four inches (4”) Class II Aggregate Base is recommended for the subject trail. Cast-in-drilled hole (CIDH) foundations may be used to support the proposed single-span trail bridge abutments. Hard drilling conditions may be encountered during drilling of the CIDH pile holes.

In summary, it is our opinion that the proposed project is geotechnically feasible provided the findings and recommendations included in this report are considered in the design and construction of the proposed improvements.

2.0 INTRODUCTION

This geotechnical report is prepared by Bengal Engineering, Inc. in support of the design and construction of the proposed Rincon Multi-Use Trail, located in and immediately adjacent to the southeast corner of the City of Carpinteria. The location of the project site and the approximate project limits are shown on Figures 1 and 2, respectively.

The proposed project consists of the construction of a 10-foot wide, approximately 2,750-foot long multi-use trail connecting the east end of Carpinteria Avenue to Rincon Beach County Park, located in Santa Barbara County at the Ventura County Line. As envisioned, the trail will provide critical, non-motorized access for both pedestrians and bicyclists and help eliminate many of the existing safety concerns for travel either along the Highway 101 shoulder or within the railroad corridor.

Bengal explored and evaluated the subsurface soil and bedrock conditions along the proposed trail alignment to provide geotechnical design and construction recommendations. This report is prepared as part of the scope of work to present the results of our site exploration and geotechnical analysis, and recommendations for the design and construction of the proposed improvements.

This report is for use solely by the City of Carpinteria for the specific project site and the proposed project elements or the scope of work described herein. Site exploration conducted, analysis performed, and findings, recommendations and conclusions contained in this report may not be adequate or appropriate for use by others, different project elements, and for any other project or purpose.

3.0 SCOPE OF WORK

The scope of work completed for this geotechnical report includes:

- A review of available publications, maps and reports prepared by others (see reference list).
- Review of historical aerial photos for the area on file at the University of California, Santa Barbara – Davidson Library, Map and Imagery Laboratory.
- Historical document review of railroad construction details at the Santa Barbara Historical Museum.
- Several site visits, geologic reconnaissance and mapping within the project limits.
- Excavation, logging and sampling of eight (8) large-diameter borings, twenty-four (24) hand-excavated test pits, and nine (9) backhoe-excavated test trenches along the trail alignment.
- Preparation of geologic maps (Plates A & B, Appendix A) and representative cross-sections (Plates C & D, Appendix A).
- Preparation of the site exploration boring, test pit and test trench logs (Appendix B).
- Laboratory testing of representative samples of the subsurface geomaterials (Appendix C).
- Review of subsurface geologic conditions
- Field and laboratory data evaluation and interpretation to determine geomaterial types and their generalized geologic and geotechnical characteristics.
- Performing various geotechnical engineering analyses; including slope stability analyses (Appendix D), and the
- Preparation of this geotechnical study report.

In preparing this report, we also reviewed the proposed project details shown on the latest civil engineering plans attached in Appendix E.

4.0 PROPOSED PROJECT

The proposed project consists of the construction of a 2,750-foot long multi-use trail connecting the eastern terminus of Carpinteria Avenue to Rincon Beach County Park, located in Santa Barbara County at the Ventura County Line (see Figure 1). As envisioned, the trail is to consist of 10-foot wide paved travel-way with a 3-foot wide paved shoulder along each side. The proposed trail route is located along and above the Rincon Road onramp to southbound (SB) Highway 101, within the Union Pacific Railroad (UPRR) track corridor, and along an existing bench (abandoned railroad bed) that is used as an unofficial trail on County property. Most of the area within and along the project limits, including both the bluff top and adjacent slopes, has been graded over the years.

The proposed trail will provide a dedicated connection for pedestrians and bicyclists from Carpinteria Avenue to the Ventura County line through Rincon Beach County Park. The alignment would begin just south of the intersection of Rincon Road (Hwy 150) and the Highway 101 southbound on-ramp. The trail alignment continues east/southeast above and alongside SB Highway 101, descending on a northeast-facing cut slope above the southbound 101 on-ramp towards Rincon Point. As the trail approaches the highway shoulder and the southbound 101 overhead (OH) bridge the alignment turns slightly southward to span over the depressed UPRR railroad track corridor via a proposed 160-foot span, pre-fabricated trail bridge. After crossing the railroad tracks, the trail tums and, through a combination of cut and fill grading, descends across a southwest-facing cut slope above a relatively flat bench and beach below. Up until the early 1970's the bench was the previous railroad corridor / track alignment and is currently an unsanctioned, or unofficial, trail leading from the County Park parking lot to railroad tracks. The proposed trail will terminate at the western end of the Rincon Beach County Park parking lot.

Bengal is also providing civil trail and bridge structural engineering design for the Rincon Multi-Use Trail, including the preparation of plans/profiles, grading plans and cross sections. This geotechnical report addresses the proposed improvements shown on these plans. Station call-outs in this report are based on the most recent trail alignment shown on these plans

The current design concept emphasizes a grading approach, involving mostly cut and some fill, in the design and construction of the proposed trail. The proposed construction of fill slopes along the bluff portion of the trail will require the removal and re-compaction and keying/benching into competent materials prior to the placement of compacted fill.

5.0 PHYSICAL SETTING

The proposed Rincon Multi-Use Trail is located at the southeastern end of the Carpinteria Valley, in southeastern Santa Barbara County. The Carpinteria Valley is bounded to the east, north and northwest by the foothills of the Santa Ynez Mountains and to the south and west by the Pacific Ocean. The peaks and ridges of the adjacent foothills bounding the Carpinteria Valley range from approximately 600 to 2,000 feet above mean sea level (MSL).

The approximate limits of the study area are shown on Figure 1 of this report. The coordinates for the middle of the site are: Latitude = 34.381°, Longitude = -119.483°.

5.1 Climate

The City of Carpinteria is situated along the only south-facing stretch of coastline in Southern California. Like much of coastal California, the climate is considered Mediterranean and is characterized by mild, wet winters and dry and/or very warm summers. Average high temperatures range from 65° during December and January to 76° during August. Regions with a Mediterranean climate receive almost all of their precipitation during the winter season. The rainy season generally extends from November through March or April, with the bulk of the average rainfall occurring from December to February.

5.2 Existing Topography along Proposed Trail Alignment

The project alignment is located largely in an area of coastal bluff east of the City of Carpinteria near the Santa Barbara/Ventura county line. Below the Carpinteria terrace surface, which is at an elevation of approximately two hundred feet (200') above mean sea level, a series of lower terraces interspersed with relatively steep slopes along the proposed trail route are evidence of extensive past grading to construct both Highway 101 and the Union Pacific Railroad within the project limits. The Union Pacific Railroad right-of-way corridor passes through the proposed trail alignment near its mid-point.

At the eastern end of Carpinteria Avenue, and near the beginning of the proposed trail (~Sta 10+00 to 12+00), the trail alignment is situated atop the slightly modified, through relatively minor fill placement, Carpinteria terrace surface. From ~Sta 12+00 ahead on line to ~Sta 23+00, the proposed trail will traverse a northeast-facing related cut slope constructed when the existing coast highway was realigned, reprofiled (much lower), and widened during the late 1960's to grade the Highway 101 corridor. The 1968 record drawings for the freeway realignment (Contract 05-033024) indicate that this cut slope, above the mid-slope bench, was initially graded at 1:1 h:v (45°), while the lower portion was graded at 1.5:1 (34°). The freeway was later modified, mostly by widening toward the median, in the "Mussel Shoals HOV" Project (Contract No. 07-260704; drawings are dated 2011).

After traversing the above-referenced highway cut slope and reaching a relatively flat shoulder area adjacent to Highway 101, at approximately Sta 23+50, the trail alignment turns slightly southward to span over the UPRR railroad corridor cut via a one hundred and sixty foot (160') long, pre-fabricated pedestrian bridge. In the vicinity of the proposed pedestrian bridge, the railroad cut slope on the northeast side of the tracks has an average gradient of about 1:1 h:v (45°), while the cut slope on the opposite side of the railroad corridor has an average gradient of about 1.5:1 h:v (34°). Two relatively flat bench areas are present on the north side of the railroad cut, with the lower bench having been paved with concrete. These benches drain under the railroad via drainage systems built in the 1968 project.

On the southwest side of the proposed pedestrian bridge, the trail continues onto the ocean bluff or "bluff" portion of the trail alignment. At ~Sta 26+50 the trail alignment will curve to the southeast and head downhill along a the face of an existing, sixty to one hundred-foot (60'-100') high, 1:1 to 1:¾ h:v (45°-60°) southwest (or ocean) facing cut slope that was graded for the original railroad alignment. An existing mid-slope bench serves as an existing, "unmarked" trail, as it's referred to by the Santa Barbara County Parks Dept. The proposed trail will continue downslope until it merges with the existing mid-slope bench at or near Station 35+50. It then transverses along the existing bench and ends at or near the existing parking lot at ~Sta 37+50.

Slopes below the mid-slope bench along the "bluff" portion of the alignment descend to the beach below at average gradient of 1:1 to 1.5:1 h:v (34°-45°).

6.0 SITE INVESTIGATION

6.1 Air Photo Review

The following historical air photos were reviewed at the Map and Imagery Laboratory of Davidson Library, University of California at Santa Barbara.

Photo Series	Date Flown	Scale	Photograph Numbers
C-430	1929	1:24,000	A-21, 22
C-4950	1938	1:24,000	SF-145, 146
GS-EM	8-21-1947	1:24,000	6-150, 6-151
BTM-1954	6-1-1954	1:20,000	11K-90, 91
HA-AN	5-27-1956	1:9,600	6-21, 22
HA-GN	11-23-1959	1:15,600	101, 100
BTM-1961	7-5-1961	1:20,000	7BB-113, -112
HA-VX	2-10-1964	1:12,000	53, 54
HB-QD	10-30-1969	1:12,000	64, 63
HB-SY	12-27-1971	1:6,000	64-67
HB-WL	8-23-1973	1:12,000	3, 4
HB-XQ	2-23-1975	1:12,000	134, 135
USDA-24-615070	1978	1:24,000	678-175
PW-55010	1-17-1995	1:12,000	3, 2

The Carpinteria fault is readily apparent in the early photo series (C-430 and C-4950) where a north-facing scarp and related sag or depression are apparent, unaffected by later grading in the area.

The famous "Thunderbowl" racetrack is first visible in the GS-EM photo series. Per Campos et al (2007), the track operated from the mid-1940's into the 1960's. The track appears to have been constructed within the sag, or depression, at the base of a north-facing scarp, or slope, formed by movement along the Carpinteria fault. It appears that relatively limited grading was required to construct the track, and the fault trace and sag areas are still visible south and southeast of the racetrack. Highway 101 came to Carpinteria in the 1960's, and dirt from various highway excavations ultimately filled the depression and the racetrack. Terratech (1996) indicates that the track was filled between 1969 and 1970.

A complex of small buildings (origin unknown), near the southeast edge of the modern day bluff top and cul-de-sac terminus of Carpinteria Avenue, were apparent in the HA-AN photo series.

The 1971 photo series (HB-SY) reveals slope instability, erosion, etc. to the slope below the old railroad tracks/bench trail, in the vicinity of test trenches TT 07 to TT 09 (Geologic Map, Plate A). This is a drainage corridor with an existing box culvert at the bench, i.e. trail, grade.

Grading for the existing Highway 101 alignment and corridor, which includes the existing Caltrans cut and the railroad cut, was well underway in the HB-QD (1969) photo series. By this time the "Thunderbowl" racetrack and the sag area to the southeast had been filled in. This earth work was part of the eight-mile-long Rincon Freeway project. This project was dedicated on Dec. 21, 1972.

The HB-WL photo series show a number of relatively small, surficial slope failures in the slope below the old railroad tracks/bench trail, in the vicinity of test trench TT 07 and boring DH 07 (Geologic Map, Plate A). Also shown is the construction of the western parking lot at Rincon County Beach Park. The existing path, providing beach access from the western beach park parking lot, has been graded and constructed at this time.

6.2 Summary of Previous Studies (Others)

The City of Carpinteria provided Bengal with copies of two (2) geotechnical documents or reports that were located by City staff, at the request of Bengal. Both reports, TerraTech (1996) and Dudek (2012), reference several reports of previous studies conducted within or immediately adjacent to the project limits. Most, if not all, of these studies were performed to evaluate site geologic conditions as they pertain to proposed development of the site known as "Carpinteria Bluffs Area III". This site is believed to be the vacant, bluff-top parcel(s) located immediately west/northwest of the northern portion of the proposed trail.

The 1996 report by TerraTech contains information that is particularly useful. In addition to reviewing previous site reports, TerraTech reviewed aerial photographs, mapped exposures on slopes, and excavated a ~150' long and up to thirty foot (30') deep seismic trench. The report copy on file at the City lacks maps and other attachments. Of note to the current investigation are the following details:

- TerraTech concluded that three faults crossed the property and concluded that these faults are "potentially active", given the offset of the contact between the Monterey Formation and the overlying terrace deposits.

- TerraTech addressed the issue of landsliding by reviewing the work done by previous investigators. Evidence of large-scale, deep-seated landsliding was observed, though the size and limits of the landsliding was disputed. We have noted and mapped this landslide(s), and it is located northwest and beyond the limits of the proposed trail improvements.

6.3 Summary of Bengal's 2013 Geotechnical Investigation

Site exploration for the preliminary investigation was conducted from April 23-25, 2013. The field investigation consisted of geologic mapping within the project limits and subsurface investigation. Along the existing, unofficial County trail, nine (9) backhoe test trenches were excavated to depths ranging from six feet (6') to thirteen and a half feet (13.5') below grade. Additionally, fourteen (14) hand-dug test pits were excavated within the proposed trail alignment. For reference, the locations of the exploratory test trenches and test pits are shown on the Geologic Maps, Plates A and B (Appendix A).

Subsurface conditions encountered in these explorations were logged by an Engineering Geologist from this office. The subsurface conditions encountered in these test pits and trenches are described in the boring logs included in Appendix B. Representative samples of the earth materials encountered were obtained. Explorations were backfilled with the excavated materials. However, the backfill was not compacted to relative compactions necessary to characterize as engineered compacted fill and, thus, should be monitored for future settlement and/or, if necessary, removed/replaced as compacted engineered-fill.

Within the hand-dug test pits and test trenches, a hand-held sampler (with a sliding drop weight) was used to obtain relatively undisturbed ring samples for laboratory samples. The rings are of 2½" outside and 2.42” inside diameters, and 1" in height.

6.4 Field Investigation – Detailed Design Phase

Site exploration for the detailed design phase was conducted from March 12th-14th and August 16th and 17th, 2018. The detailed design phase field investigation consisted of additional geologic mapping and subsurface investigation. Nine (9) twenty-four inch (24”) diameter borings, ranging from sixteen feet (16’) to fifty-five feet (55’) below grade, and nine (9) hand-dug test pits were drilled/dug, sampled and downhole logged. For reference, the locations of the exploratory borings (designated as DH 01 to DH 08) and test pits (TP 15 to TP 24) are shown on the Geologic Maps, Plates A and B (Appendix A).

Subsurface conditions encountered in these explorations were logged by an Engineering Geologist from this office. The subsurface conditions encountered in these borings and test pits are described in the boring logs included in Appendix B. Representative samples of the earth materials encountered were obtained. With the exception of borings DH 07a and DH 07b, which were backfilled with 2-sack concrete slurry, the borings and test pits were backfilled with the excavated materials. However, the backfill was not compacted to relative compactions generally necessary to characterize as engineered compacted fill and, thus, should be monitored for future settlement and/or, if necessary, removed/replaced as compacted fill to sufficient depths.

Undisturbed samples were obtained within the large-diameter borings with a Modified California (M.C.) ring sampler (ASTM D 3550 with a shoe similar to ASTM D 1586). The M.C. sampler has a 3" outside diameter and a 2.5" inside diameter. Samples were obtained by driving the sampler with successive drops of the Kelly bar. The soil is retained in the brass rings of 2½" outside diameter, 2.42” inside diameter and 1" in height.

Within the hand-dug test pits, a hand ring sampler (with a sliding drop weight) was used to obtain relatively undisturbed ring samples (2½" outside and 2.42” inside diameter and 1" in height) for laboratory testing.

Bulk samples were also obtained for testing and analysis. All undisturbed and bulk samples were sent to the laboratory for examination, testing, and classification, using the Unified Classification system and group symbol.

6.5 Laboratory Testing

Several laboratory tests were assigned on representative samples of the subsurface materials obtained from the exploratory test pits, trenches, and borings. These tests included:

- Moisture-Density tests
- Sieve Analysis tests
- Atterberg Limits tests
- Direct Shear tests
- Unconfined Compression (UC) tests
- R-Value testing, and
- Soil Corrosion tests

SubSurface Designs, Inc., of Sylmar, California and AP Engineering and Testing, Inc., of Pomona, California, performed the laboratory testing on the selected samples assigned by Bengal Engineering. Test results are included in Appendix C.

These tests were conducted to aid in the classification of the subsurface materials and to determine their shear strength parameters for slope stability analysis. These tests were conducted in accordance with the general procedure included in the applicable ASTM standards.

7.0 GEOLOGIC CONDITIONS

7.1 Regional Geology

The project site is located within the Western Transverse Ranges physiographic province of Southern California. The Transverse Ranges are a complex series of east-west trending mountain ranges and valleys. Mountain ranges in the Transverse Ranges province are made up of rocks that are progressively older from the west to the east. The structural orientation of this province is transverse to the general north-northwest structural trend of the other geologic provinces in California. The Western Transverse Ranges extends from the Ventura County, west to Point Arguello, and is dominated by the east-west trending Santa Ynez Mountain Range. Cretaceous-Cenozoic sedimentary marine rocks and Miocene volcanic rocks dominate the Western Transverse Ranges region.

Structurally, the Carpinteria Valley and the project site are within an area termed the Santa Barbara Fold Belt (Gurrola. et al., 1998). The Santa Barbara Fold Belt is located along the coastal piedmont (the area between the mountains and the ocean) from east of Carpinteria to west of Goleta. It is a region of active folding that is generally comprised of west to northwest trending folds and blind reverse faults deforming late Pleistocene (11,000 to 1.6 million years before present) to Holocene (11,000 years to present) marine terraces, terrace deposits, and alluvial fans (Gurrola et al., 1998). This deformation is thought to have caused localized topographic highs within the Carpinteria Valley, such as the Shepard Mesa and Summerland Hills.

The project area is located at the western end of an area termed by Dibblee (1994) as the Rincon Uplift. A block of marine, Miocene shale formations has been uplifted between the Red Mountain Fault on the south and the Rincon Creek Fault on the north. This uplifted block, which is anywhere from one to two miles wide, becomes gradually and progressively higher to the east, from Carpinteria to its high point at Rincon Mountain.

7.2 Overview of Topography and Site Geology along Proposed Trail Alignment

At the eastern end of Carpinteria Avenue and near the beginning of the proposed trail (~Sta 10+00 to 12+00), the project is situated atop the slightly modified eastern end of the Carpinteria coastal bluffs. The bluffs are eroded from complexly folded Monterey Shale and overlain by a thin, relatively flat-lying deposit of sandy, older alluvium and, adjacent to the contact with the underlying bedrock, regressive marine sand deposits. Mapping by the CGS (2003) and others suggests these marine terrace sands may be correlative with the dated (40-60kya) Punta Gorda terrace, located between the project limits and Ventura to the east/southeast.

Relatively thin amounts of earth fill have been placed atop the terrace deposits atop the Carpinteria coastal bluff. Approximately six feet (6') of fill overlaying terrace deposits, was encountered in test pit TP 01, and two feet (2') of fill was identified in boring DH 08.

As previously mentioned, east of the Carpinteria Avenue cul-de-sac, a north-facing scarp and related sag (depressed area) are visible in early aerial photos and topographic maps. The scarp/sag appear to the features associated with the potentially active Carpinteria Fault. The filling and leveling of this area appears to have occurred during the 1960's, in conjunction with the construction of nearby Highway 101.

From ~Sta 12+00 ahead on line to ~Sta 23+00, the proposed trail traverses a northeast-facing cut slope constructed when the existing roadway was realigned and widened during the late 1960's and early 1970's to create the 6-lane Highway 101. The northern portion of this cut slope is underlain by both terrace deposits and Santa Barbara Formation, as shown on the Geologic Map (Plate A, Appendix A). Relatively shallow surficial failures were observed and mapped within the terrace deposits on this cut slope, exclusively within the portion of the cut slope graded at 1:1 h:v (45°).

Near Sta 18+00, a high angle, south-dipping fault (presumably the Carpinteria Fault) brings siliceous shale of the Monterey Formation (Tm) into contact with both the Santa Barbara Formation and marine terrace sands. The fault contact was observed within Test Pits TP 04 and TP 08 (Plate A, Appendix A). To the southeast of this fault contact, thinly-bedded Monterey shale is exposed along the proposed trail alignment and on the Highway 101 cut slope. Where observed, bedding within the Monterey dips steeply south and locally north, where it is overturned. While relatively hard, the shale is closely fractured, locally jointed and weathers to a slopewash which is soft and prone to erosion and creep on the relatively steep cut slope.

After traversing the Highway 101 cut slope, the proposed trail will curve southward before crossing the UPRR tracks on a 160-foot long pre-fabricated pedestrian bridge. Aerial photo research indicates that the UPRR cut was made at the same time the Highway 101 construction was occurring, i.e. the late 1960's and into the early 1970's. At the proposed location of the northern abutment of the proposed pedestrian bridge, an analysis of the record drawings for the referenced railroad project indicates that the existing grade is approximately one hundred feet (100') lower than the original, pre-Highway 101 grade. Near-vertical beds of moderately hard

to very hard bedrock (siliceous siltstone) were mapped within borings DH 07a and DH 07b, drilled adjacent to the northern abutment of the proposed pedestrian bridge. Steeply south-dipping to overturned, locally folded and contorted, Monterey Shale is well-exposed in the railroad cut. Overall, the railroad cut slopes near the proposed pedestrian bridge location have performed relatively well, though the moderately hard, but brittle and fractured siliceous shale is prone to sloughing, and talus mantles the lower portions of the cut slopes in several areas.

On the southwest side of the proposed pedestrian bridge, the proposed trail is in cut as it crosses over a relatively sharp, northwest-trending ridgeline. An overlook is proposed at this location, approximately Sta 26+50, where trail users can rest while enjoying a panoramic and sweeping view of the Pacific Ocean. Here also the trail alignment veers southeast and descends the relatively steep (45°-±60°) southwest-facing cut slope constructed along the original railroad alignment through this area. From ~ Sta 26+50 to ~Sta 33+00 the cut slope is composed of steeply north-dipping and fractured shales of the Monterey Formation. The existing cut slope is in overall fair condition, with an area of exception being the previous slope failures and current failure scar from ~ Sta 27+50 to ~ Sta 28+75. A wedge of mixed slopewash and shallow rock fall debris was observed and encountered in test trenches TT 04 to TT 06.

Cut and fill grading is proposed as the trail will traverse and descend the cut slope at ~5% profile grade. Cut slopes are proposed at a 1:1 (45°) gradient, along with drainage measures along the top of the cut and mid-slope bench, while a 1.25:1 (h:v) geotextile-reinforced fill slope will daylight along the existing mid-slope bench or the “unmarked” trail as its referred to by the Santa Barbara County Parks Dept. Test pits and borings indicate that much of the slope below the mid-slope bench was constructed as a sliver fill embankment during grading for the original railroad alignment.

The trail alignment will cross the conformable contact between the Monterey and younger Sisquoc Formations (Tsq) at ~ Sta 33+00. Compared to the Monterey, the Sisquoc is not as well-bedded and is composed primarily of mudstone and/or siltstone that lacks the hard, siliceous intervals. Where observed in site explorations and at outcrop, bedding within the Sisquoc strikes generally east-west and dips steeply to the north. Near its contact with the Monterey Formation, slope failures have been investigated and mapped in the Sisquoc portion of the cut slope between ~Sta 33+40 and ~Sta 35+00.

After traversing the existing bluff cut slope face, the proposed trail will intersect the existing mid-slope bench at approximately Sta 36+00. From this point ahead to the end of the trail alignment and intersection with the Rincon Beach parking lot, the trail will be in a slight cut. From ~Sta 36+50 ahead, the existing cut slope above the bench/trail is comprised of terrace deposits (Qt), unconsolidated sands with occasional cobbles and small boulders which are locally weakly cemented and mantled by a relatively thick soil profile. Given their lower elevation, these terrace deposits appear to be younger than those along the top of the Carpinteria bluffs.

7.3 Faulting and Seismicity

The site is located in an active seismic region where large numbers of earthquakes occur each year. Moderate to large earthquakes, capable of generating significant ground motions at the subject site, have occurred in the region and are likely to occur again during the design life of the subject facility.

The Rincon Creek and Carpinteria faults, and the "central fault" discussed by Putnam (1942), are three south-dipping reverse faults, within and adjacent to the project limits, which bound the north side of the Rincon Mountain horst structure.

Carpinteria Fault

The Carpinteria fault, a high-angle, south-dipping reverse fault, has been mapped as trending north of west through the project limits. Dibblee (1994) mentions that the fault once formed a “low, vague, north-facing scarp in older alluvium just south of Highway 101” and immediately east of the project limits. The north-facing scarp was seen on early aerial photos and early USGS topographic maps, prior to development of the aforementioned “Thunderbowl” racetrack and subsequent placement of fill generated by the nearby grading of Highway 101. The fault is thought to possibly merge with the Rincon Creek Fault further to the west.

Bengal believes it exposed the Carpinteria Fault in test pits TP 04 and TP 08, and mapped the approximate surface trace of the fault on the Geologic Map (Plate A). The fault has displaced the 40k to 60k Punta Gorda marine terrace deposits (Qtm). Test Pit TP 04 showed clear evidence of the Monterey Formation bedrock in fault contact with sandy, unconsolidated Qtm deposits along a near-vertical fault plane parallel to bedding within the Monterey. Guptill (1981) mentioned that the total vertical separation of the bedrock wave abrasion platform measures thirty feet (30') at this location.

Guptill (1981) also described work to confirm the location of the Carpinteria fault west of the Highway 101 road cut. Bucket auger holes demonstrated about eighteen feet (18') of vertical separation of the terrace bench, and an antithetic fault south of the main trace offset the terrace contact and near-surface soils in a backhoe trench, which would appear to indicate quite youthful activity.

Rincon Creek Fault

The potentially active Rincon Creek fault (aka Rincon Creek / Mesa fault) and associated Rincon Creek Anticline are located approximately 3,500 feet and 1,800 feet north, respectively, of the northern limits of the study area. The fault is thought to be capable of a moment magnitude 6.4 to 6.6 earthquake. The fault is a reverse, south-side up that is thought to join the Mesa Fault west of Carpinteria. The Mesa fault is considered “active” by Santa Barbara County (1979), and it may be responsible for any of several notable earthquakes in the Santa Barbara area since records have been kept.

Red Mountain Fault

The steeply dipping / overturned block of Monterey and Sisquoc Formations is elevated on the Red Mountain fault, located just offshore, against the Pliocene Pico Formation to the south (Dibblee, 1994). The Red Mountain fault, a thrust fault capable of earthquakes between M_w 6.0-6.8 (SCEC) to 7.2 (Caltrans), is thought to dip steeply north in the project vicinity and strike south of east under Rincon Point and onshore about one mile east of Rincon Point. The fault splays into two main branches near the Carpinteria coast. The State of California considers the Red Mountain fault to be “active”, as evidence has been found at location(s) along the surface fault trace for ground rupture during the Holocene (i.e. the last 11,000 years).

The location of the Red Mountain fault varies depending on the source of the geologic mapping. Some workers show the queried or approximate location of the fault trending through Rincon Point (Dibblee, 1994), where an exposure of Pico Formation bedrock has been mapped, or offshore of Rincon Point (California Geological Survey, 2003).

7.4 Earth Materials

Areas of earth fill (ef) are found throughout the project limits. The areas of earth fill shown on the attached Geologic Maps (Plates A and B) are what are considered to be significant in the sense that they are large and/or relatively thick, or the fill has been placed to help minimize erosion of other slope stability issues, or that the fill is located in areas that will be subject to bluff-retreat processes. Notable areas of fill include:

- The fill placed on the bluff top, at and near the start of the proposed trail. Approximately two to six feet (2'-6') was encountered in subsurface explorations in this area.
- Fill encountered in numerous test pits excavated at the base of the bluff, above the aerial extent of the beach sands and encountered in several borings excavated along the outside edge of the mid-slope bench. It appears this fill was placed or cast in order to widen the mid-slope bench (on which the railroad ran along for several decades) and to slow the natural bluff retreat process. Along the base of the coastal bluff, the fill was placed directly atop beach sands.

With the exception of the soil profile observed near the County Park parking lot, natural soil deposits (Qns) were not encountered within the explorations, as much of the trail corridor has been extensively graded. Slopewash (Qsw) was noted in several test trenches excavated just above the existing unsanctioned County trail, at the base of this over-steepened slope, and mantling the Highway 101 cut slope. Landslide debris (Qls), both definitive and questionable, is shown on the Geologic Maps and was observed in many explorations along the ocean portion of the proposed trail alignment. Colluvium (Qc), a term for a heterogeneous mix of materials present on a slope, was mapped in several areas and observed in a few explorations. Though not mapped as a separate unit, shale rock fragments (i.e. talus) have accumulated near the base of slopes within the railroad cut. A relatively thin and transient deposit of beach sand (Qbs) mantles the modern bedrock abrasion platform along the beach.

Terrace deposits (Qt) have been mapped in the existing cut slope near the end of the proposed trail alignment. Older marine terrace deposits (Qtm), which have been mapped and correlated by others with the 40-60 kya Punta Gorda terrace, cover or veneer much of the relatively flat Carpinteria bluff area and were observed and sampled in several test pits.

From north to south across the project limits, sedimentary bedrock of the Santa Barbara Formation (Qsb), the Monterey Formation (Tm), and the Sisqouc Formation (Tsq) underlie the unconsolidated deposits.

The earth materials encountered within the explorations and exposed at the surface within the project limits are briefly described below. For approximate depths and more detailed descriptions, refer to the enclosed Logs of Subsurface Explorations (see Appendix B). The surficial distribution of geologic materials is shown on the Geologic Maps (Appendix A).

Earth Fill (ef)

In TP 01 and boring DH 08, near the northwest end of the project limits, the fill varied from yellowish brown, very dense silty gravel (GM) to dark brown silty sand (SM) to light brown fine-grained silty sand / sandy silt (ML) with scattered rock fragments. At the southeast end of the project limits, the earth fill encountered within explorations along the former railroad alignment consists of silt with some sand (ML) to fine-grained silty sand / sandy silt (SM/ML) with scattered to abundant shale fragments which is light brown to brown to light yellowish brown to light brownish gray, soft/loose to compact, and slightly moist with scattered roots and an occasional piece of construction debris.

Beach Sand (Qbs)

The beach area is mantled by a relatively thin layer of fine- to medium-grained sand (SP) with scattered cobbles which is light brown to tan, loose to medium dense, and dry to moist.

The thickness of the beach sand deposits varies considerably during the course of the year, with winter storm and wave conditions creating a thin profile of sand, as compared to the summer months.

Slopewash (Qsw)

Slopewash was observed in several test pits excavated along the base of the Highway 101 cut slope, above the southbound 101 on-ramp. The slopewash mantles the cut slope where the bedrock isn't exposed, is material derived from the bedrock, and is subject to slope processes such as creep and erosion. Where observed in the test pits in this area, the slopewash consists of light brown sandy silt (ML) with scattered rock fragments which is soft/loose to slightly dense, slightly moist and contains scattered to abundant roots.

Slopewash was also noted in several test trenches excavated along the base of the over-steepened slope above the existing, "unsanctioned" Santa Barbara County trail, i.e. the old railroad bed. These deposits accumulated at the base of the slope over time and vary from being clast- to matrix-supported and are noted for being quite loose and prone to caving/collapse.

Landslide Debris (Qls)

Landslide debris and questionable landslide debris / landslide-affected rock has been mapped in several areas within and adjacent to the proposed trail alignment. Where observed, the landslide debris consists of a heterogeneous, massive, clast- to matrix-supported mix of mudstone fragments in a matrix of light brown elastic silt to sandy silt to silt with clay (ML).

Questionable landslide-affected bedrock was encountered in boring DH 04, to a depth of seventeen feet (17') below grade, and consists of a highly fractured, dry, slightly hard mudstone and siltstone with local open fractures and discontinuous structure.

Terrace Deposits (Qt)

Where observed, these deposits consist mainly of medium- to thick-bedded, fine- to medium-grained sand (SP), occasionally laminated, with occasional gravel to gravelly sand (GP) with occasional layers with cobbles to small boulders which is brown grading light yellow to light reddish brown (with depth), slightly moist, and dense to very dense with localized areas of cementation.

Marine Terrace Deposits (Qtm)

Where observed, these deposits consist mainly of light reddish brown / light orange brown, brown to reddish tan clean, fine- to medium-grained sand (SP) with some silt, with occasional gravel. Near the Qtm/bedrock contact in boring DH 08 the generally thick-bedded to massive sands became coarser-grained with abundant cobbles.

These deposits unconformably overlie eroded bedrock on an elevated marine wave-cut platform. In some locations the basal layer consists of cobble to pebble gravel or conglomerate grading upward into laminated, massive beach sand. The upper two-thirds or more of terrace sequences typically includes non-marine, stratified fluvial and alluvial pebble-cobble gravel with fines and minor colluvial deposits.

The earth fill, beach sand, slopewash, colluvium, landslide debris, terrace and marine terrace deposits were classified visually and, where available, using results of the laboratory tests in accordance with the Unified Soils Classification System.

Bedrock (Qsb) – Santa Barbara Formation (lower Pleistocene)

The Santa Barbara Formation, consisting of fossiliferous fine-grained sandstone and siltstone, crops out along the base of the southbound Highway 101 cut slope and was observed/sampled in test pits TP 07 and TP 08. Where observed in the test pits and on the cut slope, the bedrock is typically buff to pale-yellow (where weathered), soft to moderately hard, friable, moist, consolidated and weakly to locally well-indurated (i.e. cemented). Abundant fossils, most of which are broken into a “hash”, include pectin and turritella.

Bedrock (Tsq) – Sisquoc Formation (Pliocene-Miocene)

The Sisquoc Formation generally consists of occasionally bedded to massive mudstone, siltstone and diatomaceous mudstone. The bedrock is typically light brown to light yellowish brown to olive/brownish gray grading to gray/blue-gray (unoxidized), moderately hard to hard, moist, moderately to slightly weathered, highly to slightly fractured, and occasionally jointed. The Sisquoc is generally considered a “landslide prone” formation.

Bedrock (Tm) – Monterey Formation (Miocene)

Thinly-bedded, soft to moderately hard shale, laminated siltstone, diatomaceous shale and very hard siliceous shale, with minor beds of chert, of the Miocene Monterey Formation underlies most of the project area and is exposed along the sea cliffs, within the railroad cut, and along the highway cut above the southbound Highway 101 on-ramp. The bedrock is typically gray to grayish brown to light brown to dark gray/black, slightly hard to very hard, slightly weathered, and highly to slightly fractured.

Earth material profiles can only be obtained from individual explorations placed on the subject property. Care should be exercised when using these profiles to determine changes in depth or thickness of the earth materials between explorations.

7.5 Geologic Structure

Geologic structure refers to the presence and preferred orientation of geologic features or discontinuities within the bedrock materials; such as bedding, shearing, jointing, flow banding, fracturing, etc.

Within the study limits, the Tertiary bedrock formations (Sisquoc and Monterey) have been thrust up and brought into contact with the Santa Barbara formation along the Carpinteria Fault. South of the fault, the Monterey and Sisquoc shales are together upended and partly overturned southward. In other words, north-dipping bedding is overturned. Along the beach, the Monterey is complexly folded, is generally upended or overturned, and contains numerous tar seeps.

Site sedimentary bedrock exhibits continuous and planar bedding (planar or nearly planar surfaces that visibly separate each successive layer of stratified rock). Bedding mapped in the explorations, and where bedrock is exposed at the surface, exhibits a consistent east-west strike with primarily steep dips both north and south.

7.6 Landslides

Areas of landslide debris and questionable landslide debris have been mapped (Geologic Maps, Appendix A) along the proposed trail corridor, primarily along the existing unsanctioned County trail along the present sea cliff.

Along the Caltrans cut slope, in the vicinity of Sta 16+00 to 17+00, surficial failures have occurred within the marine terrace deposits (Qtm) located above the mid-slope bench. Of note is that these failures occurred in the highest and steepest, 1:1 (h:v) portions of the cut slope where the terrace sands are exposed.

Between approximately Sta 33+40 and Sta 35+00, coalescing landslides have been mapped along the proposed trail alignment. Further evidence of slope instability includes segments of a top-of-slope retaining wall, originally constructed to support a portion of the original coast highway prior to realignment, which are now lying on the slope below. Test trenches TT 02 and TT 03 were excavated in these landslide deposits, near the base of the ascending slope. Eight feet (8') of landslide debris was encountered in TT 02, and eleven feet (11') in TT 03. These slides developed in weathered and over-steepened cut slopes of Sisquoc Formation mud/siltstone.

During the detailed design exploration phase this area was further investigated. Boring DH 04 was drilled, sampled and downhole logged to thirty-five feet (35') below grade. Questionable landslide-affected bedrock and/or poor-quality rock, characterized by open fractures, discontinuous structure and local "powdery" zones, was encountered to a depth of seventeen feet (17') below grade. A distinct shear or shear zone was not observed at 17', but rather a steeply northwest- to west-dipping fracture zone with open voids and roots below which the rock quality immediately improved.

The area between approximately Sta 33+40 to Sta 35+00, including the existing cut slope areas and the existing bench on which compacted fill will be placed, will require mitigation as part of the construction of the proposed trail. The existing, ascending slopes in this area are not stable and, unless mitigated, this is a likely area for future movement and/or distress. We recommend remedial grading of this area by way of construction of a buttress fill.

Additional areas of landslide-affected or potential landslide-affected materials have been mapped along the ocean bluff and have the potential to impact construction and long-term performance of the proposed trail (Geologic Maps, Appendix A).

1) Southwest of Sta 27+00, approximately twelve feet (12') of colluvium or landslide debris was encountered in boring DH 01, and similar colluvium and/or mudflow deposits were encountered in test pit TP 24, excavated near the toe of slope and above the beach sands. A massive and heterogeneous mix of shale fragments and light brown to light orange brown silt/clayey silt are exposed in a near-vertical slope face along the base of the bluff. In test pit TP 24, beach deposits were found at a depth of nine feet (9').

   The colluvium/mud flow deposits observed on the slope and in test pit TP 24 appear to thicken toward the northwest, where they are well-exposed in the steep slope just behind a low-height concrete sea wall.

2) Highly fractured and locally contorted and thermally altered shale is exposed in the scar of coalescing, relatively shallow landslides on the existing cut slope between ~ Sta 27+50 to ~ Sta 28+75. The proposed 1:1 (h:v) cut slope should help mitigate the potential for future shallow sliding/rock fall events. Trail construction below the trail surface and the descending fill slope will require close construction monitoring to ensure that all loose debris had been removed prior to the placement of compacted fill in keyway(s) and atop cut benches.

3) Underlying fill along the beach and at the toe of the sliver fill slope, three feet (3') of landslide debris overlying beach sand was encountered in test pit TP 21. Given the location, this failure is analogous to the common type of slope failure seen as a result of wave-attack at the base of the sea cliff. It is likely that additional areas of landslide debris are found along the base of the sea cliff within the project limits.

   Relatively recent tension cracks, indicative of an incipient shallow (?) failure developed in colluvium and/or landslide debris, have developed near the top of the descending slope in the vicinity of Sta 35+50 (Geologic Map, Plate B).

4) The fill materials comprising the afore-mentioned sliver fill slope below the County trail and mid-slope bench are, in general, prone to surficial erosion and occasional shallow slope failures.

Air photo analysis and field mapping indicate the presence of a relatively large and deep-seated landslide present within the coastal bluff slope, west of the project limits. Guptill (1981) mentioned that this landslide moved slightly during the 1978-79 winter rains, with open fissures, offset culverts and a pronounced sag along a portion of the railroad tracks observed. Subsurface exploration at a point just north of the railroad tracks indicated a suspected slide zone located approximately forty to fifty feet (40'-50') below grade (Guptill, 1981).

7.7 Sea-Cliff or Bluff Retreat Rates

Long term rates of cliff or bluff erosion along the "South Coast" region, which includes the Carpinteria area, have been calculated by many and this remains an area of active research. This includes site-specific, and regional, studies, including a 2007 study by the United States Geological Survey (USGS), which quantitatively assessed bluff retreat rates along the entire California coastline.

The coastal portion of the proposed trail will be affected by the various processes of sea-cliff retreat. Evidence for this can clearly be seen in the landslide and/or debris/mud flow deposits mapped along the sea-cliff (Geologic Maps, Appendix A) and areas of surficial erosion that have required remedial measures in an attempt to stop or slow down the bluff retreat process. These measures include the past construction of two seawall segments at the base of the bluff, and the placement of concrete rubble fill. The seawall protection is for the bluffs located northwest and outside the project limits.

The City of Carpinteria's General Plan (2003) suggests for planning purposes the use of a "conservative" rate of an average long-term, bluff retreat of 6.0 inches/year.

8.0 GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS

This section presents our review of the pertinent geotechnical conditions along the proposed trail alignment. The existing surface grade and the proposed finish grade elevations along the centerline of the proposed trail alignment, the proposed cut/fill details and recommended remedial/stabilization excavation/backfill limits are shown on Plates A through D (Appendix A) and the Typical Cross Section and Layout Plans (Appendix E).

8.1 Subsurface Soil/Bedrock Conditions

Based on the review of existing relevant information and the results of field exploration and laboratory testing conducted as part of this study, subsurface materials underlying the project site can be divided into seven (7) broad units for the purpose of geotechnical analysis and design. These units include:

1. Artificial fill consisting of mainly dry to moist, loose to medium dense silty sand (SM) and elastic silt/sandy silt (MH).
2. Marine Terrace Deposits (Qtm) consisting mainly of fine- to medium-grained sand (SP) and silt (ML) layers with interbedded layers of silty/clayey sand (SM/SC) and gravelly sand (GP).
3. Santa Barbara Formation (Qsb) consisting of locally well-cemented dense to very dense sand and silty sand soil-like bedrock materials.
4. Monterey Formation (Tm) – slightly to moderately hard, well-bedded, moderately weathered sandy silt/silt-like (MH) siliceous shale and shale bedrock.

5. Sisquoc Formation (Tsq) consisting of mainly slightly to moderately hard, highly fractured and moderately weathered elastic silt-like (MH) siltstone/mudstone bedrock.
6. Slopewash/colluvium/landslide debris (Qsw/Qc/Qls) consisting of mainly loose, sandy silt with little or no clay (MH) and rock fragments, and silty sand (SM), and
7. Beach Deposit (Qbs) consisting of loose to medium dense sand (SP) with cobbles.

For more detailed description of the subsurface materials, including their area exposure and spatial distributions along the alignment and the bedrock bedding orientations, where present, please refer to the Plates A through D in Appendix A and the exploration logs in Appendix B.

Based on the subsurface materials encountered at the locations of the field explorations, the proposed trail alignment can be broadly divided into five (5) geotechnical segments:

Segment 1: Station 10+00 to Approx. Station 17+70

This segment is located north of the Carpinteria Fault, which intersects the proposed trail alignment at approximately Station 17+70. This segment of the alignment is underlain, at the locations of the field exploration, by about two (2) to six (6) feet of fill soils (ef) consisting of mainly silty sand (SM) to silty gravel (GM). About two (2) feet of slopewash (Qsw) soil was encountered on the north-east (or freeway) side of the trail alignment. Fill or slopewash soils are underlain by up to about thirty (30) feet of Marine Terrance Deposit (Qtm), which consist of dense to very dense sand (SP), which in turn is underlain by moderately hard to hard, cemented, sand (SP) to silty sand (SM) bedrock of the Santa Barbara Formation (Qsb).

Segment 2: Approx. Station 17+70 to Approx. Station 24+00

This segment of the trail alignment is underlain by about one (1) to two (2) feet of fill soils (ef) or slopewash (Qsw) over Monterey Formation (Tm) bedrock consisting of moist to slightly moist, slightly weathered, tightly fractured, well-bedded, and very stiff to moderately hard siliceous shale and shale.

Segment 3: Approx. Station 24+00 to Approx. Station 26+50

This segment of the trail alignment is within the UPRR railroad corridor cut and underlain by moist to slightly moist, moderately to slightly weathered, laminated and well-bedded, stiff to moderately hard to hard Monterey Formation (Tm) bedrock consisting of siliceous shale and shale with little or no overlying overburden soils. This segment of the trail alignment will be carried over the railroad cut by a proposed single-span trail bridge. The proposed pile-supported bridge abutments are located at Stations 24+50 (Abutment 1) and Station 26+10 (Abutment 2). The southern part of this trail segment, past Abutment 2, traverses along the bottom of a proposed cut through the middle of a steeply rising ridge before daylighting on the face of the ocean-facing steep slope or coastal bluff.

Segment 4: Approx. Station 26+50 to Approx. Station 33+00

This portion of the trail alignment traverses across and down the modified, relatively steep cut face of the bluff from its top to an existing, unsanctioned dirt trail located at mid-height of the overall slope. The slope materials beneath the trail consists of mainly moist, stiff to moderately hard, thinly bedded, highly to moderately weathered siliceous siltstone and shale of the Monterey Formation (Tm). The bedrock material (Tm) within the lower part of the slope, below the existing dirt trail, is overlain by up to ten (10) to fifteen (15) feet of mixed earth fill/slopewash/colluvium (ef/Qsw/Qc) materials. A number of localized surficial landslides (Qls) were also mapped on this area of the slope. These surficial materials are considered potentially unstable, compressible under static loads (i.e. new fill), and susceptible to new or reactivated landsliding.

Segment 5: Approx. Station 33+00 to Station 37+50

This segment of the trail alignment is underlain by mainly moist to slightly moist, weathered to slightly weathered, locally jointed, massive to locally bedded, and slightly to moderately hard mudstone/siltstone bedrock of the Sisqouc Formation (Tsq). The lower part of the slope, below the merged segment of the existing dirt trail and the proposed trail alignment, is overlain by about four (4) to seven (7) feet of fill (ef) over two (2) to five (5) feet of colluvium/landslide debris, which in turn is underlain by beach sand near the toe of slope. An approximately one hundred fifty (150) foot wide, minimum ten (10) to twelve (12) foot deep landslide is mapped along this trail segment between approximately Stations 33+20 and 34+70.

8.2 Groundwater Conditions

Groundwater and/or seepage were not encountered within the subsurface explorations. Evidence of surface seeps, i.e. springs, within or adjacent to the project limits was not observed. Additionally we have seen no mention of historical springs within the reviewed documents.

Though groundwater was not encountered, there are two settings where transient groundwater or seepage may occur at various times (dependent mostly on seasonal rainfall): (1) at the interface between the unconsolidated marine terrace deposits and the shale bedrock and (2) at or near the base of the coastal bluff, i.e. behind the beach. These groundwater regimes are noted along many other stretches of coastline along southern Santa Barbara County.

It must be noted that fluctuations in groundwater conditions or levels will occur. The depth to groundwater, if encountered in the explorations, is only valid for the date of exploration. Changes may occur in this groundwater level due to climatic conditions and/or alterations in the existing groundwater recharge area (i.e. surface drainage and surface water infiltration conditions).

8.3 Engineering Parameters for Soil/Bedrock Materials

Laboratory tests were performed to evaluate soil/bedrock parameters necessary for the geotechnical engineering evaluation of the existing and proposed site conditions, and evaluation, design and construction of the proposed improvements. Results of the laboratory testing are included in Appendix C, and results of the direct shear tests are also plotted on Figures 4-1 through 4-22 attached in Appendix A. Design soil parameters, developed based on the interpretation/evaluation of the laboratory test results, are summarized in Table 1 below.

Table 1. Summary of Selected Design Soil/Bedrock Parameters

Soil/Bedrock	In-situ		Atterberg Limits		Peak Shear Strength Parameters	
	Moisture Content (%)	Dry Density (pcf)	Liquid Limit (LL)	Plasticity Index (PI)	Cohesion, c (psf)	Effective Friction Angle, ϕ (degrees)
Earth Fill (ef)	14.0-19.0	74-103	0-37	0-22	300-450	27-28
Terrace Deposit (Qtm)	2.5 - 5.0	102-110	-	-	100-180	28-44
Monterey Formation (Tm)	13.0-38.0	67-107	45-67	5-26	300-1650	26-54
Santa Barbara Formation (Qsb)	11.0-13.0	98-112	NP	NP	300	38
Sisquoc Formation (Tsq)	9.0-18.0	103-108	46-50	1-15	340-800	22-32
Slopewash / Colluvium / Landslide Debris (Qsw/Qc/Qls)	10.0-1.07	92-108	44-56	2-28	0-300(1)	27-38(1)
Beach Deposit (Qbs)	-	106	-	-	0	28

8.4 Seismic Hazards

8.4.1 Primary Seismic Hazards

The project site is located within a seismically active region of Southern California. The general area has experienced moderate to strong ground motions due to earthquakes in the past and is likely to experience similar earthquake-induced ground motions during the design life of the of the proposed improvements.

8.4.1.1 Fault Rupture Hazards

The proposed trail alignment is not located within any currently identified Alquist-Priolo Earthquake Fault Zone (EFZ), as defined by the California Geological Survey (CGS, 2011b).

The Carpinteria fault crosses the alignment at or near Station 17+70, as shown on Plate A (Appendix A). However at this time, neither the California Geological Survey (CGS, 2008) nor the California Department of Transportation (Caltrans, 2012) considers this fault as a source for seismic hazards. Therefore, the potential for fault surface rupture due to movement of the Carpinteria Fault at the site is considered low.

8.4.1.2 Ground Motion Hazards

The general area around the site is underlain by numerous active and potentially active faults, including the Mesa-Rincon Creek fault and the Red Mountain fault. Based on the Caltrans' 2012 fault database (Caltrans, 2012), the Mesa-Rincon Fault is the nearest active fault from the alignment. This reverse fault, located about 0.5 km northeast from the proposed trail bridge location, as shown on Figure 5, is capable of generating a maximum earthquake of moment magnitude, M_{max}= 6.6 . The Red Mountain fault is located about 2.2 km south of the proposed trail bridge. This reverse fault is capable of generating a maximum earthquake of moment magnitude, M_{max}=7.4.

A seismic ground motion hazard analysis was performed using the Caltrans ARS Online (Caltrans, 2018) tool to evaluate design ground motion for the subject trail bridge. The design ground motion, as per Caltrans SDC (Caltrans, 2013), is defined as the envelope of the deterministic ARS and probabilistic ARS based on a return period of 975 years. For ground motion analysis, the soil profile at the site can be categorized as Type C. Therefore, this ground motion hazard analysis was performed based on an average, $(V_s)_{30}$ = 560 m/sec.

The recommended ARS curve and the corresponding data points developed based on the above analysis are presented in Figure 6 (Appendix A). The design ARS from period T=0.05 to 0.40 sec is controlled by the probabilistic hazard. The design PGA≈0.8g and the ARS curve for T>0.40 sec is controlled by the deterministic hazard. The moment magnitude of the design earthquake (M) associated with the design PGA=0.8g is 7.4 (i.e., M=7.4).

8.4.2 Secondary Seismic Hazards

8.4.2.1 Liquefaction

Formation materials present along the trail alignment are not of the type that are susceptible to liquefaction. In the absence of groundwater, soils present along the alignment are not considered liquefiable during earthquakes.

8.4.2.2 Seismic Slope Failure/Lateral Spreading

The design peak ground acceleration, PGA=0.80g, at the site is relatively high. Results of our seismic slope stability analyses are presented in Appendix D and discussed later in this report.

It should be noted that much of the artificial fill, especially fills associated with early 20th century road and railroad construction, may not be properly engineered. Non-engineered surficial existing fills, slopewash, colluvium and landslide debris, particularly those below the existing dirt trail on the ocean-facing bluff slope, are considered prone to lateral/downslope movements during strong seismic events. All new fills proposed as part of the trail construction along this segment of the trail are recommended to be: (1) keyed into competent slope material by removing surficially unsuitable soils, and (b) placed as geotextile-reinforced engineered fill to prevent surficial instability during future earthquakes.

8.4.2.3 Rockfall Potential

Steeper slopes, particularly those on the ocean side, are composed of shales of the Monterey and Sisquoc Formations. These materials are slightly to moderately hard, well-bedded (Monterey) and locally highly fractured. Some rock falls are to be anticipated during seismic events. The potential for this will be of a limited nature and size.

8.4.2.4 Ground Settlement

Ground settlement along the subject trail, if any, during seismic events should be small and of no consequence to the proposed improvements.

8.4.2.5 Tsunami

Hazards due to tsunami-generated flooding exist along the California coastline. Distant and local offshore earthquake faults, and aseismic as well as co-seismic submarine landslides within the Santa Barbara Channel are potential sources of tsunami waves that can reach the Carpinteria coastline.

The California Emergency Management Agency (CalEMA, 2009) has published a map designed as the “Tsunami Inundation Map” that shows the location and limits of the areas along the California coast that are subject to inundation during the worst-case scenario tsunami associated with realistic as well as hypothetical tsunami sources. It should, however, be emphasized that the referenced tsunami hazard map is to be used only for local agency emergency planning and evacuation. This tsunami hazard depicted in this map is very conservative and not suitable for development planning. Tsunamis are rare events. Tsunamis that can generate waves in height that can significantly impact the subject trail alignment should be extremely rare.

8.5 Cut/Fill Recommendations

The proposed trail construction will involve mostly cut into and along the existing slopes for the majority of the alignment in order to achieve a mildly sloped trail, both transversely and longitudinally. As shown on the attached Typical Cross Sections included in Appendix E, the subject trail will be about 16 feet wide, with a 5 feet wide travel way and a 3 foot shoulder in each direction. In the longitudinal direction, the proposed trail will be constructed at a profile gradient ranging from about 2% to 5%. The trail will also have a cross-slope of 1% to 2%.

Construction of the trail segment from Station 10+00 to 23+00 will include cut to flatten the portion of the existing cut slope above the trail alignment to a 1.4:1 (h:v) gradient. The maximum depth of cut along the centerline of this segment of the trail is about twelve and a half (12.5) feet. Immediately south of the proposed bridge site, portions of the trail will traverse a small steeply rising ridge where the maximum depth of cut along the trail centerline will be about thirty (30) feet. For the next segment of the trail, to about Station 33+30, the maximum depth of cut along the trail centerline is about fifteen (15) feet. Along this segment of trail the existing slope above the trail alignment is proposed to be cut back to a gradient of 1:1 (h:v) with one or more benches. Construction of this segment of the trail alignment will also involve fill placement on the existing slope directly below the trail alignment, but above the existing dirt trail.

The segment of the trail from approximate Station 33+30 to about Station 36+00 will be constructed on fills placed on the existing slope. The maximum depth of fill, excluding any remedial over-excavation and backfilling, along this trail alignment will be on the order of about six (6) to seven (7) feet. Being located on fill sections, construction of this segment of the trail will also include new fill placement on the existing slope both above and below the trail alignment.

The proposed new fills will be placed at a gradient of 1:1(h:v) or less. We recommend that these fills be placed as compacted, geotextile-reinforced fill to prevent erosion and local/surficial slope instability.

The reminder of the proposed trail south of approximate Station 36+00 will involve cut of up to about two (2) feet along the trail centerline

As shown on the Plates C and D included in Appendix A, new fill placed along the ocean-facing slope shall be buttressed at the bottom and keyed/benched into competent slope materials by removing and re-compacting unsuitable surficial soils, including existing landslide debris, where present.

On-site cut soils consisting of cohesionless or low plasticity soils (PI<4) may be used as new fill material. Cut material from the highway-facing segment of the trail slope (north of the bridge site) consisting of Terrace Deposits (Qtm) and Santa Barbara Formation (Qsb) should be suitable for placement as compacted/reinforced fills.

All fill material should be provided with adequate back/subsurface drainage systems consisting of geo-composite or geotextile wrapped burrito-type sand drains placed against the excavated/remedial removal surfaces and prior to placing any fills.

8.6 Slope Stability Analyses

This section presents the results of our analyses performed to evaluate the stability of the slopes that may affect the service and stability conditions of the as-built trail. The topographic and geologic information shown on the Plates A through D in Appendix A, the soil/rock parameters in Table 1 and the design ground motion parameters presented above (Section 8.4.1.2) were used as the basis for these analyses.

The appropriate soil parameter types and their values, in particular those for shear strengths, depend on many factors including soil/bedrock characteristics such as constituent mineral types, particle sizes/characteristics, past deposition and stress history; moisture content or degree of saturation, permeability and the rate of loading, as well as the slope failure mechanisms being investigated.

Four (4) cross sections considered representative of the conditions along the proposed trail alignment were selected for the slope stability analysis. These cross sections are located at trail centerline Stations 16+10, 18+00, 28+56 and 33+90. Representative subsurface profiles with recommended soil/bedrock parameters were developed for each cross section based on the results of subsurface exploration. For slope stability analyses, the required soil/rock parameters included soil density and shear strength parameters, which were developed based on the results of the laboratory density and direct shear tests.

Slope stability analyses include limit equilibrium based soil slope stability analyses for all slopes and, a kinematic rock slope stability analysis for the highway-facing slope.

8.6.1 Limit Equilibrium Based Slope Stability Analyses

All limit equilibrium based slope stability analyses were performed using the software SLIDE, Version 6.0 (Rocscience, 2016). These slope stability analyses were performed considering circular types of rotational failures.

8.6.1.1 Static Slope Stability Analyses

The slope cross section models with geologic profile and geotechnical soil parameters, and the results of the static slope stability analyses are presented in Appendix D. In addition to the four (4) representative cross sections for the proposed grading conditions, a back analysis was performed for the mapped local landslide between approximate Sta 33+30 to Sta 35+00. Results of these analyses which indicated a factor of safety (FS) of about 1.0 for the mapped landslide mass, verified the accuracy of selected design soil density and shear strength parameters used in our slope stability analyses for the two sections located within the ocean-facing slope which are characterized by similar geologic conditions.

In general, a minimum static factor of safety of 1.3 is considered adequate (Caltrans 2014) for roadside slopes. The minimum static factors of safeties against slope failures obtained from our analysis for the four (4) representative locations along the trail alignment are summarized in Table 2 below:

Table 2. Results of Static Slope Stability Analyses

Location	Approximate Minimum Factor of Safety (FS)
Station 16+10	1.7
Station 18+00	1.9
Station 28+56	1.8
Station 33+90	1.4

Based on the above results, the subject slopes supporting the proposed trail alignment are considered to have adequate static slope stability conditions against overall or global failures.

8.6.1.2 Seismic Slope Stability

Based on Caltrans (2014), seismic stability of roadway slopes requires a minimum factor of safety of 1.1, using an equivalent coefficient of horizontal peak ground acceleration, k_h =1/3(PGA/g) or 0.2, whichever is greater. Thus, for the design peak ground acceleration, PGA=0.8g at the site, the design k_h is taken as equal to 0.2. Results of our seismic overall slope stability analyses are presented in Appendix D following the results of the static stability for each of the four (4) sections analyzed. These results are summarized in Table 3 below:

Table 3. Results of Seismic Slope Stability Analyses

Location	Approximate Minimum Factor of Safety (FS)
Station 16+10	1.2
Station 18+00	1.3
Station 28+56	1.3
Station 33+90	0.97

Based on the above results, the subject slopes, except the segment of the ocean-facing slope at or adjacent to the Station 33+90, for the as-built conditions of the proposed trail can be considered as adequately stable during the design seismic ground motion event.

For the cross section at Station 33+90, results of our seismic slope stability analysis indicated a FS=0.97, as compared with the required minimum FS=1.1. Based on these results, the portion of the ocean-facing slope from approximate Station 33+00 to the south end of the proposed trail is considered susceptible to lateral/downslope sliding when subjected to the design ground motion. Additional seismic slope stability and Newmark's rigid-body type deformation analyses (Newmark, 1965) was thus performed to evaluate the likely lateral displacements that this section of the slope may experience in the event shaken by a design ground motion generating earthquake event.

These analyses consisted of additional seismic slope stability analyses to evaluate the coefficient of yield acceleration (k_y) of the subject as-built slope. Results of these analyses are presented in Figure 7 (Appendix A), which shows k_y =0.175 for the subject slope. The yield acceleration is the seismic capacity of the slope in that the slope is stable (FS>1.0) for $k_h < k_y$. The slope is likely to experience incremental lateral displacement during ground shaking every time ground motion represented by k_h exceeds that represented by k_y.

Once the coefficient of yield acceleration (k_y) is known a slope, the seismic displacement due to the design ground motion, expressed in terms of the design PGA and the causative earthquake moment magnitude Mw, can be estimated based on published empirical corrections. Results of such an analyses performed based on the empirical correlation presented by Bray and Travasarou (2007) are presented in Figure 8. Based on this figure and a k_y =0.175, the estimated median seismic settlement is about 12.0 inches for the ocean-facing slope.

8.6.2 Kinematic Slope Stability Analysis

A kinematic slope stability analysis was also performed for the proposed cut slope adjacent to Highway 101, particularly from Station 18+00 to Station 24+00. Results of this analysis were presented in the referenced Technical Memorandum, dated October 16, 2018.

8.6.3 Surficial Slope Stability/Slope Erosion

Signs of localized soil erosion and surficial slope failures have be observed along portions of the existing slopes along the proposed trail alignment. Based on these field observations, the existing relatively steep slope areas containing highly weathered, near-surface formation materials or mantled by earth fill, slopewash, colluvium, landslide debris, and relatively cohesionless terrace and marine terrace deposits are prone to the effects of erosion and surficial instability.

8.6.3.1 Station 10+00 to Approx. Station 26+50 (Segments 1-3)

Along the trail alignment, from Station 10+00 to approximately Station 26+50, soil erosion and relatively shallow surficial failures were observed only on the upper part of the existing slope that was cut in the past to a 1:1 (h:v) gradient. No distress was observed on lower part of the existing slopes that were cut to a 1.5:1 (h:v) gradient. The proposed trail construction along this segment will involve cutting the upper portion of the slope to a flatter 1.4:1 (h:v) gradient.

Additionally, the following measures included in the current design of the cut slope should provide additional protection of the proposed multi-use trail and the existing highway facilities below.

- Alongside the trail alignment and at the base of the proposed 1.4:1 (h:v) cut slope, a six-foot (6') wide drainage swale is to be constructed. The drainage swale is to be lined with concrete for erosion/scour protection and to provide rock fall protection to both the trail and the existing highway facilities below.

- The proposed sixteen (16) foot wide trail with 5% cross slope will act as a bench on the slope providing both erosion and rock fall protection to existing highway facilities below, and aid maintenance crews in the removal of accumulated sediment and debris, if any, from the concrete-lined drainage swale, and long-term maintenance.

- Landscaping along the trail alignment are proposed at or near the end of the construction phase. Landscaping is expected to consist primarily of hydro-seeding using a native seed mix, and should provide additional erosion protection measures.

- The proposed cut will remove near surface weaker material exposing harder materials to the surface, and flatten the existing 1:1(h:v) upper part of the existing cut slope. This will result in an improvement to the existing stability conditions of the subject slope.

Based on the above, it is our opinion the proposed project will result in an improvement to conditions of the existing slope, and reduced potential hazard to the trail and the existing highway facilities below due to slope erosion, rock-fall and/or surficial failures.

8.6.3.2 Station 26+50 to Station 37+50 (Segments 4 and 5)

This segment of the trail begins near the top of the ocean-facing slope and traverses down and across the slope face. The southern portion this trail segment merges with an existing dirt trail located at about the mid-height of the overall slope.

Localized areas of shallow landslide debris, questionable landslide-affected materials, loose earth fill, slopewash and colluvial soil are present on the portion of the existing ocean facing slope located below the existing dirt trail. The conditions of these potentially unstable localized existing slope soils should be periodically observed during the service life of the proposed trail, and if necessary maintained/stabilized, to prevent significant deterioration which can affect the stability of the overall slope, including the subject multi-use trail located above.

The mapped landslides area between approximate Station 33+40 and Station 35+00 extend from below the existing dirt trail to above the proposed new trail alignment. It is affecting the stability of the existing dirt trail/bench and the ascending part of the slope at this location which will contain/support the proposed new trail and the associated proposed new fill to be placed above the existing bench. Therefore, this landslide area will require mitigation as part of the construction of the proposed trail. We recommend remedial grading of this area by way of construction of a buttress fill and keying into existing slope surface as shown on the Section at Station 33+90, Plate D, included in Appendix A.

Additionally, to prevent soil erosion and surficial slope instabilities, we recommend that all new fills, including the landslide remedial fills between Station 33+40 and Station 35+00, be placed as geotextile-reinforced engineered fill.

Based on the above discussion, it is our opinion that the potential hazards associated with erosion and localized/surficial instability of the areas of the slope containing and above the trail alignment should be low provided the grading recommendations are incorporated in design and construction of the project.

8.7 Bridge Foundation Design Recommendations

The proposed trail project includes a new bridge over the depressed UPRR rail corridor. For convenience, a copy of the proposed plan view and cross section profile along the bridge centerline are reproduced in Figure 9, as attached in Appendix A.

Based on the exploration borings DH 07a and DH 07b, drilled near the proposed bridge Abutment 1, and our observation of the surface conditions, the proposed bridge site, as shown on Figure 8, is underlain by moist to slightly moist, well-bedded, slightly to moderately hard diatomaceous shale/siltstone and hard siliceous shale of the Monterey Formation (Tm).

Based on the relatively hard subsurface conditions and high design ground motion (PGA=0.8g), we recommend using drilled shafts as the bridge foundation. Based on the relative short bridge length and anticipated low support loads, we recommend using Caltrans Standard Plan 24" Cast-in-Drilled-Hole (CIDH) Concrete Pile with a 200-kip design capacity.

Based on Caltrans current practice the bridge abutment foundations need to be designed for the Service and Strength Limit States in accordance AASHTO LRFD BDS (2012), 6th Edition with California Amendments (Caltrans, 2014).

8.7.1 Axially Loaded Pile Design Parameters

Based on Caltrans current practice abutment piles need to be designed to support axial load based on the LRFD Service Limit State 1 Load Combination without exceeding 2.0 inches of settlement.

For LRFD Strength Limit State, piles in axial compression are required to be designed with a side (or skin) resistance factor of 0.7 or less and a tip resistance factor of 0.5 or less. The nominal structure resistance of the Standard Plan 24" CIDH piles is 400 kips. It is assumed that the factored load per pile from the Strength Limit State load combination will not exceed 280 kips.

Based on the results of an axially loaded pile analysis, presented as Figure 10 included in Appendix A, the recommended design pile length is forty-three (43) feet to support a factored load of 280 kips per pile.

8.7.2 Lateral Loaded Pile Design

Recommended soil parameters for laterally loaded pile analysis using the p-y method are presented in Table 4 below:

Table 4. Recommend Design Soil Parameters for p-y Type Laterally Loaded Pile Analysis

Depth below Cut-off Elevation (ft)	Soil Type	Total Unit Weight (pcf)	Shear Strength Parameters		k_s/k_c (pci)	ε_{50}
			Cohesion, c (psf)	Friction Angle, ϕ(degrees)		
0-20	Silt (ML/MH)	95.0	850	43	150/280	0.009
20-60	Silt (ML/MH)	100.0	1500	43	500/280	0.007

8.7.3 Foundation Settlement

Based on the subsurface conditions, the pile diameter (24") and the anticipated service load per pile (e.g., 200 kips or less), abutment support settlement should be less than the permissible support settlement of two (2) inches for single span bridges.

8.8 Retaining Walls

The proposed project includes construction of an approximately seven (7) to eight (8) foot high, seventy-five (75) to eighty (80) foot long retaining wall along the existing mid-slope bench, from ~Sta 30+71 to ~ Sta 31+46, as shown on Plate D in Appendix A. Based on the location and relatively small height, we recommend construction of a geo-synthetic reinforced, mechanically stabilized wall at this location. Such a wall can be designed based on the following foundation soil parameters:

- Total Unit Weigh = 100 pcf
- Cohesion = 300 psf
- Friction Angle = 27 degrees
- Coefficient of Active Earth Pressure = 0.38
- Coefficient of Passive Earth Pressure = 2.7

For a minimum wall width of five (5) feet and two (2) feet of soil embedment, the allowable bearing capacity of the in-situ soils may be taken as 1,500 psf. The wall should be founded on firm, undisturbed native earth materials, or engineered fill placed on firm native earth materials. Existing unstable subgrade (i.e. soft/weak, disturbed soil or undocumented fill soils), if any, should be removed and re-compacted prior to wall construction.

8.9 Pavement Design Recommendations

Results of R-value tests performed on two soil samples retrieved from the ocean-facing slope (Boring DH-01 and DH-02) are included in Appendix C. The two samples tested consisted of sandy clay with gravel. Based on these results, the R-value of the soils tested may be taken as equal to 45. This R-value may be also for the anticipated subgrade soils along the highway-facing slope.

The trail structural section is designed assuming occasional access need for maintenance and emergency vehicles. For the purpose of Portland Cement Concrete (PCC) pavement design, the subgrade soils along the trail alignment can be classified as Type II, as defined in Table 623.1A of the Caltrans Highway Design Manual (Caltrans, 2017). The PCC pavement design and construction need to consider the corrosive nature of the subgrade soils and the close proximately of the subject trail to salt water

A minimum structural section consisting of 5.0 inches Jointed Plain Concrete Pavement (JPCP) over 4.0 inches of Class II aggregate base is recommended for the subject trail. Portland Cement Type IV should be used. Plate dowels, ¼- to ½-inch in thickness, should be considered, instead of bars, for load transfer across the joints.

We recommend that, prior to the placement of the AB layer, at least the upper eight (8) inches of exposed subgrade soils should be scarified, moisture conditioned to within ±2.5 percent of the optimum and compacted to relative compaction of at least 90% maximum dry density determined as per ASTM Standard D1557.

Unless specified otherwise herein, pavement section detailing, material selection and construction should meet the requirements for JPCP specified in the Caltrans Highway Design Manual (Caltrans, 2017) and Standard Specifications (Caltrans, 2015a).

8.10 Drainage Recommendations

All surfaces should be graded to direct runoff to non-erosive collection, distribution and discharge drainage devices. Run-off should not be permitted to flow uncontrolled on-site or off-site.

All new fills placed against existing slope surfaces should be provided with adequate subsurface drainages consisting of geo-composite or geotextile wrapped burrito-type drainages placed on the final slope surfaces prior to the placement of any fill. Sub drains should be installed where necessary to facilitate drainage or percolation of water from the trail pavement base and subgrade materials.

8.11 Corrosion

Results of a number of chemical test performed on samples retrieved from ocean-facing slope are included in Appendix C. Based on these results, the sulfate and chloride content of the soils tested ranged from 462 to 3042 ppm and 280 to 2900 ppm, respectively.

Based on the Caltrans' current corrosion guidelines (Caltrans, 2015b), a site is considered corrosive to structure elements if one or more of the following exists for the representative site soil and/or water.

Chloride concentration is 500 ppm or greater, sulfate concentration is 2000 ppm or greater, or the pH is 5.5 or less.

Therefore, based on the results of the chemical tests soils along the subject trail alignment should be considered corrosive to common construction materials, including both steel and concrete.

9.0 HAZARDOUS WASTE POTENTIAL

It is our understanding that there are no known hazardous wastes along the proposed trail alignment. We also know of no existing hazardous waste studies or reports within and adjacent to the trail alignment.

10.0 CONSTRUCTION RECOMMENDATIONS

This section presents construction recommendations for the proposed improvements.

- All construction activities should be performed in conformance with the applicable requirements of the US Federal and California Occupational Safety and Health Administration (OSHA/Cal-OSHA).

- All construction shall conform to the requirements of the Caltrans Standard Specifications (Caltrans, 2015), except as specified otherwise herein.

- All earthwork and foundation construction activities, including but not limited to clearing and grubbing, removal/replacement of unsuitable/landslide debris, slope cut, fill placement/compaction, backfilling, drainage installation, subgrade preparation, placement and compaction of pavement materials, and bridge foundation installation, should be performed under the observation of the owner's geotechnical representative.

- All surfaces to receive fills, pavement or foundations should be scarified to a depth of at least eight (8) inches, moisture conditioned, if necessary, and re-compacted to at least 90% of the maximum density determined as per ASTM Test Method D1557.

- If subgrade or subsurface conditions different that those encountered during the field exploration, as documented in this report, are encountered during construction, this office should be contacted immediately so that actual ground conditions can be evaluated and, if necessary, revised or modified recommendations can be provided.

- Select excavated site soils consisting of silts (ML) with PI<4, silty sand (SM) and sand (SM/SP) may be used compacted fill.

- Wet, soft/weak, pumping or yielding subgrade soils, if any, should be stabilized prior to additional construction activities. Stabilization may include removal and replacement of wet or soft materials to depths determined based on field conditions.

- When new fills are to be placed on natural or existing ground steeper than 5:1(h:v), compacted fill should be keyed and benched into firm materials. Back drains should be installed, where necessary, to intercept water entering into new fills.

- Oversize materials such as rock greater than eight (8”) inches in largest dimension should not be buried or placed in fills. Rocks larger than three (3”) inches should not be placed within the upper five (5) feet of fills placed directly beneath the trail pavement section.

- Fill and cut slopes should be graded and hydro-seeded to reduce water-induced surficial erosion and sloughing. Permanent erosion control measures should be implemented immediately after the completion of slope construction.

- All surfaces should be graded to direct runoff to non-erosive drainage devices and should not flow uncontrolled off-site.

- Sub drains should be installed where necessary to facilitate drainage or percolation of water from trail base materials.

- All compacted fill should be placed in horizontal lifts 8 inches or less in un-compacted thickness and compacted to at least 90% of the maximum dry density and at moisture contents within ±2.5% percent of the optimum as per ASTM D1557 method.

- All pavement materials should be selected, and construction works should be performed, in accordance with Caltrans Standard Specifications (2015a) and/or the Green Book- Standard Specifications for Public Works Construction (BNI, 2018).

- Cast-in-drilled-hole (CIDH) piles for the proposed trail bridge should be constructed in dry conditions.

- Hard excavation/drilling conditions should be anticipated during the CIDH pile installation.

- Groundwater seepage may be encountered in the CIDH pile holes. If encountered, seepage water shall be pumped out of the hole to maintain dry conditions until the placement of reinforcement and concrete.

- The bottom of the CIDH holes must be clean and free of any loose//soft soil or other debris prior to placing reinforcement and concrete.

- The embedded CIDH pile length recommended herein should not be shortened during construction.

- Unless specified otherwise here, CIDH pile materials and construction shall meet the requirements specified in the Caltrans Standard Specifications (2015).

11.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the results of our current geotechnical exploration as discussed above and presented in the various attached appendices:

- The proposed trail alignment traverses through and located on the face of relatively steep hill sides with variable subsurface conditions.

- The portion of the trail alignment located on the hill slope facing the Rincon Road on-ramp to Southbound Highway 101, directly underlain by marine terrace formation (Qtm) consisting of sand, and bedrock of the Santa Barbara Formation (Qsb) consisting of silty sand and sand-like material, and bedrock of the Monterey Formation(Tm) consisting mainly sandy silt/silt (MH/ML) like siltstone/shale.

- The reminder of the trail alignment, including the proposed bridge and the trail alignment traversing through and located on the face of the ocean facing hill side is underlain directly by bedrock of the Monterey Formation (Tm) siltstone/shale and Sisquoc Formation (Tsq) siltstone/mudstone both consisting mainly sandy silt/silt-like (MH/ML) materials.

- To construction the trail on the slope faces with mild cross slope (2 to 5%) and maintain mild longitudinal gradient (≤5%), cut both along the trail centerline alignment and the slope portion above the trail alignment are necessary for the majority of the alignment.

- The proposed trail will cross the surface trace of the Carpinteria fault, a high-angle, south-dipping reverse fault which trends north of west through the project limits. Work by others on the adjacent parcel(s) to the west suggests that additional faults may be present, though no evidence has been found to suggest that these faults or suspected faults have been active in the Holocene. The City of Carpinteria (2003) and other sources suggest that the Carpinteria Fault be considered “potentially active” (faults which show evidence of Quaternary displacement) for planning purposes. Neither USGS nor CGS considers the Carpinteria Fault to be “potentially active”. Caltrans (2012) does not include this fault in its fault database for consideration in the design of highway facilities. Therefore, the potential for fault surface rupture within the project limits is considered low.

- However, due to its location in a highly active seismic regions with numerous nearby active and potentially active large faults, e.g., Mesa-Rincon and Red Mountain faults, , the trail alignment is susceptible to relatively high design ground motion as defined by Caltrans (2013). Based on our analysis, he design PGA at the site is about 0.8g generated by an earthquake of moment magnitude M_w=7.4.

- Our subsurface investigation and geologic mapping indicates that, from a slope stability perspective, the slopes along the coastal bluff, both above and below the existing unsanctioned County trail (approx. Sta. 27+00 to 37+50) are most problematic, mainly with respect to local/surficial slope instability. Areas of landslide debris, colluvium and questionable landslide debris have been mapped along this section of the proposed trail corridor.

- The proposed grading plans was reviewed and existing slopes and proposed cut slopes were analyzed for gross stability. Shear strength test results were obtained and both limit equilibrium and kinematic based slope stability analyses were performed to evaluate the global or overall static as well as seismic loading conditions.

- Based on our slope stability analysis, the subject slopes containing the proposed trail alignment are considered to have adequate stability against static loading or under normal, short and long term service conditions.

- Due to the relatively low shear strength of the Monterey and Sisquoc Formation (Tm and Tsq) and the slope face orientation, the existing ocean-facing slope south of the proposed trail bridge is considered to be susceptible to surficial/local instability under static conditions. This portion of the slope is also considered susceptible to both surficial and overall slope movements during the design seismic ground motion event.

- We recommend that all new fills placed along the trail alignment be placed as engineered geotextile-reinforced soils with subsurface/back drains. Additional recommendations include constructing adequate surface drainage facilities to collect and disposing of surface-run off properly and hydro-seeding the exposed newly cut and fill surfaces. These measures, in conjunction of the slope flattening and load reduction resulting from the proposed slope cut backs, should significantly reduce the hazards associated with both slope erosion and local/surficial slope instability under both static and seismic loading conditions.

- Due to the relatively low shear strength and steep gradient, the portion of the ocean facing slope between Station 33+90 and the south end of the proposed trail is considered susceptible to seismically induced limited lateral deformation, estimated to be on the order of about 12 inches, in the event shaken by the design seismic ground motion event.

- In addition, the portion of the existing slope located below the existing dirt trail and beyond the limit of the proposed trail construction is considered susceptible to local/surficial slope instability. This portion of the slope should be monitored and, if necessary, stabilized periodically to prevent affecting the stability of the trail and the overall slope.

- Due to relatively low strength of the underlying Monterey Formation (Tm) siltstone/shale bedrock, deep foundation is recommended for supporting the proposed single-span trail bridge abutments. Due to relatively hard excavation conditions, cast-in-drilled holes (CIDH) pile type is recommended. Based on the anticipated loadings, Caltrans Standard Plan 24" Cast-in-Drilled-Hole (CIDH) Concrete Pile with 200 kips design capacity is recommended.

- Subsurface exploration was performed utilizing hand labor, backhoe and drill rig. Extremely hard layers of bedrock were locally encountered. Thus, excavating into the bedrock during construction may be difficult. Should hard cemented bedrock be encountered during the installation of the CIDH piles, coring may be necessary.

- A qualified professional from Bengal Engineering should be present at all times during construction to observe and document actual field conditions and construction of the recommended improvements and, if necessary, provide updated recommendations.

- Finally, it is our opinion the proposed project is feasible, from the geotechnical point of view, provided findings and recommendations included in this report are considered in both the design and construction of the proposed improvements.

12.0 LIMITATIONS

Subsurface conditions at the site were determined on the basis of our field explorations at limited locations and review of the available and pertinent existing information. Our scope of work was limited to the study area along and adjacent to the proposed trail alignment. It does not extend beyond the proposed graded slope areas shown on the attached civil layout plans.

Due to the location of the trail alignment, slope areas located outside the grading plan may influence the stability of the as-built trail in the future. Evaluation of the current or future conditions of and/or design for the stability of these slope areas outside the proposed grading limits and their future impacts on the stability of the as-built trail, if any, is outside our scope of work for the subject project.

Many recommendations presented herein are for the specific soil/bedrock conditions encountered at specific locations. They may not have any applicability to other situations or conditions, or construction types. Bengal Engineering, Inc. accepts no liability for use or reuse of the content of this report for other purposes or by others.

Conclusions and recommendations presented herein are based on our experience and professional judgment. Therefore, the conclusions and recommendations are professional opinions and are not meant to indicate a control of nature.

Services provided by Bengal Engineering, Inc., have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the area under similar conditions. Bengal Engineering makes no other warranty or guarantee, either expressed or implied, concerning the content of this report.

This report has been prepared by the registered professionals whose seals and signatures appear hereon.





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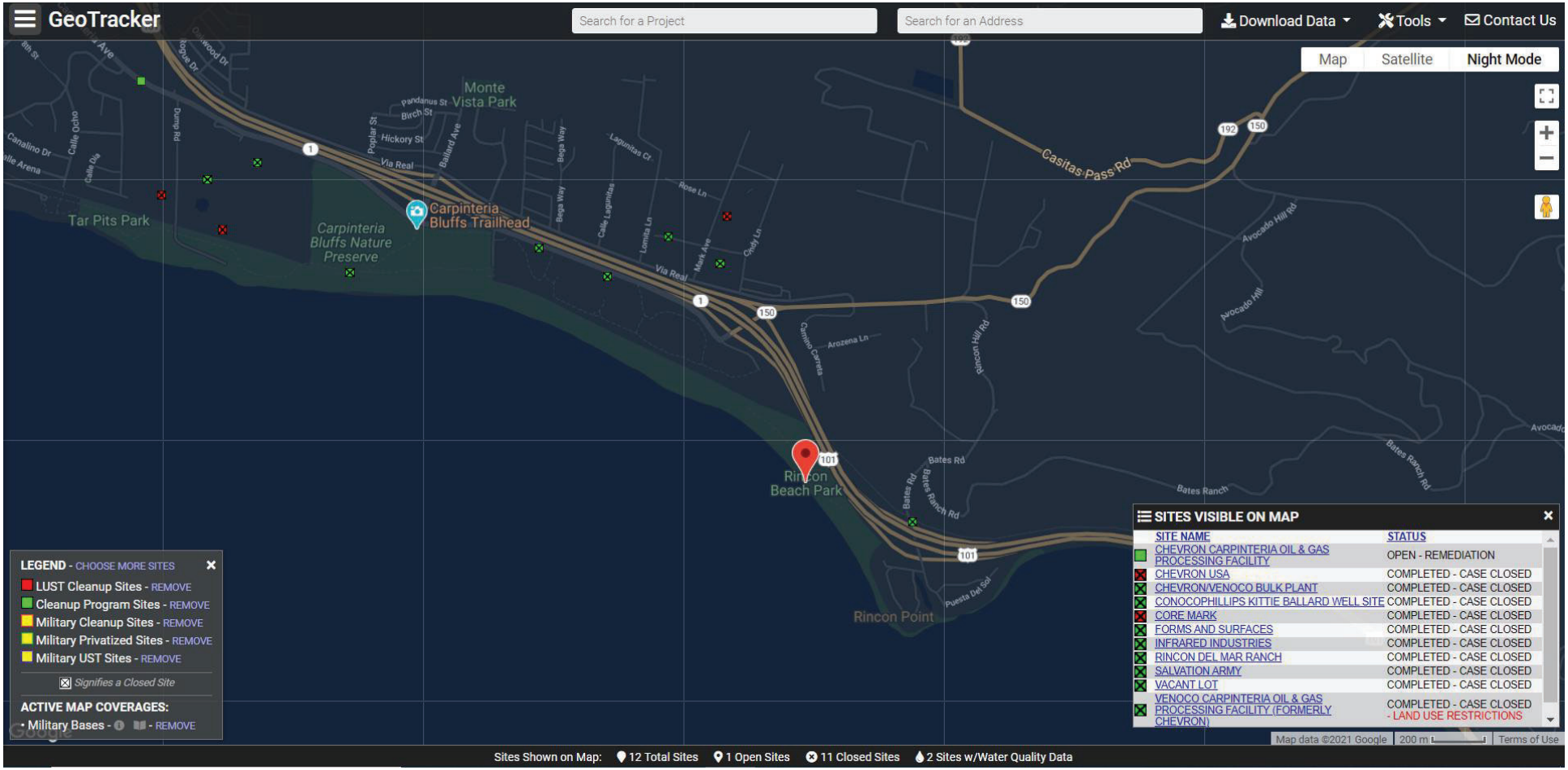
22. US Department of Transportation (1975), State of the Art: Class I Bicycle Path Pavements, Report No. DOT-TST-76-67, prepared by James Lai, Washington, DC.

APPENDIX A

FIGURES AND PLATES

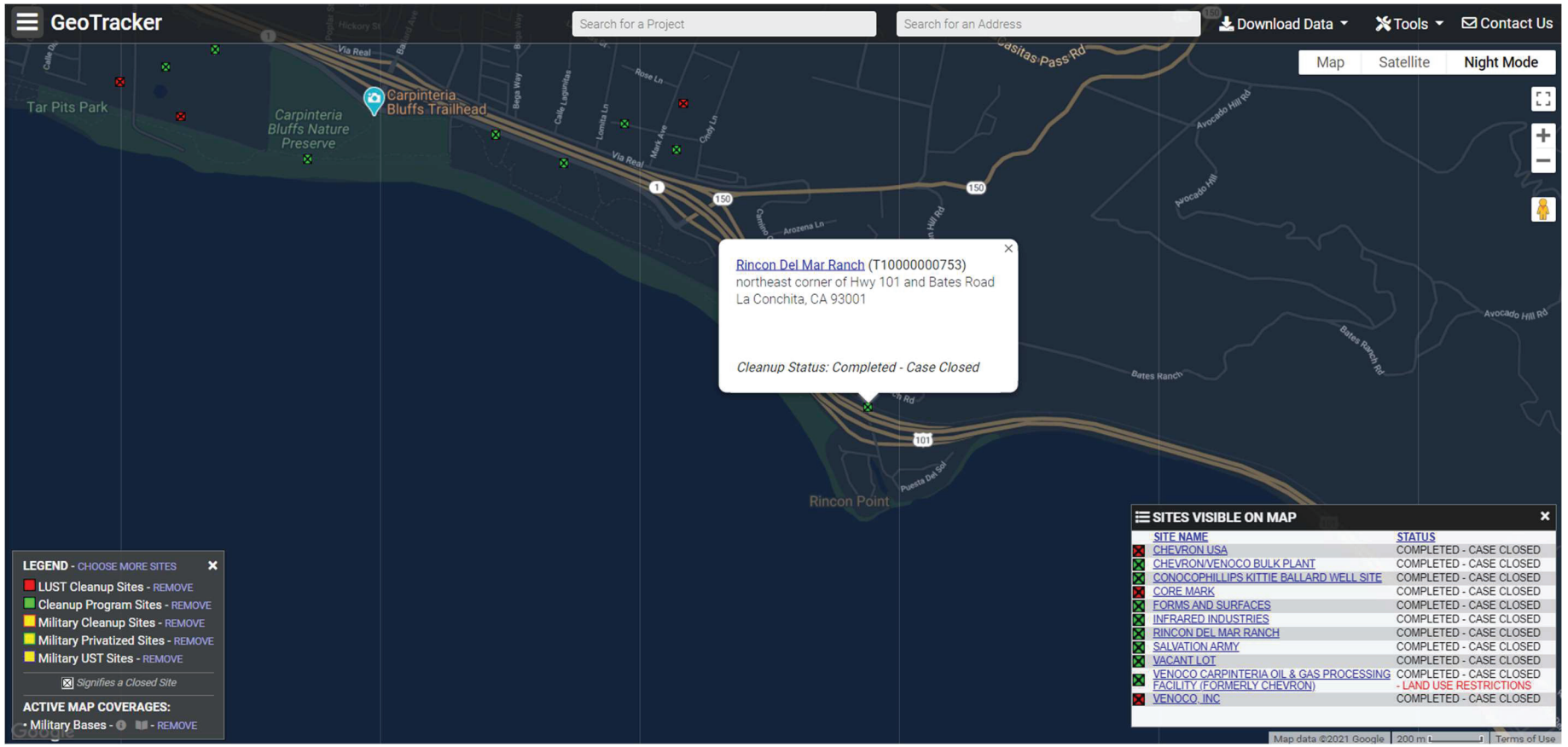
Appendix F

EnviroStor and GeoTracker Database Maps



GeoTracker Web-Site https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Rincon+Beach+County+Park#

Accessed: January 14, 2021



GeoTracker Web-Site https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Rincon+Beach+County+Park#

Accessed: January 14, 2021

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME

Rincon Del Mar Ranch

FACILITY ID

FACILITY ADDRESS

northeast corner of Hwy 101 and Bates Road
La Conchita, CA 93001
VENTURA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

OTHER PETROLEUM

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER

SR3146549

REGIONAL BOARD CASE NUMBER

LOCAL AGENCY

UNKNOWN

REGIONAL BOARD
UNKNOWN

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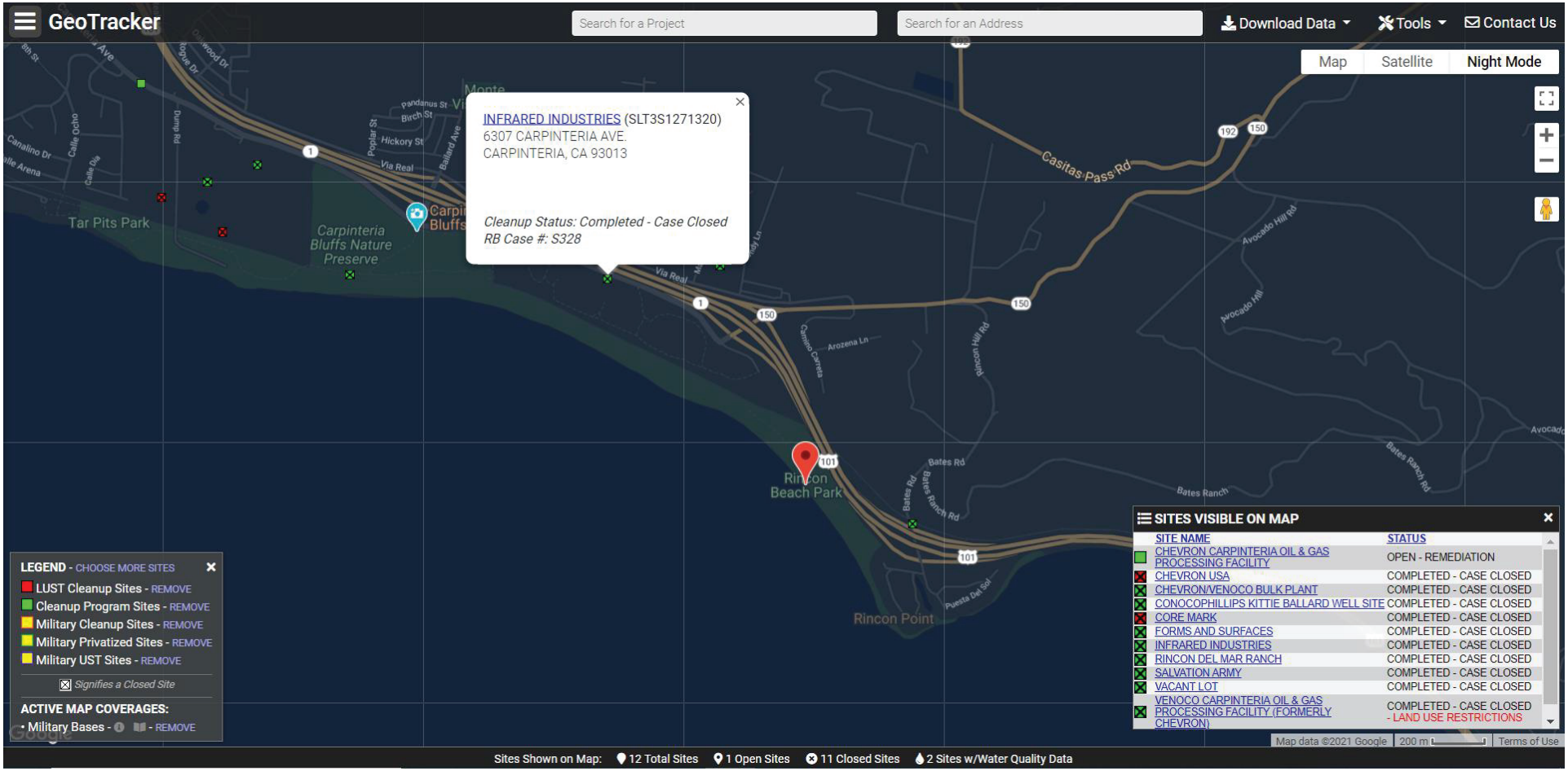
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Accessed: January 14, 2021

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE
12/1/1987

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?
N

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME
INFRARED INDUSTRIES

FACILITY ID

FACILITY ADDRESS
6307 CARPINTERIA AVE.
CARPINTERIA, CA 93013
SANTA BARBARA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET
none

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

VOC

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED	HOW DISCOVERED	DESCRIPTION
	Tank Closure * GOV	Tank removal

DATE STOPPED	STOP METHOD	DESCRIPTION
12/1/1987	Close and Remove Tank	Tanks removed in December 1987

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE
Tank

CAUSE OF DISCHARGE
Unknown

DISCHARGE DESCRIPTION
Solvents and used oil

VIII. CASE TYPE

CASE TYPE
Other Groundwater (uses other than drinking water)

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

Discharge of TCE to soil and groundwater from USTs. This case was also worked on my Santa Barbara County and was formerly in GeoTracker as Infrared Industries UST case (T0608300037) SB case #50288. This was not a typical UST case because the USTs contained solvents and was therefore not part of the Tank Fund. To avoid confusion, all of the files from the UST case were merged into this Infrared Cleanup Case and the former UST case was deleted.

08-08-2017: ALL HARD COPY FILES FROM REGION 3 RECORD STORAGE HAVE BEEN UPLOADED TO GEOTRACKER FOR THIS SITE.

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
	S328

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION NAME	EMAIL ADDRESS
HISTORIC CLOSED SANTA BARBARA COUNTY SITE	CSS	SANTA BARBARA COUNTY	

ADDRESS
2125 S CENTERPOINTE PARKWAY ROOM 333
SANTA MARIA, CA 93455

CONTACT DESCRIPTION
Closed SMU Sites

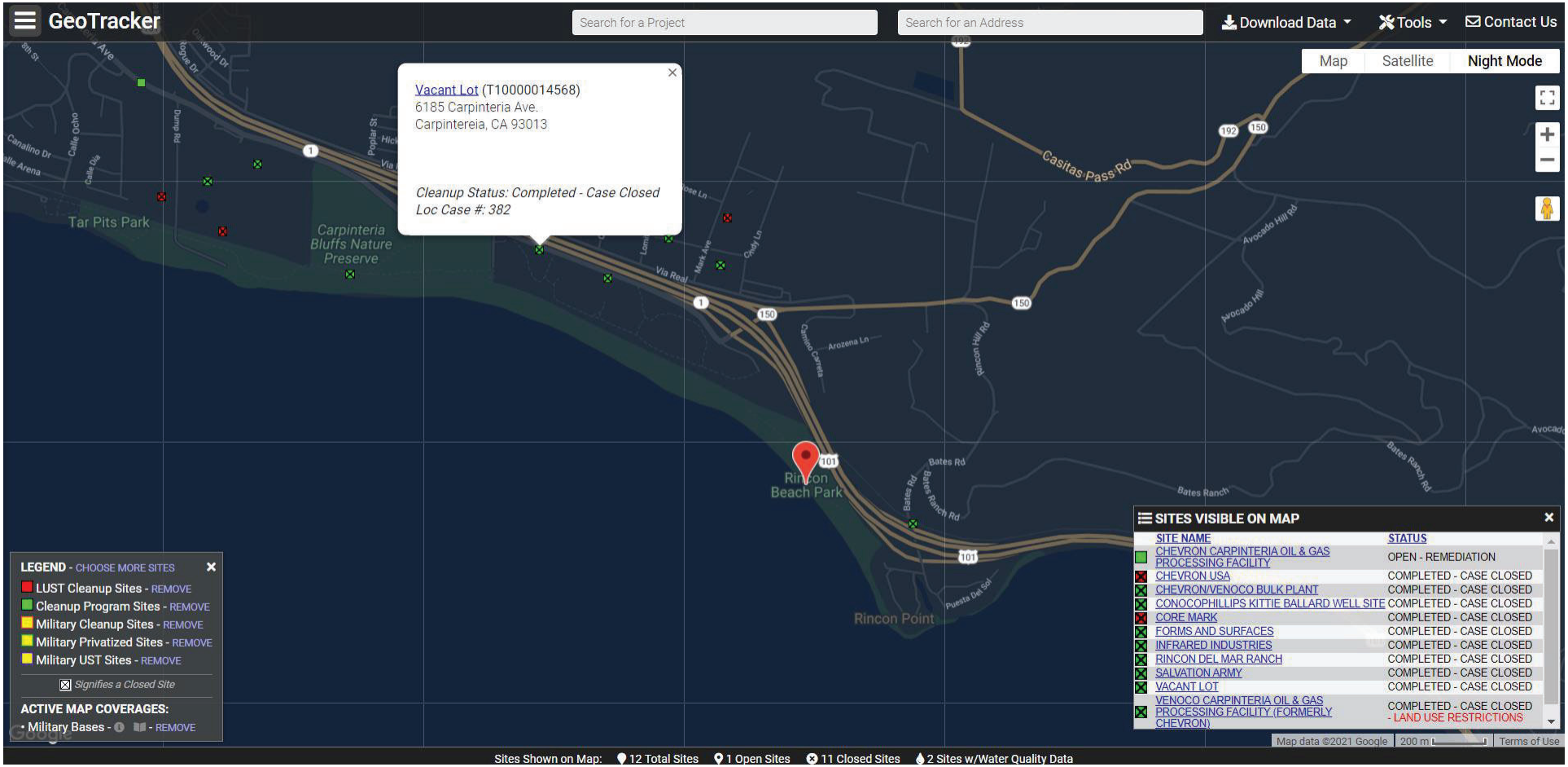
PHONE TYPE	PHONE NUMBER	EXTENSION
General Office	(805)-346-8460	

REGIONAL BOARD

UNKNOWN

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Accessed: January 14, 2021

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME

Vacant Lot

FACILITY ADDRESS

6185 Carpinteria Ave.
Carpintereia, CA 93013
SANTA BARBARA COUNTY

FACILITY ID

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER

382

REGIONAL BOARD CASE NUMBER

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION NAME	EMAIL ADDRESS
HISTORIC CLOSED SANTA BARBARA COUNTY SITE	CSS	SANTA BARBARA COUNTY	

ADDRESS

CONTACT DESCRIPTION

2125 S CENTERPOINTE PARKWAY ROOM 333
SANTA MARIA, CA 93455

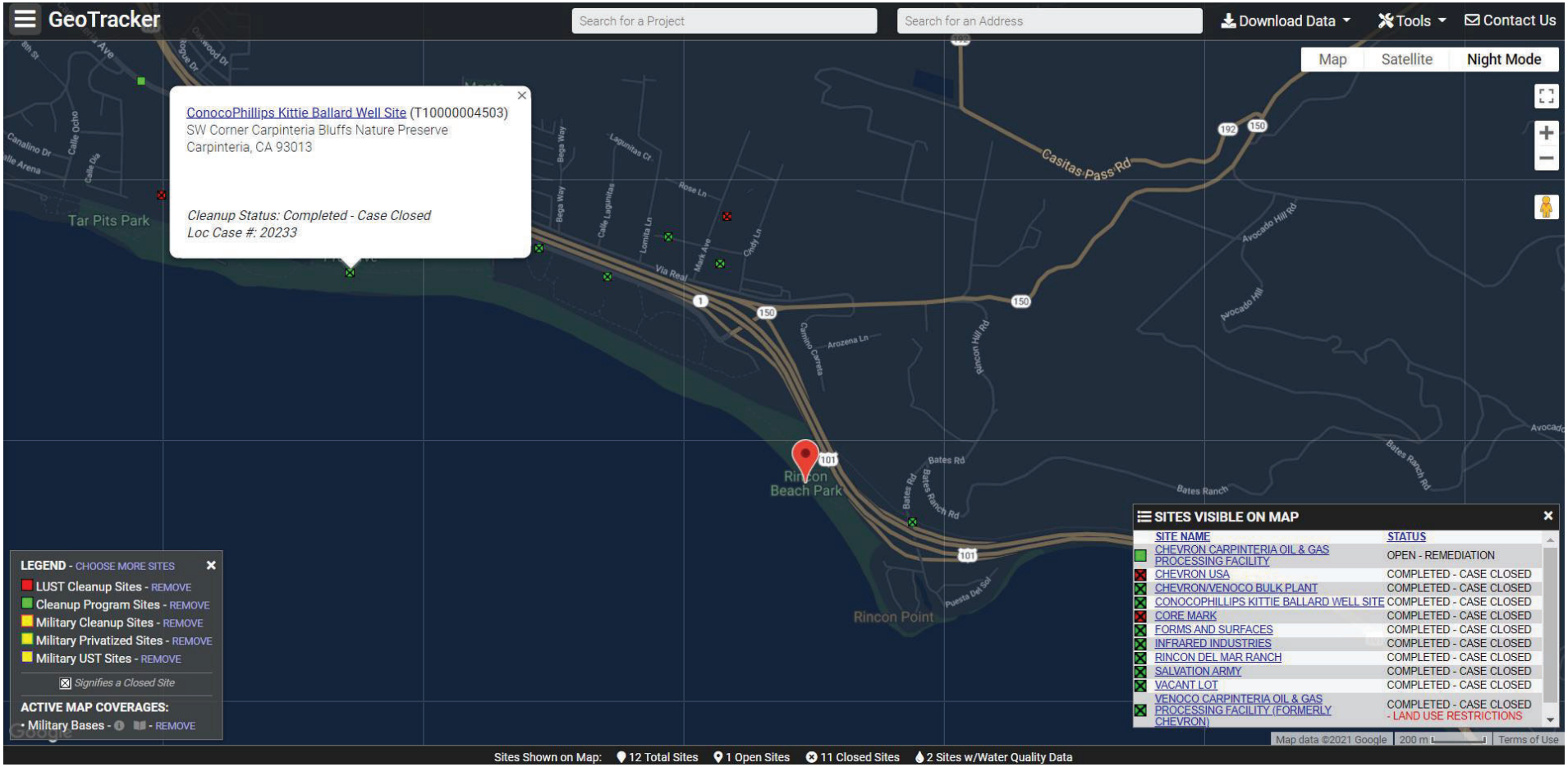
Closed SMU Sites

PHONE TYPE	PHONE NUMBER	EXTENSION
General Office	(805)-346-8460	

REGIONAL BOARD

UNKNOWN

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GeoTracker Web-Site https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Rincon+Beach+County+Park#

Accessed: January 14, 2021

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE
12/19/2011

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?
Y

I. REPORTED BY -
DOGGR

CREATED BY
SANTA BARBARA COUNTY FIRE, SITE MITIGATION UNIT

III. SITE LOCATION

FACILITY NAME
ConocoPhillips Kittie Ballard Well Site

FACILITY ID

FACILITY ADDRESS
SW Corner Carpinteria Bluffs Nature Preserve
Carpinteria, CA 93013
SANTA BARBARA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

BENZENE
CRUDE OIL
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)
TOLUENE
XYLENE
ETHYLBENZENE
TOTAL PETROLEUM HYDROCARBONS (TPH)
NAPHTHALENE

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED	HOW DISCOVERED	DESCRIPTION
12/19/2011	Visual	surface seep reported by public users

DATE STOPPED	STOP METHOD	DESCRIPTION
12/19/2012		re-plugging/abandonment of well completed

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE
Physc / Mech Damage

DISCHARGE DESCRIPTION
well confirmed as source of leak. start date unknown

VIII. CASE TYPE

CASE TYPE
Soil

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

Site was originally opened in 2012 following identification that the plugged and abandoned oil well, Kittie Bailard #1, located on the Carpinteria Bluffs preserve, appeared to be seeping oil. The well was originally plugged and abandoned under DOGGR oversight

in 1929. Also of note is that there are a number of natural oil seeps in the immediate vicinity including oil that seeps out of the sea bluff immediately to the south of the well. Following environmental review by the City of Carpinteria, ConocoPhillips excavated the well head and confirmed that oil was seeping up around the inner well casing. The work was performed with oversight by DOGGR, the City of Carpinteria and Santa Barbara County Environmental Health Services, Site Mitigation Unit (EHS-SMU). C/P proceeded to replug and abandon the well to current standards under DOGGR oversight. C/P performed a remedial excavation of nearly 74 tons of oil contaminated soil in 2013 and submitted the remedial action completion report and request for closure on May 20, 2013. EHS-SMU issued a closure letter to ConocoPhillips on August 26, 2013.

In January 2017, ConocoPhillips was notified that an oil seep had again been observed near the Kittie Bailard oil well and returned to the site to contain the seep and investigate. C/P contractor, ATC, installed straw wattles, high visibility fencing, signs, and protective bird block fabric mesh around the oil seep. C/P subsequently excavated the wellhead for inspection by various stakeholders and regulatory agencies including the City of Carpinteria, DOGGR and EHS-SMU. No oil was observed seeping around the wellhead and the existing seep was noted to be east of the wellhead with surface dimensions of 6-feet long by 3/8 inches wide and oriented east to west. Additionally, ATC performed leak-check investigation for volatile organic hydrocarbons, hydrogen sulfide and carbon dioxide. The field monitors did not detect any gases leaking from the well. All stakeholders concurred the current seep did not originate from the well but appeared to be a natural seep. While the surface seep was not C/P's responsibility, they proceeded to remove, transport and properly dispose of the oil-impacted soil. Cleanup of visually impacted soil was completed but no verification sampling was required and the case closed on November 15, 2018.

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
20233	

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION NAME	EMAIL ADDRESS
JASON JOHNSTON	JJ	SANTA BARBARA COUNTY	jason.johnston@sbcphd.org

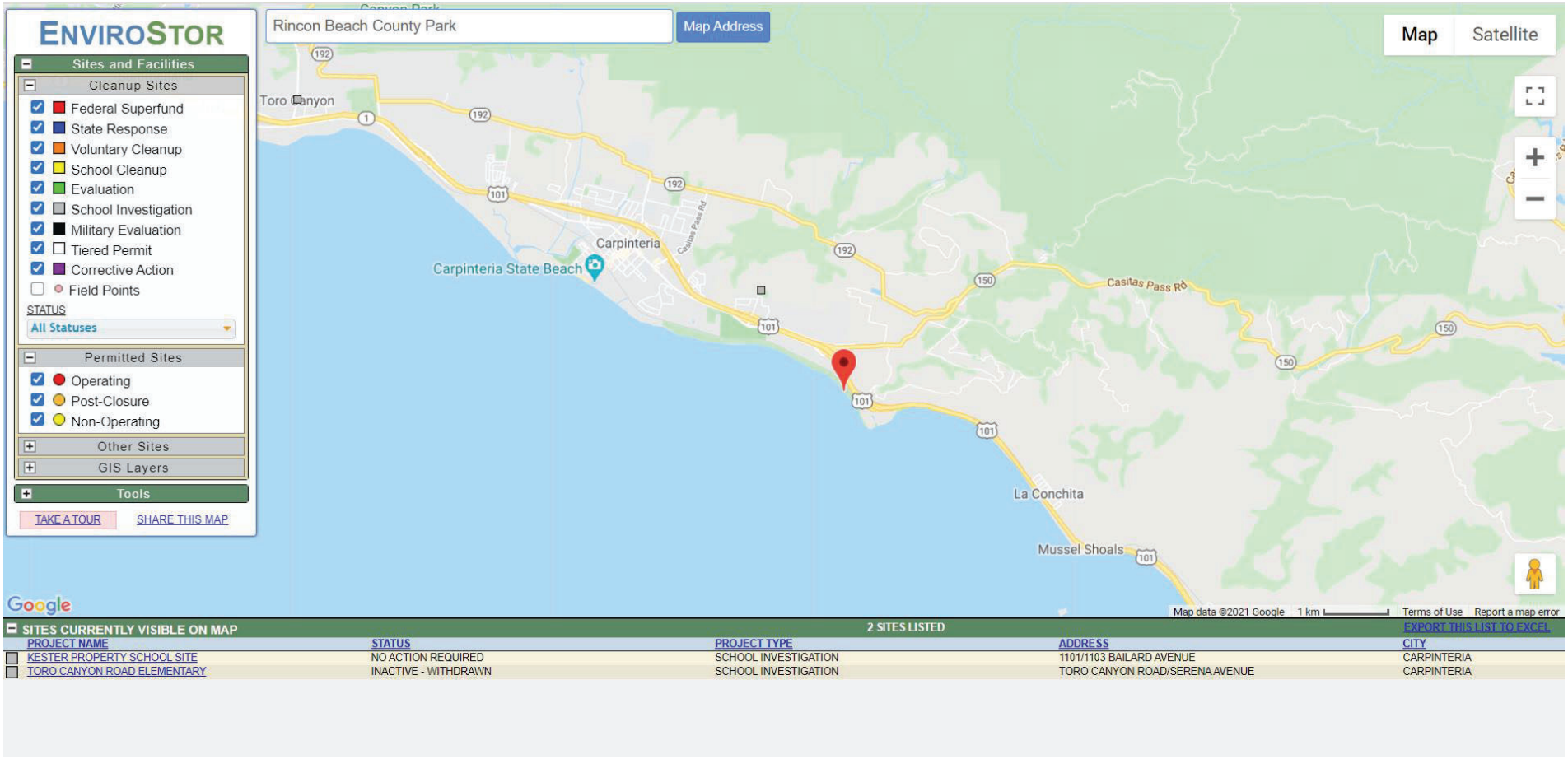
ADDRESS	CONTACT DESCRIPTION
2125 SOUTH CENTERPOINTE PARKWAY, ROOM 333 SANTA MARIA, CA 93455	Program Supervisor

PHONE TYPE	PHONE NUMBER	EXTENSION
Office	(805)-346-7348	

REGIONAL BOARD

UNKNOWN

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EnviroStor Web-Site https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Rincon+Beach+County+Park

Accessed: January 14, 2021

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

KESTER PROPERTY SCHOOL SITE (42010003)

SIGN UP FOR EMAIL

1101/1103 BAILARD AVENUE
CARPINTERIA, CA 93013-2637
SANTA BARBARA COUNTY
SITE TYPE: SCHOOL

SUPERVISOR: THOMAS COT
OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELD OUTREACH
SCHOOL DISTRICT: CARPINTERIA UNIFIED SCH DISTRICT
CENSUS TRACT: 6083001704
CALENVIROSCREEN PERCENTILE SCORE: 41-45%

Summary | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen

Site Information

CLEANUP STATUS
NO ACTION REQUIRED AS OF 9/7/1999

SITE TYPE: SCHOOL
NATIONAL PRIORITIES LIST: NO
ACRES: 6.98 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY

SCHOOL DISTRICT: CARPINTERIA UNIFIED SCHOOL DISTRICT
ENVIROSTOR ID: 42010003
SITE CODE: 300764
SPECIAL PROGRAM:
FUNDING: SCHOOL DISTRICT
ASSEMBLY DISTRICT: 37
SENATE DISTRICT: 19

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
RESIDENTIAL AREA

POTENTIAL CONTAMINANTS OF CONCERN
NO CONTAMINANTS FOUND

POTENTIAL MEDIA AFFECTED
NO MEDIA AFFECTED

Site History

2 parcels; 2 single family homes; vacant agricultural land and avocado orchards; all would be demolished for school. Phase I was completed with a no action required determination mad

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2.412109 seconds

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

TORO CANYON ROAD ELEMENTARY (36010037)

SIGN UP FOR EMAIL

TORO CANYON ROAD/SERENA AVENUE
CARPINTERIA, CA 93013
SAN BERNARDINO COUNTY
SITE TYPE: SCHOOL

SUPERVISOR: MARK MALINC
OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELD OUTREACH
SCHOOL DISTRICT: CARPINTERIA UNIFIED SCH DISTRICT
CENSUS TRACT: 6083001706
CALENVIROSCREEN PERCENTILE SCORE: 6-10%

Summary | Activities | Site/Facility Docs | Map | Related Sites | CalEnviroScreen

Site Information

CLEANUP STATUS
INACTIVE - WITHDRAWN AS OF 11/29/1999

SITE TYPE: SCHOOL
NATIONAL PRIORITIES LIST: NO
ACRES: 9.05 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY

SCHOOL DISTRICT: CARPINTERIA UNIFIED SCHOOL DISTRICT
ENVIROSTOR ID: 36010037
SITE CODE: 300826
SPECIAL PROGRAM:
FUNDING: SCHOOL DISTRICT
ASSEMBLY DISTRICT: 37
SENATE DISTRICT: 19

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
AGRICULTURAL - ROW CROPS

POTENTIAL CONTAMINANTS OF CONCERN
ARSENIC
DDD
DDE
DDT

POTENTIAL MEDIA AFFECTED
SOIL

Site History

This site has been historically used for agricultural purposes from 1928 to 1989, the property was used for citrus orchards. The property was cleared and used for the cultivation of flowe the time of the site assessment in 1996, the site was still planted in flower.

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Appendix G

Drainage System Feaibility Discsusion

Drainage Overview

This project is located in a coastal setting where heavy rains are likely to occur regularly. These rains will bring some sediment and perhaps rockfalls, which will likely be heavier in the earlier years, diminishing as vegetation becomes established.

In order to minimize maintenance and to protect the substantial investment in the project, along with concern for the safety of the users, designers feel it is important to provide adequate drainage systems including graded drainage benches where feasible. Such was the concept used during the original construction of the railroad and Hwy 101.



Aerial view looking south: Bengal photo

Note the benches built to control drainage on the cut slopes above the US 101 Highway to protect these facilities.

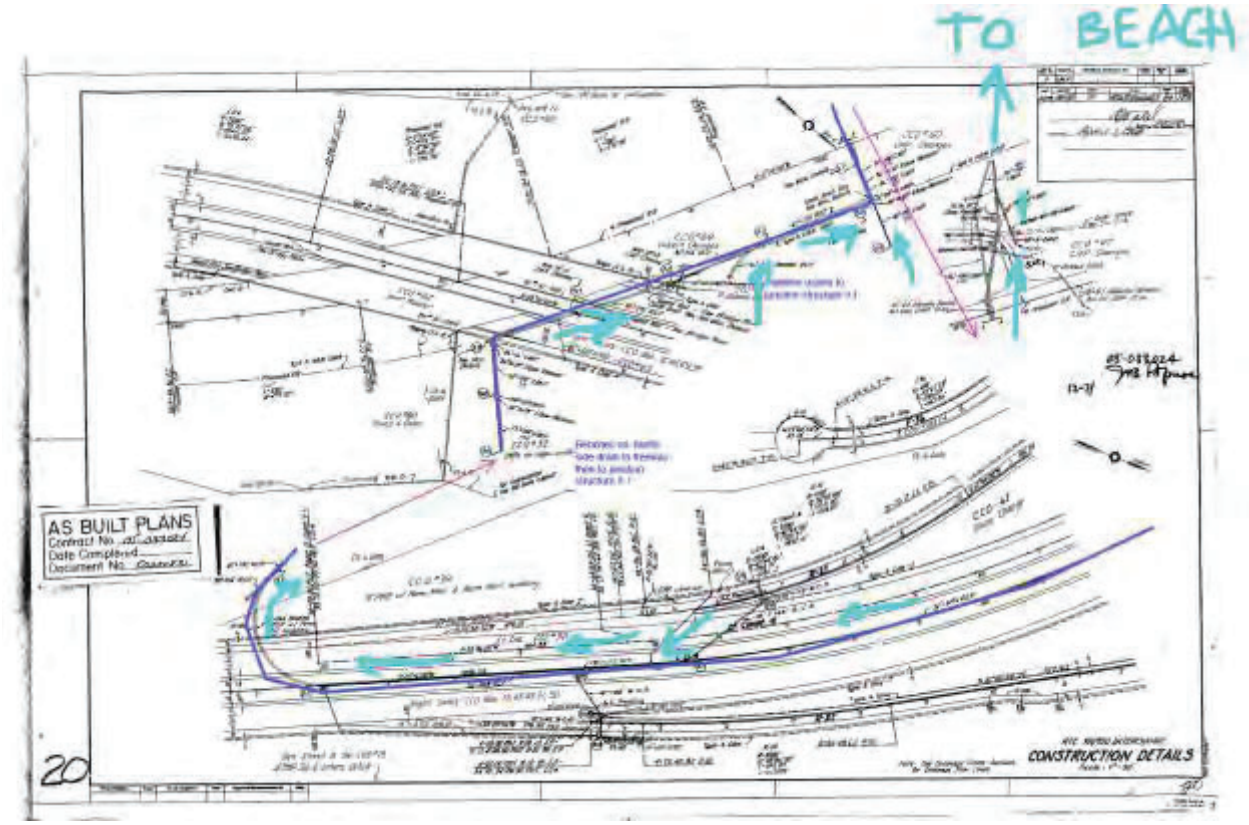
Drainage on Freeway Side of the Project

Designers of Hwy 101 routed all the drainage west of the “wave overhead” (the freeway bridge crossing the UPRR) down the median of the freeway then sweeping along the lower bench above the railroad, then descending to the beach (light blue arrows below). Note this existing system passes under the Union Pacific railroad tracks before it descends to the beach.



Above: Existing Drainage Paths (light blue); Proposed Drainage Path (yellow) . Note that on the freeway side of the UPRR, because the new trail will intercept the water which currently drains either to the existing mid-slope bench or to the southbound ramp below, engineers will include a drainage v-ditch along the trail. This v-ditch will convey water to the existing drainage system, as shown in the yellow arrows above.

As-Built Drawings of Hwy 101 Drainage



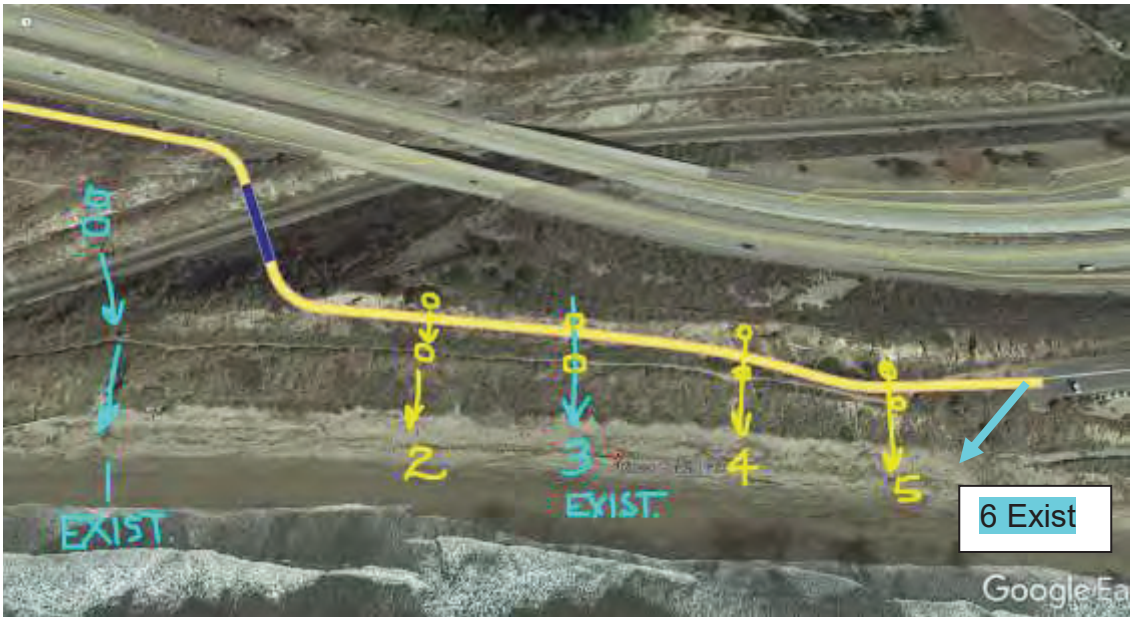
As-built construction plan showing drainage system. Note the freeway drains to the beach.

It is important to understand that as part of the construction of the Rincon Trail, neither the volume of water entering the system, nor the point of discharge on the beach would be changed.

Description of Proposed Drainage on Ocean-side of Project

South of the railroad, Bengal anticipates the need for at least 6 drains to the beach.

[existing drain 6 shown below was discovered in 2019]



View of the Ocean-side of the project: The first drain at the left (west) is the existing system from the freeway, mentioned previously, and shown in the as-built drawings.



View of Drainage Stystem #1 from ocean side of UPRR. Note this drain accepts all the drainage from both sides of the freeway, including the down-drains far in the distance (photo, top right).



View of the outfall of drainage system Number 1 as seen from the beach. Note old concrete sea wall and broken concrete “rip rap” along with remains of the corrugated metal pipe down-drain. The proposed project would not affect this existing facility.

Drainage systems 2, 4 and 5 are proposed as part of the project. These are important design features because they will capture water before it becomes concentrated and flows into the parking lot. Note that if this water is unchecked, it could flow through the Rincon Beach parking lot, and all the way to Bates Road. Designers believe that these vertical drains are imperative for the success of the project and underscore the need to obtain the permits to build them.

Drainage system #3 will replace an existing drainage system which has rusted out.



A view of drainage system #3 as seen from beach. Note that it drains not only the old rail bed, but it originally drained the old state highway. It has since rusted away due to lack of maintenance.



View of the existing drainage system #3, looking westerly along the old Southern Pacific Railroad rail bed. Note the rusty pipe visible at the left, oriented parallel with the old rail bed, is an old communications line, now abandoned. Drainage system #3 passes under it, in-line with the yellow tape measure shown in the photo.

Space Limitations for "Infiltration" Systems

Current engineering practices are evolving to include the use of infiltration measures to limit both the volume of run-off and the amount of sediment.

This project faces the same narrow footprint available for grading which faced the engineers who built both the railroad and the freeway in the past. Because of these space limitations, and because implementation of an infiltration system will add water to the soils, likely reducing their stability, such methods do not appear to be a practical fit for the project as it is currently proposed.

Factors Guiding the Suggested Approach for Drainage Design

The proposed drainage design includes multiple down drains leading to the beach. This approach has been selected based on careful consideration, described next.

Performance of Past Projects

If one visits the site, one can see past projects including both the new and old railroad alignments, the old State Highway 2 (which existed on the ridgeline before Hwy 101 was constructed), the County Park, and Hwy 101, all included drainage systems to protect their investments. Some still function—some are rusty metal skeletons and crumbling concrete relics. These systems have had varying degrees of success. Most were built as “downdrains”, as we suggest in the proposed project.

But one these systems is a complicated trunk line storm drain: the Caltrans-constructed “Drainage System Number 3” (mentioned in the record drawings above). Today, the difficulties facing Caltrans maintenance crews for such a complicated trunk line are evident to the designers of the Rincon Trail. This system has no maintenance openings for hundreds of feet—including the railroad crossing. This system cannot easily reached from the old railroad bench or from the beach. And this system also provides no redundancy—no ancillary inlets to accommodate blockage. So should any part of it become blocked, we can expect damage which will be difficult to repair.

Rainfall Intensity: the Future May be Harsher than the Past

Today, engineers expect rain, including heavy rain, at this location. Growing concerns regarding changing climate may prove that heavier rains will be a “new normal”. For example, the nearby 2018 flooding in Montecito, was caused not only because of the Thomas fire, but also because of freakishly high rainfall intensity. The results from the plugged drainage systems near Olive Mill Road, which closed the freeway for weeks, are still fresh in our minds.

As it turned out, the existing storm drains which functioned OK for years, failed during the time of greatest need. Rob Lewin, OEM Director, said, “The storm we got was not the storm we prepared for.”

Rockfalls could plug an individual downdrain

Because of the nature of the soil in the area, engineers expect that historic rock falls, which are partially-driven by rain, will continue to occur in spite of the proposed cut slopes which are less-steep than those which exist. Such rock falls could plug any drainage system. Therefore engineers have provided redundancy to avoid “having all our eggs in one basket”.



Access to remove rockfall.

Designers believe that the project should provide access to remove rockfall debris especially the upper slopes during in the early years of service. Designers envision that rockfall will decrease with time as slopes mature and perhaps some vegetation takes purchase. But given the low organic content in the soils, along with the southern exposure to the sun, designers do not expect to see well-vegetated slopes, based on what we see in the old cuts made by Southern Pacific Railroad.

However new "fills" which will be made below the path will be reinforced with geosynthetic materials, and we envision using a mantle of topsoil on the daylight face of the fill slope to provide better soil vegetation in the zone below the bike path and above the old railroad bench.

Project Engineers Strive to Simplify Maintenance

The designers (engineers) anticipate that agencies like the City of Carpinteria and Santa Barbara County will have shrinking resources: less staff and budget: available to maintain any infrastructure. Therefore the designers prefer designs which avoid the need for specialized equipment or staff; "simpler is better". Even if staff and budget are generous, experience has shown that complicated designs generate complicated maintenance scenarios, and are difficult to understand by emergency crews who will likely be responding in bad weather often at night (like the 2018 Montecito Flood).

Other Drainage Design Concepts Which Were Considered

Facing the challenges mentioned, engineers implemented a design with multiple down drains. However engineers also considered several other ideas, described next:

A) **A trunk line storm drain following the old railroad bench**
We considered a trunk line like the Caltrans "Drainage System 3". This trunk line could descend to the beach near the west end of the County park in a single down drain. The driving force for this concept was considered to minimize the number of drains to the beach.

This concept was disregarded because:

- Likely this trunk line would conflict with a Frontier Fiber Opitic line which already occupies this area in a dedicated easement; this fiber optic line runs the full length of the bench and then into the parking lot.
- Such a storm drain will be much more difficult to maintain. Access below the paved trail would be particularly limited, unless the trail alignment is shifted toward the freeway, generating more cut in the process.



- The existing bench is narrow in places. There is not much room for such a storm drain.
- This bench has areas which will be stabilized by engineering (reinforced fills). Construction will be difficult as the storm drain will conflict with the reinforced fills, a situation we seek to avoid.
- The system has no redundancy—which leads to the next point.
- Should any part of this drain fail, greater damage is expected as "all our eggs will be in one basket".



View of the proposed west end of the trail, near Rincon Park, March 2018.
Note gate, demarking the end of the paved parking lot.
Note muddy conditions which develop due to lack of drainage systems.

B) A trunk line storm drain following the proposed "trail" bench, buried below proposed trail

This concept was disregarded because:

- As mentioned, Rain and rockfalls seem to be certainty, therefore a design which allows for them seems best.
- We envision the upper trunk line B will be plugged at some point. In worse case it could flow off the paved path, uncontrolled.
- Because the slopes *below* the paved trail will not be protected by a drainage system, therefore we'd still need trunk line A, and likely face most of the detriments already mentioned.

C) A combination of 2 trunk lines—A+B, combined.

We considered 2 smaller trunk lines, combining the ideas of A) and B). This idea was disregarded because:

- The detriments of each trunk line: still remain, likely in spite of much higher cost.



View of old retaining walls which remain from State Hwy 2, near Rincon Park, March 2018.

Note that these old walls will be removed as part of the project to make room for the trail and drainage improvements. Drainage at this location appears to have been a problem since construction in 1929.

NOTES

1. FOR COMPLETE RIGHT OF WAY INFORMATION, SEE MAPS IN THE CITY OFFICES.
2. THESE PLANS ARE FOR THE LAYOUT AND CONSTRUCTION OF THE DRAINAGE FACILITIES.
3. EXISTING DRAINAGE SYSTEMS ARE GIVEN IDENTIFICATION FROM CAL TRANS 1968 DRAINAGE PLANS
4. APPROX 10-FOOT X 10-FOOT PAD OF 2 TON RIP RAP AT OUTFALL OF DRAINAGE SYSTEMS 3,5,6,7&8

DIST	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	UPRR MP 380.3		

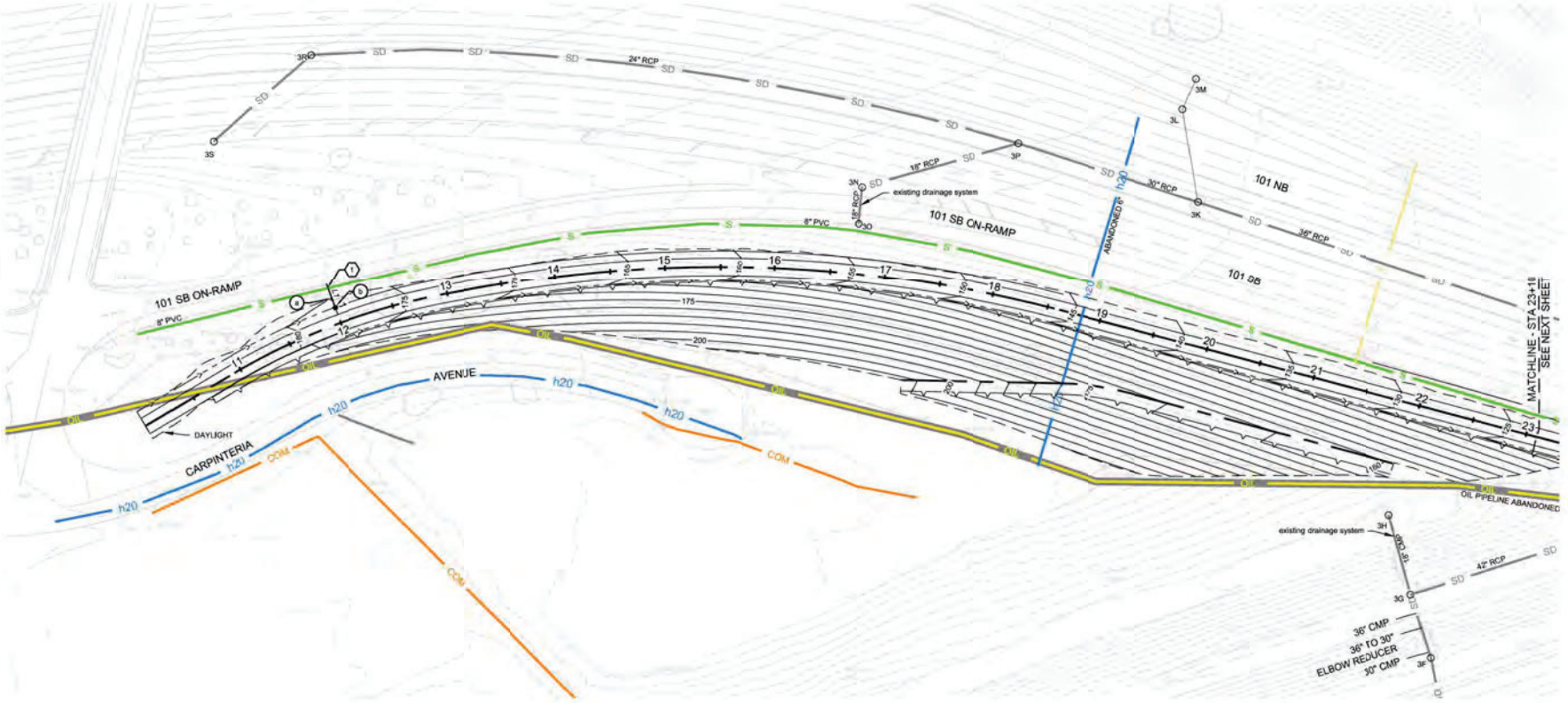
REGISTERED ENGINEER – CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER * STATE OF CALIFORNIA * S. Onishuk No. C48052 CIVIL

DESIGNER:
BENGAL ENGINEERING
360 S. HOPE AVE.
SUITE C-110
SANTA BARBARA, CA 93105

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DRAINAGE - 1

NORTH

SCALE 1"=50' H

CITY OF CARPINTERIA, CALIFORNIA

PROJECT ENGINEER: Scott Onishuk, FE

Matt Roberts, Project Manager

CALCULATED/DESIGNED BY: MB

CHECKED BY: SO

DATE

REVISED BY:

DATE REVISED:

LAST REVISION

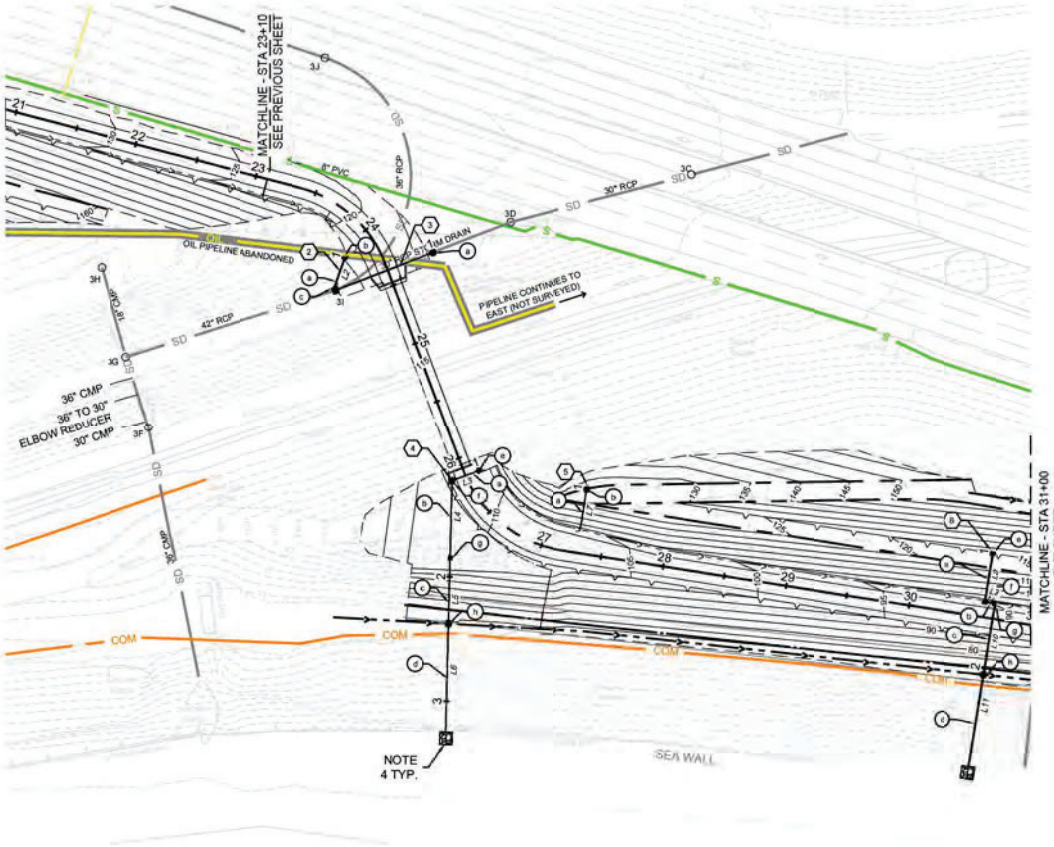
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DIST	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	UPRR MP 380.3		

REGISTERED ENGINEER - CIVIL

S. Onishuk
No. C48052
CIVIL

PLANS APPROVAL DATE

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PROJECT ENGINEER
Scott Onishuk, FE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager

CARPINTERIA RINCON TRAIL - Ped Bridge, RR Under, Carpinteria CA, Santa Barbara Sub, M.P. 380.49, DOT 441148Y

DRAINAGE - 2

NORTH

SCALE 1"=50' H

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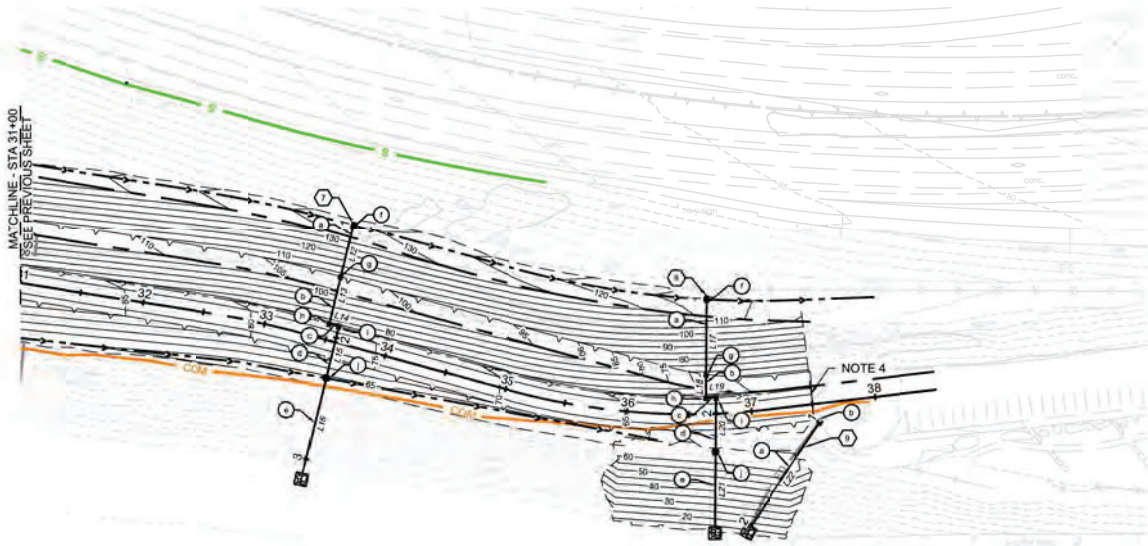
REGISTERED ENGINEER - CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
S. Onishuk
No. C48052
CIVIL
STATE OF CALIFORNIA

DESIGNER:
BENGAL ENGINEERING
360 S. HOPE AVE.
SUITE C-110
SANTA BARBARA, CA 93105

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NORTH

DRAINAGE - 3

SCALE 1"=50' H

CITY OF CARPINTERIA, CALIFORNIA

PROJECT ENGINEER
Scott Onishuk, FE

Matt Roberts, Project Manager

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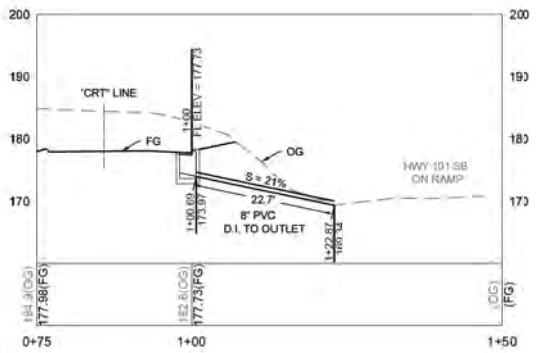
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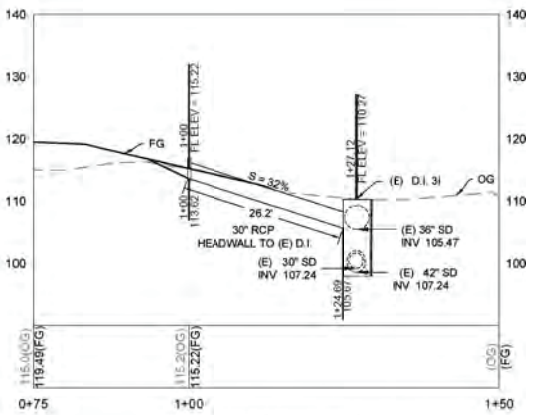
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DWG FILE: Progress Print: August 6, 2019 9:15AM

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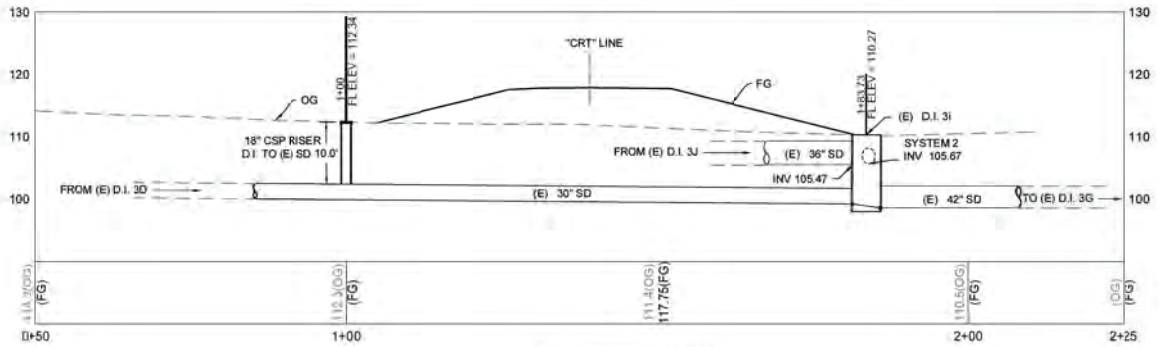
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DRAINAGE SYSTEM 1 PROFILE



DRAINAGE SYSTEM 2 PROFILE



DRAINAGE SYSTEM 3 PROFILE

DIST	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
05	SB	101	UPRR MP 380.3		

REGISTERED ENGINEER: - CIVIL

S. Onishuk
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PROJECT ENGINEER
Scott Onishuk, FE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager

CARPINTERIA RINCON TRAIL - Ped Bridge, RR Under, Carpinteria CA, Santa Barbara Sub, M.P. 380.49, DOT 441148Y

LAST REVISION

DRAINAGE - 4

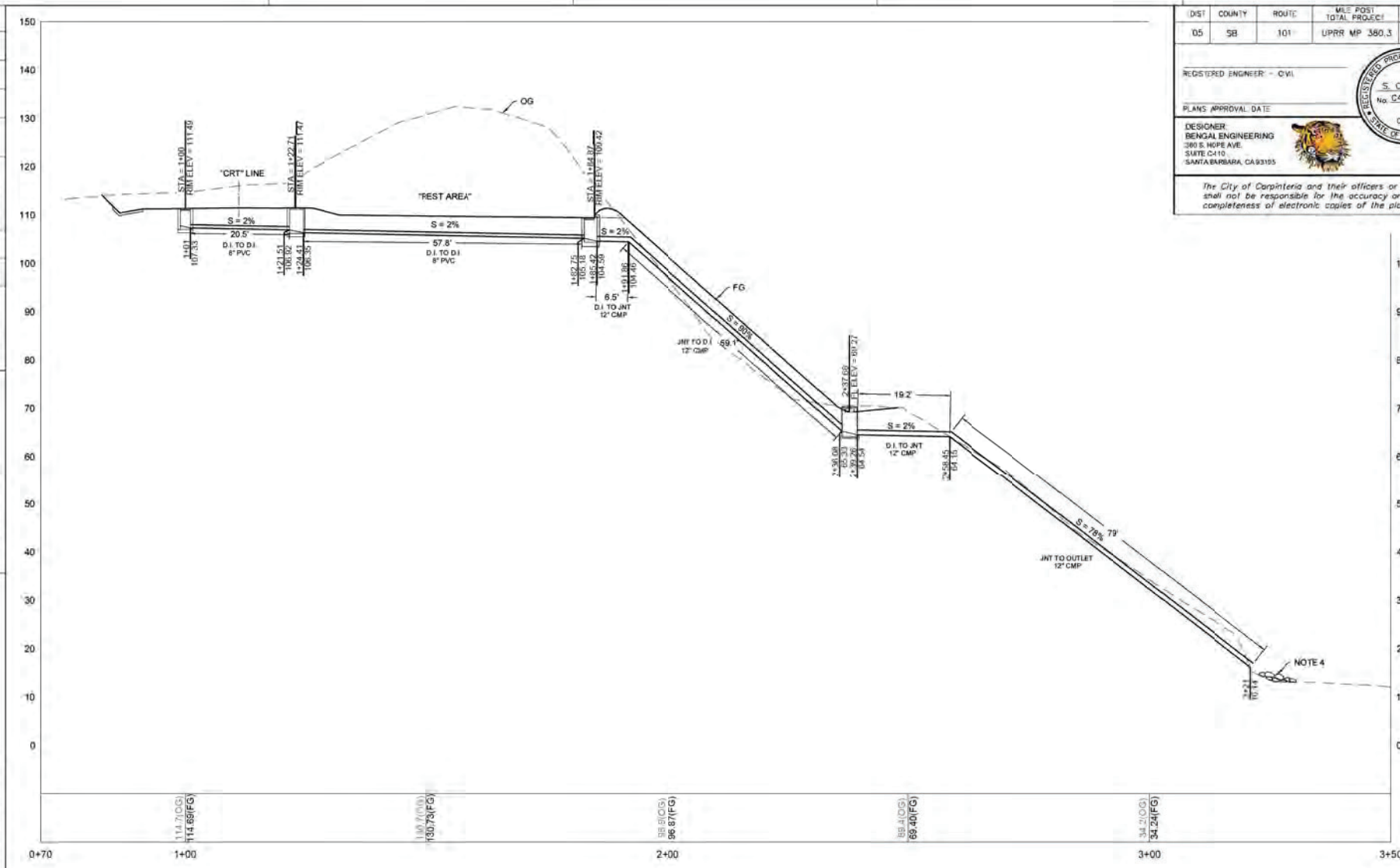
SCALE 1"=10' H&V

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DRAINAGE SYSTEM 4 PROFILE

DRAINAGE - 5

SCALE 1"=10' H&V

DIST	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	101	UPRR MP 380.3		

REGISTERED ENGINEER - CIVIL

S. Onishuk
No. C48052
CIVIL

PLANS APPROVAL DATE

DESIGNER:
BENGAL ENGINEERING
380 S. HOPE AVE.
SUITE C410
SANTA BARBARA, CA 93105

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MB

SO

DATE

REVISED BY:

DATE REVISED:

PROJECT ENGINEER
Scott Onishuk, FE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager

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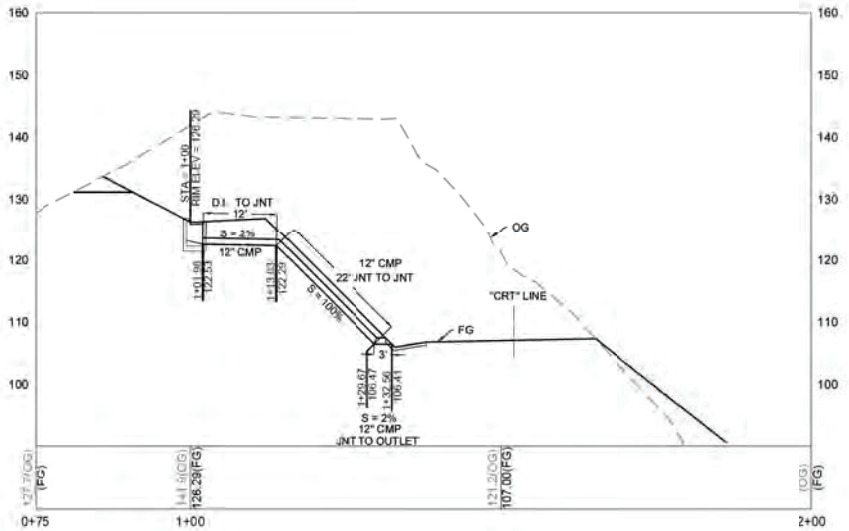
REGISTERED ENGINEER - CIVIL

S. Onishuk
No. C48052
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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DRAINAGE SYSTEM 5 PROFILE

DRAINAGE - 6

SCALE 1"=10' H&V

CITY OF CARPINTERIA, CALIFORNIA

Matt Roberts, Project Manager

PROJECT ENGINEER
Scott Onishuk, FE

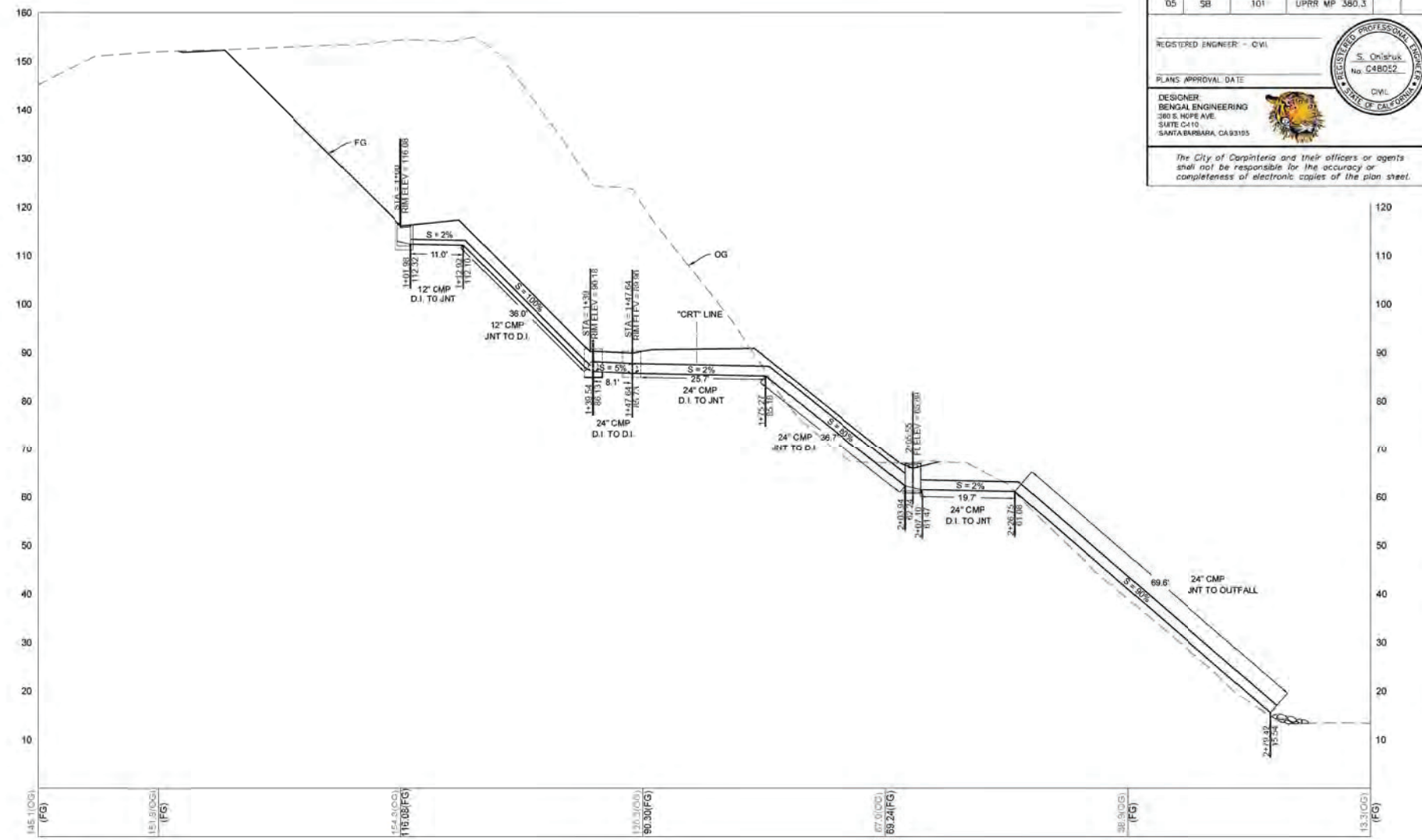
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PROJECT ENGINEER
Scott Onishuk, PE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager

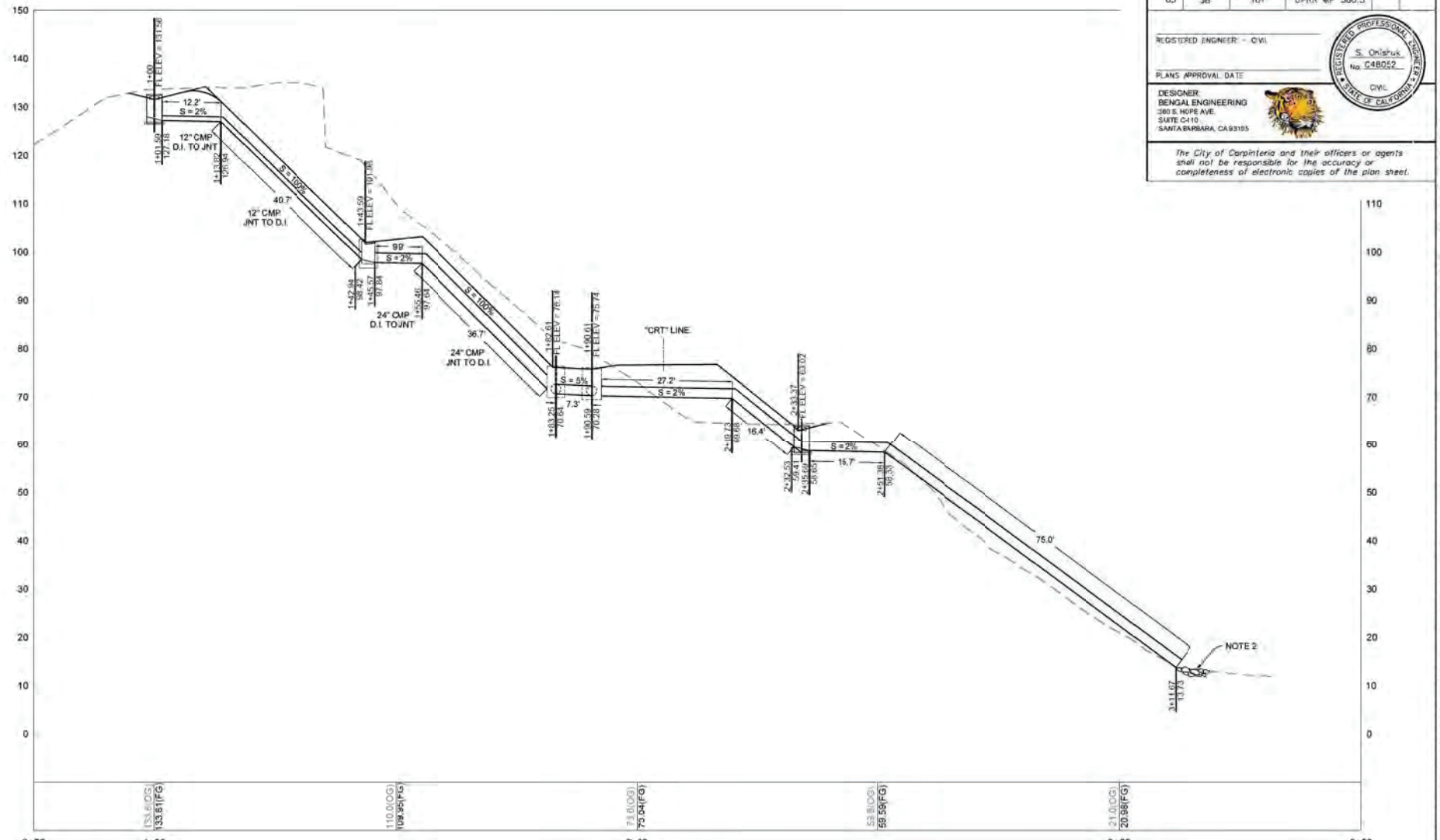
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CITY OF CARPINTERIA, CALIFORNIA

PROJECT ENGINEER
Scott Onishuk, FE

Matt Roberts, Project Manager

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DATE REVISED:

DRAINAGE - 8

SCALE 1"=10' H&V

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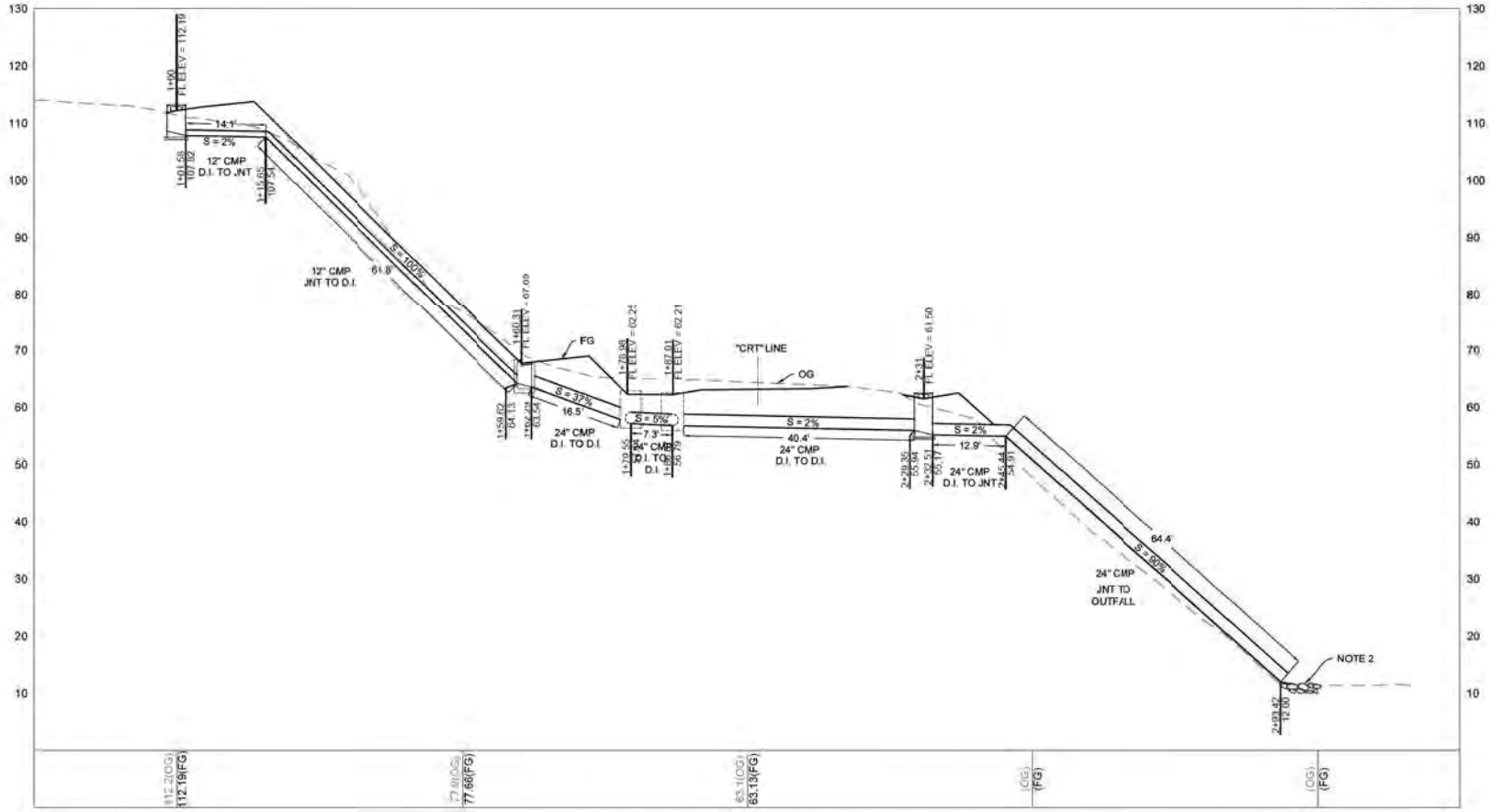
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PROJECT ENGINEER
Scott Onishuk, FE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager



DRAINAGE SYSTEM 8 PROFILE

DRAINAGE - 9

SCALE 1"=10' H&V

LAST REVISION

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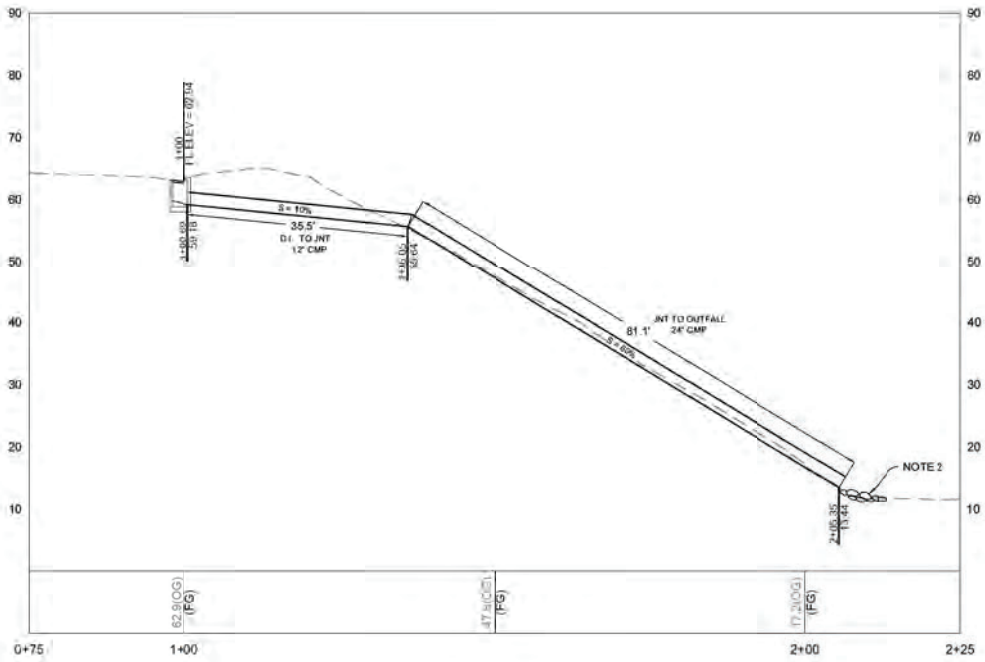
REGISTERED ENGINEER - CIVIL

S. Onishuk
No. C48052
CIVIL
STATE OF CALIFORNIA

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BENGAL ENGINEERING
380 E. HOPE AVE.
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SANTA BARBARA, CA 93105

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DRAINAGE SYSTEM 9 PROFILE

DRAINAGE - 10

SCALE 1"=10' H&V

CITY OF CARPINTERIA, CALIFORNIA	PROJECT ENGINEER	CALCULATED/ DESIGNED BY	MB	DATE	DATE REVISED:
Matt Roberts, Project Manager	Scott Onishuk, FE	CHECKED BY	SO		REVISED BY:

LAST REVISION

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REGISTERED PROFESSIONAL ENGINEER — S. Onishuk — No. C48052 — CIVIL — STATE OF CALIFORNIA

DESIGNER:
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360 S. HOPE AVE.
SUITE C-110
SANTA BARBARA, CA 93105

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DRAINAGE SYSTEM 1

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L1	1+00.00	1965057.54	6113746.24	22.87'	N26° 12' 28.25"E	1+22.87	1965078.06	6113756.34

DRAINAGE SYSTEM 2

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L2	1+00.00	1964097.14	6114409.17	24.69'	S65° 44' 03.32"W	1+24.69	1964086.99	6114386.66

DRAINAGE SYSTEM 3

START STATION	START NORTHING	START EASTING
1+00.00	1964049.15	6114461.32

DRAINAGE SYSTEM 4

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L3	1+00.00	1963900.67	6114358.40	22.71'	N63° 58' 19.73"W	1+22.71	1963910.63	6114338.00
L4	1+22.71	1963910.63	6114338.00	62.73'	S47° 55' 44.35"W	1+85.44	1963868.60	6114291.43
L5	1+85.44	1963868.60	6114291.43	52.24'	S47° 55' 19.66"W	2+37.68	1963833.59	6114252.66
L6	2+37.68	1963833.59	6114252.66	83.32'	S47° 55' 32.67"W	3+21.00	1963777.76	6114190.81

DRAINAGE SYSTEM 5

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L7	1+00.00	1963827.28	6114408.15	32.56'	S55° 25' 11.63"W	1+32.56	1963808.80	6114381.34

DRAINAGE SYSTEM 6

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L8	1+00.00	1963555.43	6114595.23	39.67'	S55° 27' 24.04"W	1+39.67	1963532.93	6114562.55
L9	1+39.67	1963532.93	6114562.55	8.00'	S34° 32' 48.53"E	1+47.67	1963526.34	6114567.09
L10	1+47.67	1963526.34	6114567.09	57.91'	S55° 26' 14.58"W	2+05.58	1963493.49	6114519.40
L11	2+05.58	1963493.49	6114519.40	73.84'	S55° 29' 19.80"W	2+79.42	1963451.65	6114458.55

DRAINAGE SYSTEM 7

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L12	1+00.00	1963331.16	6114794.35	43.59'	S60° 11' 37.43"W	1+43.59	1963309.49	6114756.52
L13	1+43.59	1963309.49	6114756.52	39.02'	S60° 11' 37.43"W	1+82.61	1963290.10	6114722.67
L14	1+82.61	1963290.10	6114722.67	8.00'	S28° 09' 54.77"E	1+90.61	1963283.04	6114726.45
L15	1+90.61	1963283.04	6114726.45	42.76'	S60° 10' 16.26"W	2+33.37	1963261.78	6114689.36
L16	2+33.37	1963261.78	6114689.36	78.30'	S60° 12' 09.30"W	3+11.67	1963222.87	6114621.41

DRAINAGE SYSTEM 8

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L12	1+00.00	1963331.16	6114794.35	43.59'	S60° 11' 37.43"W	1+43.59	1963309.49	6114756.52
L13	1+43.59	1963309.49	6114756.52	39.02'	S60° 11' 37.43"W	1+82.61	1963290.10	6114722.67
L14	1+82.61	1963290.10	6114722.67	8.00'	S28° 09' 54.77"E	1+90.61	1963283.04	6114726.45
L15	1+90.61	1963283.04	6114726.45	42.76'	S60° 10' 16.26"W	2+33.37	1963261.78	6114689.36
L16	2+33.37	1963261.78	6114689.36	78.30'	S60° 12' 09.30"W	3+11.67	1963222.87	6114621.41

DRAINAGE SYSTEM 9

SEGMENT ID	START STATION	START NORTHING	START EASTING	LENGTH	DIRECTION/ DELTA	END STATION	END NORTHING	END EASTING
L22	0+75.00	1962953.56	6114961.84	151.10'	S80° 08' 26.36"W	2+26.10	1962927.69	6114812.97

DRAINAGE - 11
LAYOUT

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager
PROJECT ENGINEER
Scott Onishuk, FE
CALCULATED/ DESIGNED BY
CHECKED BY
MB
SO
DATE
DATE REVISED:
REVISED BY:

LAST REVISION

CARPINTERIA RINCON TRAIL - Ped Bridge, RR Under, Carpinteria CA, Santa Barbara Sub, M.P. 380.49, DOT 441148Y

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DRAINAGE QUANTITIES

DRAINAGE SYSTEM NUMBER	DRAINAGE UNIT	8" PVC	12" CMP	24" CMP	30" RCP	18" CSP RISER CAL TRANS STD D93B	12" CMP DOWNDRAIN CAL TRANS STD D87B	24" CMP DOWNDRAIN CAL TRANS STD D87B	30" SINGLE HEADWALL CAL TRANDS STD D89	24" GCP CAL TRANS STD D75B	TYPE G- 1DROP INLET TYPE 24-12X CALTRANS D72B	TYPE GT- 4 DROP INLET Type 24-12X CALTRANS D72D	TYPE OMP CALTRANS D75A	CONNECT TO EXISTING RCP	CONNECT TO EXISTING JUNCTION STRUCTURE
		LF			LF	LF	LF	LF	EA	EA	EA	EA	EA	LS	LS
1	a	25													
	b											1			
2	a				30										
	b								1						
	c													1	
3	a					12				1					1
4	a	24													
	b	62													
	c *						70								
	d *						96								
	e										1				
	f										1				
	g											1			
	h												1		
5	a *						30								
	b											1			
6	a *						50								
	b			12											
	c *							66							
	d *							92							
	e											1			
	f											1			
	g											1			
	h												1		
7	a *						54								
	b *						50								
	c			12											
	d *							48							
	e *							94							
	f												1		
	g											1			
	h											1			
	i											1			
	j												1		
8	a *						76								
	b			20											
	c			12											
	d			44											
	e *							82							
	f												1		
	g											1			
	h											1			
	i											1			
	j												1		
9	a *							120							
	b											1			
TOTALS		111	0	100	30	12	426	502	1	1	2	13	6	1	1

*ELBOW USED & INCLUDED IN LENGTH

DIST	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
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REGISTERED ENGINEER: - CIVIL

S. Onishuk
No. C48052
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REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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SUITE C-110
SANTA BARBARA, CA 93105

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DATE
DATE REVISED:
REVISED BY:

PROJECT ENGINEER
Scott Onishuk, FE

CITY OF CARPINTERIA, CALIFORNIA
Matt Roberts, Project Manager

DRAINAGE - 12
QUANTITIES

LAST REVISION

CARPINTERIA RINCON TRAIL - Ped Bridge, RR Under, Carpinteria CA, Santa Barbara Sub, M.P. 380.49, DOT 441148Y

FOR REDUCE PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

USER NAME:
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Appendix H

Noise

NOISE APPENDIX

Published Noise Contour Maps

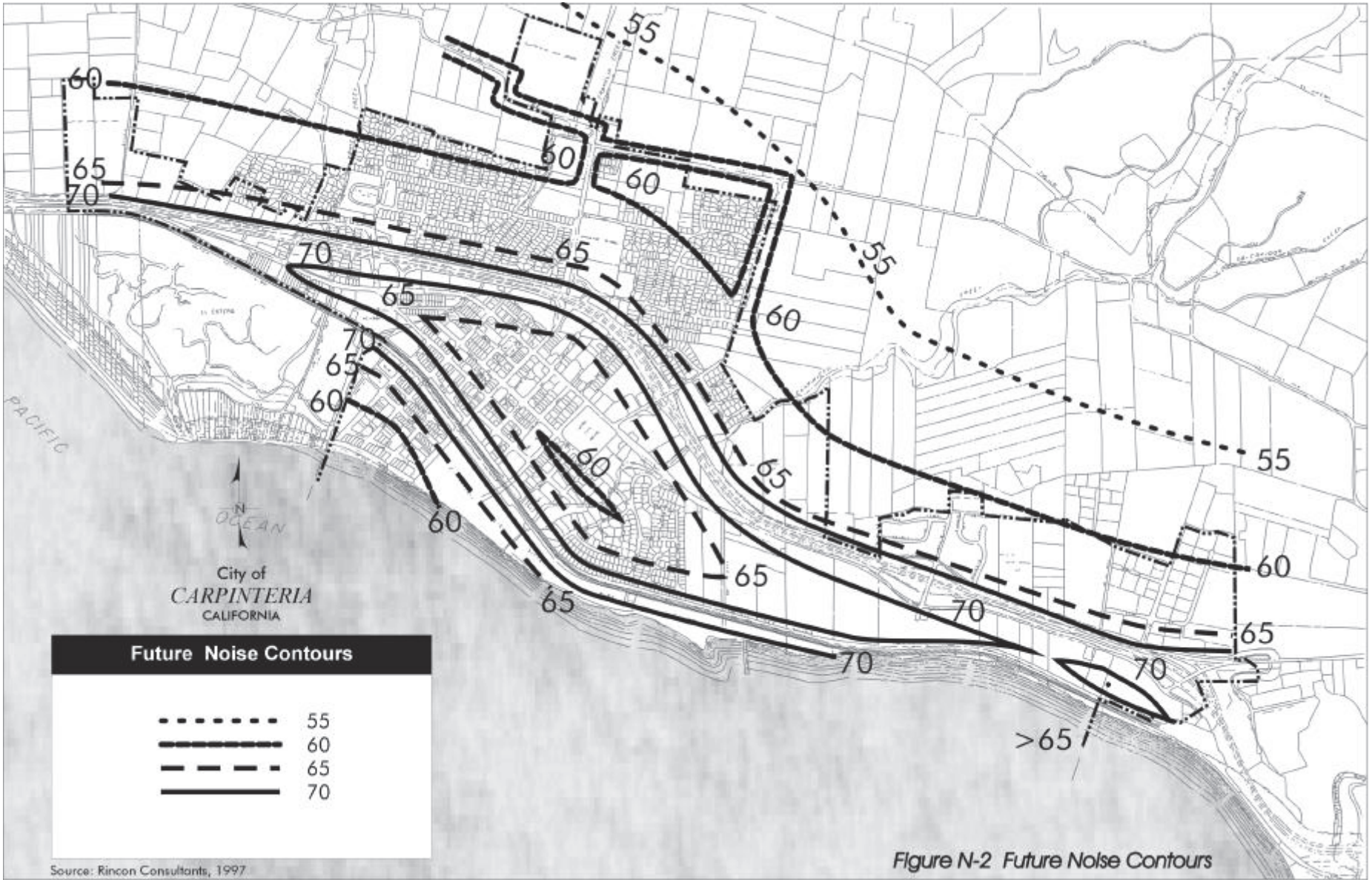
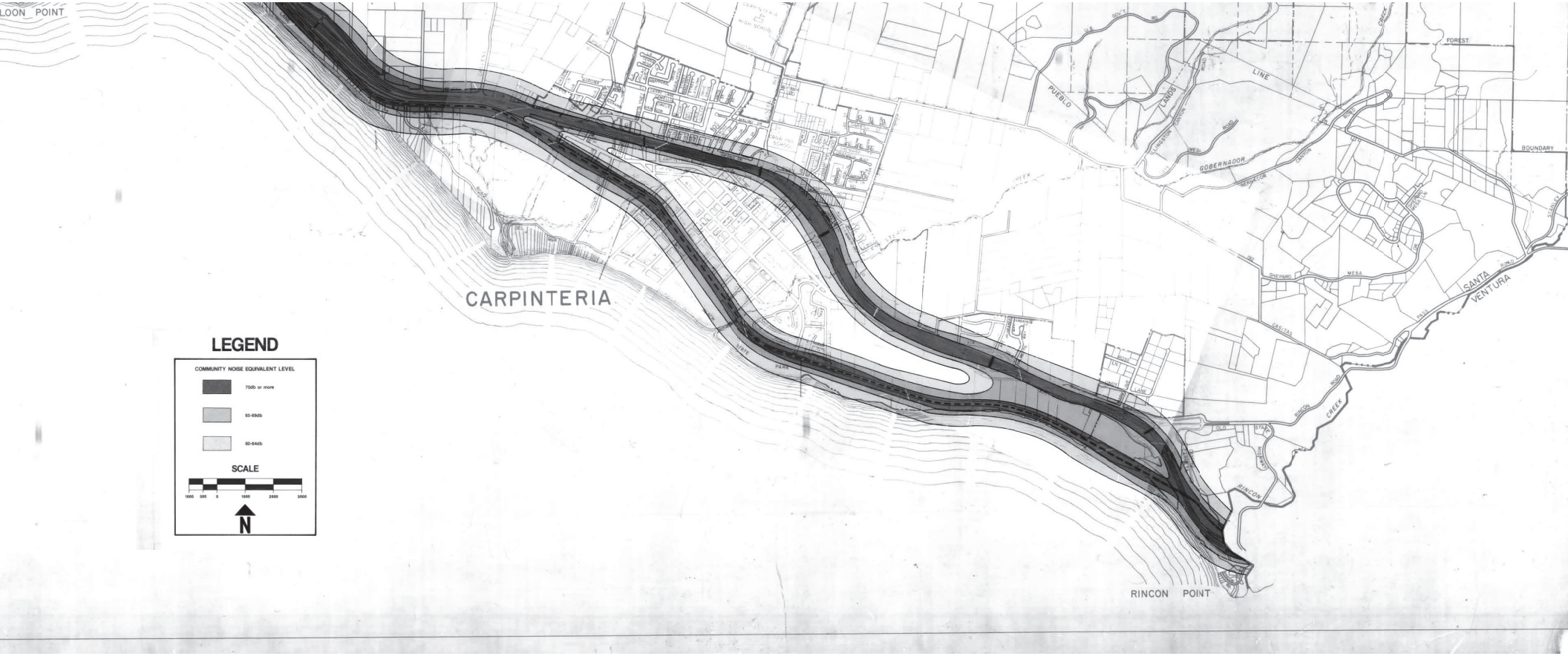


Figure N-2 Future Noise Contours

Santa Barbara County Comprehensive Plan Noise Element - Carpinteria Area Noise Contours (2009)



NOISE APPENDIX

Construction Noise Modeling Data

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per County = 70
allowable hours over which Leq is to be averaged (example: 8 for County of San Diego, FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Grader	1	40	85		775	61.2	8	480	57
	Dozer	1	40	82		775	58.2	7	420	54
	Front End Loader	1	40	79		775	55.2	8	480	51
								Total for Site Preparation Phase:		**59.5**
Grading	Grader	1	40	85		775	61.2	7	420	57
	Tractor	1	40	84	Crawler Tractor	775	60.2	6	360	55
	Front End Loader	1	40	79		775	55.2	7	420	51
								Total for Grading Phase:		**59.5**
Trail Construction	Tractor	1	40	84	Crawler Tractor	775	60.2	7	420	56
	Backhoe	1	40	78		775	54.2	6	360	49
								Total for Trail Construction Phase:		**56.5**
Bridge Construction	Crane	1	16	81		775	57.2	8	480	49
	Backhoe	1	40	78		775	54.2	6	360	49
	Welder / Torch	3	40	73		775	49.2	8	480	50
								Total for Bridge Construction Phase:		**54.2**
Paving	Tractor	1	40	84		775	60.2	8	480	56
	Dump Truck	2	40	76		775	52.2	8	480	51
								Total for Paving Phase:		**57.4**

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per County = 70

allowable hours over which Leq is to be averaged (example: 8 for County of San Diego, FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Grader	1	40	85		600	63.4	8	480	59
	Dozer	1	40	82		600	60.4	7	420	56
	Front End Loader	1	40	79		600	57.4	8	480	53
								Total for Site Preparation Phase:		**61.7**
Grading	Grader	1	40	85		600	63.4	7	420	59
	Tractor	1	40	84	Crawler Tractor	600	62.4	6	360	57
	Front End Loader	1	40	79		600	57.4	7	420	53
								Total for Grading Phase:		**61.7**
Trail Construction	Tractor	1	40	84	Crawler Tractor	600	62.4	7	420	58
	Backhoe	1	40	78		600	56.4	6	360	51
								Total for Trail Construction Phase:		**58.7**
Bridge Construction	Crane	1	16	81		600	59.4	8	480	51
	Backhoe	1	40	78		600	56.4	6	360	51
	Welder / Torch	3	40	73		600	51.4	8	480	52
								Total for Bridge Construction Phase:		**56.4**
Paving	Tractor	1	40	84		600	62.4	8	480	58
	Dump Truck	2	40	76		600	54.4	8	480	53
								Total for Paving Phase:		**59.6**

To User: bordered cells are inputs, unbordered cells have formulae

noise level limit for construction phase, per County = 75

allowable hours over which Leq is to be averaged (example: 8 for County of San Diego, FTA guidance) = 8

Construction Phase	Equipment	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Site Preparation	Grader	1	40	85		655	62.7	8	480	59
	Dozer	1	40	82		655	59.7	7	420	55
	Front End Loader	1	40	79		655	56.7	8	480	53
								Total for Site Preparation Phase:		**61.0**
Grading	Grader	1	40	85		655	62.7	7	420	58
	Tractor	1	40	84	Crawler Tractor	655	61.7	6	360	56
	Front End Loader	1	40	79		655	56.7	7	420	52
								Total for Grading Phase:		**61.0**
Trail Construction	Tractor	1	40	84	Crawler Tractor	655	61.7	7	420	57
	Backhoe	1	40	78		655	55.7	6	360	50
								Total for Trail Construction Phase:		**57.9**
Bridge Construction	Crane	1	16	81		655	58.7	8	480	51
	Backhoe	1	40	78		655	55.7	6	360	50
	Welder / Torch	3	40	73		655	50.7	8	480	51
								Total for Bridge Construction Phase:		**55.6**
Paving	Tractor	1	40	84		655	61.7	8	480	58
	Dump Truck	2	40	76		655	53.7	8	480	53
								Total for Paving Phase:		**58.9**

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Lesser of or available Lmax	Spec. 721 Lmax	Measured L_{max} @50ft (dBA, slow)
All Other Equipment > 5 HP	No	50	85	85	-- N/A --
Auger Drill Rig	No	20	84	85	84
Backhoe	No	40	78	80	78
Bar Bender	No	20	80	80	-- N/A --
Blasting	Yes	-- N/A --	94	94	-- N/A --
Boring Jack Power Unit	No	50	80	80	83
Chain Saw	No	20	84	85	84
Clam Shovel (dropping)	Yes	20	87	93	87
Compactor (ground)	No	20	80	80	83
Compressor (air)	No	40	78	80	78
Concrete Batch Plant	No	15	83	83	-- N/A --
Concrete Mixer Truck	No	40	79	85	79
Concrete Pump Truck	No	20	81	82	81
Concrete Saw	No	20	90	90	90
Crane	No	16	81	85	81
Dozer	No	40	82	85	82
Drill Rig Truck	No	20	79	84	79
Drum Mixer	No	50	80	80	80
Dump Truck	No	40	76	84	76
Excavator	No	40	81	85	81
Flat Bed Truck	No	40	74	84	74
Front End Loader	No	40	79	80	79
Generator	No	50	72	72	81
Generator (<25KVA, VMS signs)	No	50	70	70	73
Gradall	No	40	83	85	83
Grader	No	40	85	85	-- N/A --
Grapple (on backhoe)	No	40	85	85	87
Horizontal Boring Hydr. Jack	No	25	80	80	82
Hydra Break Ram	Yes	10	90	90	-- N/A --
Impact Pile Driver	Yes	20	95	95	101
Jackhammer	Yes	20	85	85	89
Man Lift	No	20	75	85	75
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	90
Pavement Scarafier	No	20	85	85	90
Paver	No	50	77	85	77
Pickup Truck	No	40	55	55	75
Pneumatic Tools	No	50	85	85	85
Pumps	No	50	77	77	81
Refrigerator Unit	No	100	73	82	73
Rivit Buster/chipping gun	Yes	20	79	85	79
Rock Drill	No	20	81	85	81
Roller	No	20	80	85	80
Sand Blasting (Single Nozzle)	No	20	85	85	96
Scraper	No	40	84	85	84
Shears (on backhoe)	No	40	85	85	96
Slurry Plant	No	100	78	78	78
Slurry Trenching Machine	No	50	80	82	80
Soil Mix Drill Rig	No	50	80	80	-- N/A --
Tractor	No	40	84	84	-- N/A --
Vacuum Excavator (Vac-truck)	No	40	85	85	85
Vacuum Street Sweeper	No	10	80	80	82
Ventilation Fan	No	100	79	85	79
Vibrating Hopper	No	50	85	85	87
Vibratory Concrete Mixer	No	20	80	80	80
Vibratory Pile Driver	No	20	95	95	101
Warning Horn	No	5	83	85	83
Welder / Torch	No	40	73	73	74

Appendix I

Airflow Analysis

Airflow analysis for the proposed regrading of the Rincon bluffs

Paolo Luzzatto-Fegiz, PhD

January 22, 2021

Summary

This report provides an estimate of the change in vertical air velocity over the Rincon bluffs, as a consequence of the regrading associated with the proposed Rincon trail project. The analysis uses methodologies informed by a review of published scientific studies, civil engineering codes, as well well as practices from the paragliding and soaring communities. The analysis focuses on the specific case where wind is approaching perpendicular to the bluff, which is the case of greatest practical relevance.

As a consequence of the proposed regrading, the vertical wind velocity above the front of the bluff is expected to decrease by an amount between 10% and 30%. The addition of horizontal sections (that is, benches) in the bluff profile is likely to introduce some additional turbulence, which however is expected to remain close to the surface of the bluff, without significantly affecting altitudes greater than approximately 75ft above the bluff. A regrading involving one fewer bench near the bluff top is estimated to provide a reduction in vertical wind velocity between 10% and 20%.

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1 Relevant prior work on topographic amplification and ridge lift

Although numerous studies have examined the effect of topography on local wind velocity, the focus in the literature has been predominantly on developing predictions for wind loads on buildings. Studies have therefore typically focused on horizontal wind speeds and on gust velocities near the surface. By contrast, the vertical wind velocities induced by topography have received little attention. A review of relevant studies follows below.

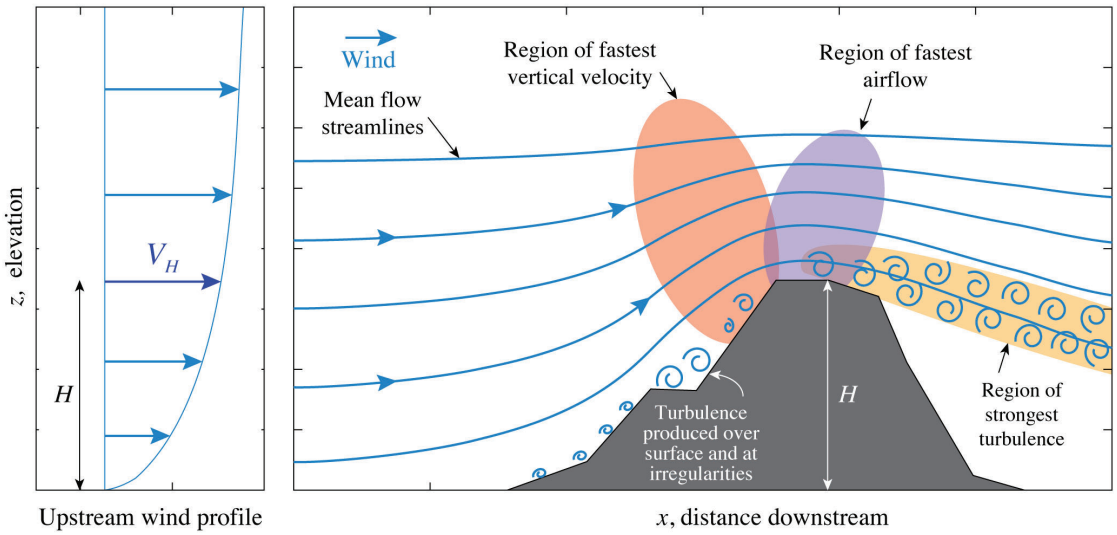


Figure 1: Sketch of the key aerodynamic features of flow over topography, based on academic literature (e.g. Jackson and Hunt, 1975), engineering codes (e.g. American Society of Civil Engineers, 2017) as well as soaring literature (e.g. Crawley and Schmanske, 1994; Pagen, 1992, 2001). The left-hand panel shows the definition of the reference velocity V_H, which is the velocity of the undisturbed flow at the elevation of the top of the topography.

1.1 Wind amplification over topography

The study of wind acceleration over topography received its formal foundation in the theoretical modeling work of Jackson and Hunt (1975); this and subsequent efforts are summarized in the review of Belcher and Hunt (1998). Although their quantitative predictions are limited to gentle hills (and are therefore inapplicable here), their qualitative analysis of the aerodynamics of complex terrain remains relevant even for steep topography, and is illustrated in figure 1. The airflow accelerates over the terrain, as the flow is essentially forced to move through a smaller area; this is associated with a contraction of the streamlines in figure 1 (here, streamlines are used to illustrate the time-averaged path of the airflow). The region of fastest airflow occurs at the top of the topography, where the distance between the streamlines is smallest; this region is shown by the purple shaded region in the figure. The region of fastest vertical velocity (which is of relevance to soaring activities) occurs at the front of the topography, and is highlighted by the orange region in the figure.

Over the front of the topography, the interaction between airflow and surface roughness (such as vegetation, structures, or uneven terrain) and with more significant irregularities (such as benches) produces turbulence. This turbulence is transported by the mean airflow, and therefore moves essentially along the streamlines. As a result, at the front of the topography, the turbulence remains confined to a relatively thin layer near the surface. At the top of the topography, this layer grows in thickness, forming a region of stronger turbulence that can separate from the topography and is transported downstream; this is represented by the yellow region in figure 1. This qualitative overview of the flow is consistent with experiments, field measurements, recent engineering standards, as well as with the literature on soaring, as described below.

Bowen and Lindley (1977) performed wind tunnel experiments that systematically investigated the effect of steep topography on airflow. They measured horizontal velocities around topographies with front slopes varying from 4:1 to a vertical cliff; some of their results are shown later in figure 3. Bowen and Lindley (1977) found that, for small slope angles, an increase in slope yields a

corresponding increase in the maximum velocity above the topography. However, once the slope angle is increased past approximately 2:1, the maximum flow velocity no longer increases significantly, and instead remains around 1.8 times the wind velocity upstream of the topography. Bowen (1980) later showed that, for the front and top regions of the topography, field measurements at full scale agreed closely with the wind tunnel experiments of Bowen and Lindley (1977). For the region behind the topography, differences between wind tunnel and field measurements were found for front slopes steeper than 1:1. Bowen and Lindley (1977) and Bowen (1980) found that surface-generated turbulence remained confined to the near-surface region over the front of the topography, as it was essentially transported by the mean flow. Several other laboratory and field measurements have also supported these findings (including Hauf and Neumann-Hauf, 1982; Lange et al., 2016; Liu et al., 2016).

Theoretical predictions of the airflow over steep topography are challenging. Bowen (1983) summarized available theories for the "outer" flow (which is unaffected by the turbulence), noting that theories perform poorly once the slope exceeds 2:1. This was also confirmed by Jensen (1983) and Glanville and Kwok (1997), who compared theory to field data and reduced-scale experiments. In addition, Bowen (1983) and Jensen (1983) discussed the difficult question of choosing approximate representations for complex topographies; these works inform our choices of approximate bluff profiles later in section 2. Overall, this review of past efforts suggests that, for topographies steeper than 2:1, it is best to rely on empirical or semi-empirical modeling approaches, rather than on theoretical analyses attempting to model the overall flow.

The results from wind tunnel experiments and field measurements reviewed above have been effectively implemented in engineering codes, such as ASCE 7-16, which provides semi-empirical relations for the maximum horizontal wind and gust velocities (American Society of Civil Engineers, 2017, p. 266; other engineering codes for flow over steep topography have been reviewed by Safaei Pirooz and Flay, 2018).

1.2 Vertical wind velocity over topography

To the best of our knowledge, current engineering codes do not provide relations for predicting vertical wind velocity at the front of steep topography; vertical wind velocities are rarely reported in experiments or field measurements.

In the soaring literature, a common approach for estimating vertical velocity over topography is to assume that the airflow is locally parallel to the surface (Crawley and Schmanske, 1994; Pagen, 1992). The vertical wind velocity is therefore obtained by multiplying a reference wind velocity V_{wind} by the sine of the slope angle α,

$$V_z = V_{\text{wind}} \sin \alpha. \tag{1}$$

This approach, involving equation 1, is used for example in the book by Pagen (1992) to prepare their figure 139 on p. 158, although this does not appear to be made explicit in their presentation.

If the reference wind velocity V_{wind} is based on the flow upstream of the topography, equation 1 underestimates the actual vertical velocity V_z, as it neglects flow amplification, which is significant near the top of the topography. To address this issue, Crawley and Schmanske (1994) proposed a semi-empirical expression accounting for amplification, based on wind tunnel experiments. They tuned their expression to estimate vertical velocity at an altitude $H/8$ above the topography (which has maximum elevation H; in their specific experiments, this corresponded to a soaring altitude of 150 ft above the surface). Their expression is

$$V_z = V_{\text{wind}} \frac{cH}{cH - z_{\text{topo}}(x)} \sin \alpha(x), \tag{2}$$

where H is the maximum elevation of the topography (see figure 1), $z_{\text{topo}}(x)$ is the local elevation of the topography at a horizontal coordinate x, $\alpha(x)$ is the local slope angle, and c is an empirical constant, which they estimate between 3.5 and 4.0. The predictions of equation 2 are compared to our analysis in section 2 below. A significant limitation of equation 2 is that it is intended to only provide predictions at a fixed altitude of $H/8$ above the slope, and cannot be used at other altitudes.

1.3 Effect of introducing horizontal sections (benches) in the topographic profile

Introducing a horizontal segment (a "bench") on the topography has two main effects. First, if the highest elevation of the topography is shifted downstream, the average slope angle will be effectively reduced. This will reduce the vertical velocity. Second, the bench may introduce turbulence, which is associated with flow separation and unsteadiness that occurs at the front of the bench, where the topography rapidly curves away from the incoming flow (figure 1). For small benches, a local region of recirculating flow may form, with the outer airflow effectively 'skipping' over the bench, and continuing to follow the topography at a higher elevation.

The only formal study of the effect of a significant bench appears to be the wind tunnel experiment of Zheng et al. (2018), who examined the effect of a large bench (of horizontal extent H/2) on a 1:1 slope. They measured flow velocities and turbulence at an altitude of $0.2H$ from the surface and above. Zheng et al. (2018) found that the bench had a negligible effect on flow amplification near the top of the topography. The turbulence generated over the bench followed the surface of the topography; for an altitude of more than $0.5H$ above the surface, there was no measurable increase in turbulence intensity. At $0.2H$ above the surface, a small increase in turbulence intensity was found, corresponding to an increase of approximately 4% in gust velocity. An increase in turbulence intensity was found close to the top surface of the topography (consistently with the sketch shown earlier in figure 1).

Although Zheng et al. (2018) appear to provide the only targeted investigation of the effect of benches, several studies have examined complex, realistic topographies featuring irregularities (e.g. Cuerva-Tejero et al., 2018; Glanville and Kwok, 1997); a common finding is that the turbulence generated over the surface does not significantly affect the outer flow on the front of the topography.

1.4 Connection to literature on soaring

As already noted above, the findings from the scientific and engineering literature are consistent with the qualitative discussions found in the soaring literature. Two key references are Pagen's books "The Art of Paragliding" and "Understanding the Sky" (Pagen, 1992, 2001). The regions highlighted in figure 1 match those discussed for example in figures 13-3, 13-6, 13-11, 13-12 and 13-13 of Pagen (2001). The region of strongest vertical velocity in figure 1 corresponds to the "soarable envelope", whereas the region of maximum velocity corresponds to Pagen's "Venturi area". In addition, figures 105, 106 and 115 of Pagen (1992) indicate that airflow above the slope can be largely unaffected by turbulence produced on the slope surface, consistently with the measurements summarized in the previous section.

2 Analysis

As noted earlier, theoretical models that attempt to describe the complete flow can be inaccurate for steep topographies. Civil engineering codes provide semi-empirical formulas for horizontal wind velocity, but do not appear to consider vertical wind velocities. For this reason, the analysis

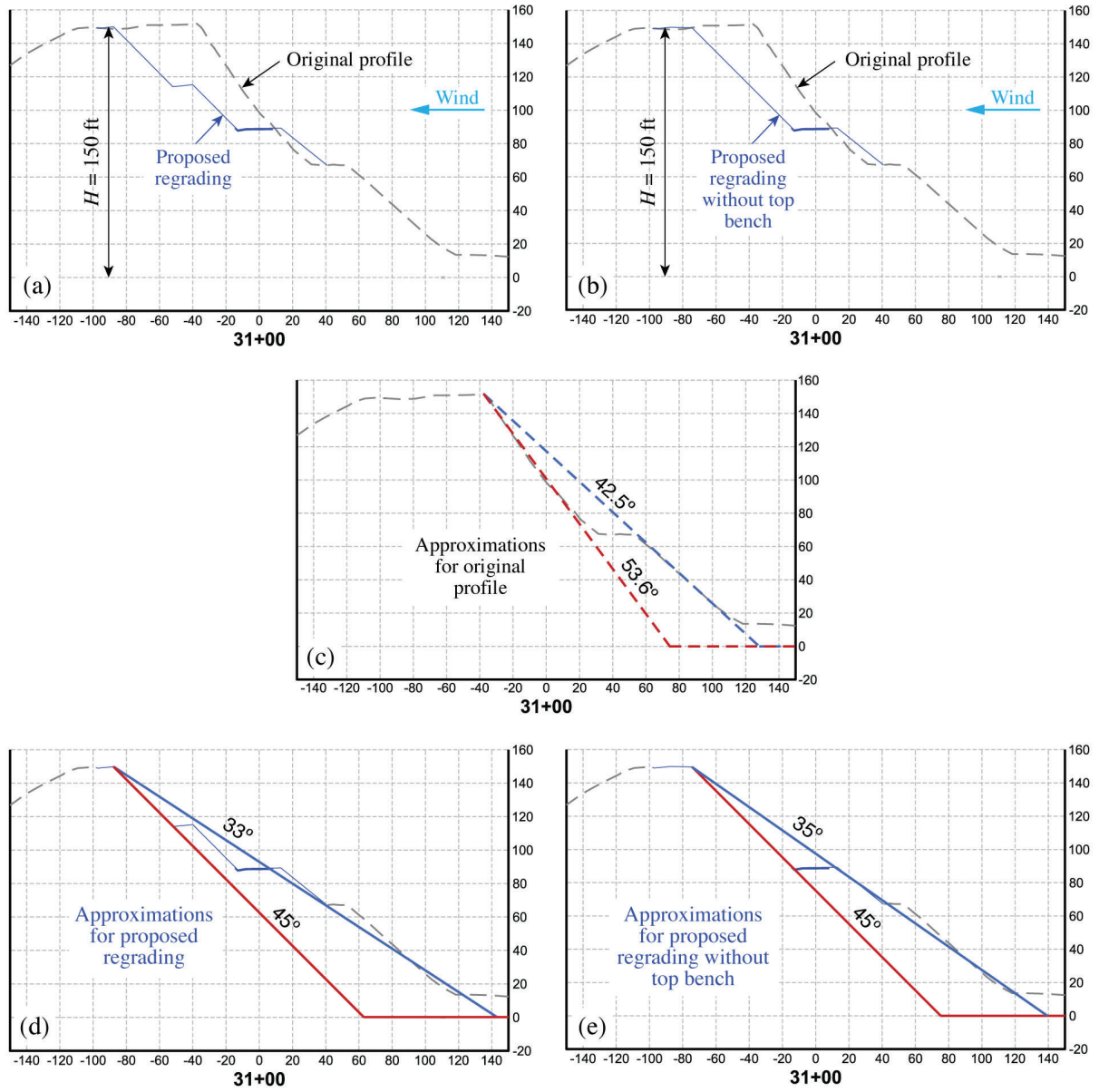


Figure 2: (a): comparison of original bluff profile and proposed regrading. (b): proposed regrading without top bench. (c) Approximations to the original profile, based on mean slope (blue) and near-top slope (red). (d): approximations for proposed regrading, and (e) approximations for proposed regrading without top bench.

presented here employs several semi-empirical approaches, relying also on the well-established data set of Bowen and Lindley (1977), who measured flow over topographies with different slope angles.

2.1 Approximate representations of the topography

The analysis is based on a representative two-dimensional section of the Rincon bluffs, shown in figure 2(a). To approximate the topography, two approaches are used and compared. The first approximation defines a mean slope, which joins the foot of the bluffs (where the topography rapidly departs from horizontal) to the top of the topography; this approach is consistent with

approximations used in the academic literature (e.g. Jensen, 1983), and is expected to approximate the airflow at an altitude larger than the lengthscale of the benches. This mean slope is shown by the blue lines in figure 2(c,d). The second approximation uses a slope based on the bluff shape near the top, where the maximum air velocity is expected. This approximation may be more representative of local flow conditions experienced very close to the ridge, and is shown by the red lines in figure 2(c,d). Quantities referring to the original bluffs and to the proposed regrading are represented using dashed and continuous lines, respectively. The slope angles associated with each approximation are shown in the figure.

An alternative proposed regrading was also considered, which essentially removed the bench closest to the top of the topography. This is sketched in figure 2(b,e), and only implies a change in the mean slope.

The analysis does not consider other effects, such as changes in vegetation patterns, and addition or removal of other structures. As noted earlier, the incoming wind direction is assumed perpendicular to the bluffs. A neutrally stratified atmosphere is assumed.

2.2 Wind amplification

To estimate wind amplification, the data of Bowen and Lindley (1977) for the wind amplification factor A_z are digitized. The quantity A_z is defined as the ratio between the wind speed measured at a point over the topography and the wind speed found upstream of the topography, at the same altitude (for example, a point 30 ft above the bluff is compared to an upstream point that is 30 ft above the ocean surface). Figure 3 shows maps of A_z for topographies ranging from a 2:1 slope to a vertical cliff. Lengths are normalized by the maximum elevation H of the topography. These maps of wind amplification are used to calculate vertical wind velocity in the next section.

2.3 Vertical wind velocity

To obtain a first estimate of the change in vertical velocity due to the regrading, we note that the wind amplification at a given elevation is not expected to change significantly after the regrading, since the mean slope remains significantly steeper than 2:1. Noting that the vertical velocity near the surface will be equal to the wind magnitude times $\sin(\alpha)$, the ratio of the vertical velocities before and after the regrading may be approximated as

$$\frac{V_w|_{\text{regrading}}}{V_w|_{\text{original}}} = \frac{\sin(\alpha_{\text{regrading}})}{\sin(\alpha_{\text{original}})}. \tag{3}$$

This expression can also be obtained from equation 2 (due to Crawley and Schmanske, 1994), as long as one compares slope locations with the same elevation. Using the slopes in figure 2, equation 3 implies a reduction in V_z between 12% and 20% for the proposed regrading, and a reduction between 12% and 15% for the regrading without the top bench. This simple prediction is expected to be reasonable at an altitude that is small compared to H (say, around $0.1\,H$, corresponding to approximately 15 ft).

To obtain an estimate of the change in V_z at greater altitudes, we return to the data set of Bowen and Lindley (1977). As noted in section 1, Bowen and Lindley (1977) did not measure vertical velocities; for this reason, we deduce the vertical velocity V_z from the horizontal velocity V_x over the topography, which is calculated from A_z. Since the time-averaged flow is exclusively in the $x-z$ plane, mass conservation implies $\frac{\partial V_x}{\partial x} + \frac{\partial V_z}{\partial z} = 0$ (e.g. Batchelor, 2000). We calculate $\frac{\partial V_x}{\partial x}$ and integrate the equation for mass conservation to find $V_z(z) = V_z(z_1) - \int_{z_1}^{z} \frac{\partial V_x}{\partial x}\, dz$, where z_1 is an

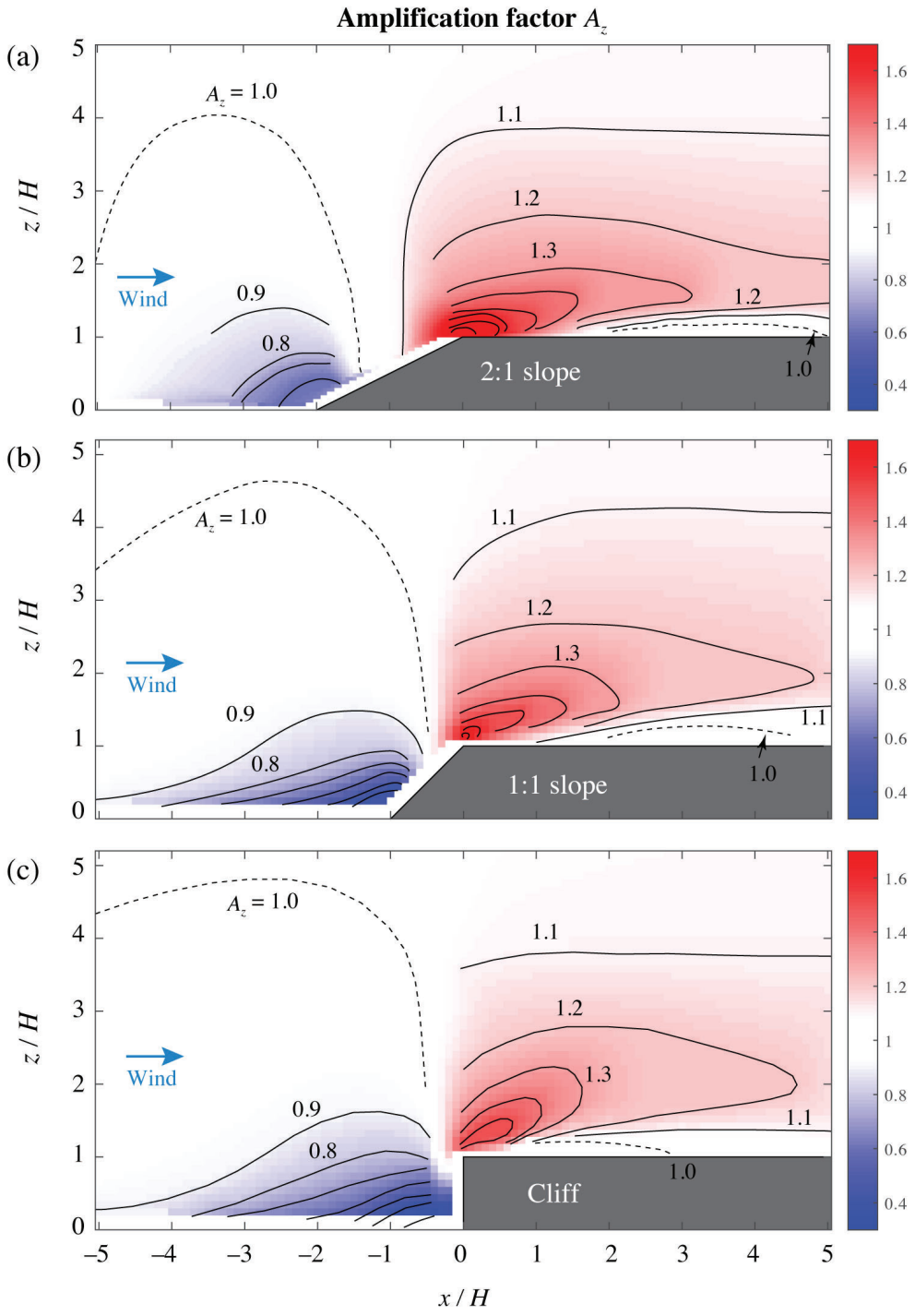


Figure 3: Acceleration of flow over slopes of varying steepness, for a given altitude, expressed by the amplification factor A_z, such that $A_z > 1$ represents accelerated flow relative to the undisturbed conditions upstream. Contours are shown at intervals of 0.1. The $A_z = 1.0$ contours are shown by dotted lines. Each panel shows: (a) 2:1 slope, (b) 1:1 slope, and (c) a vertical bluff. Data adapted from the wind tunnel experiments of Bowen and Lindley (1977).

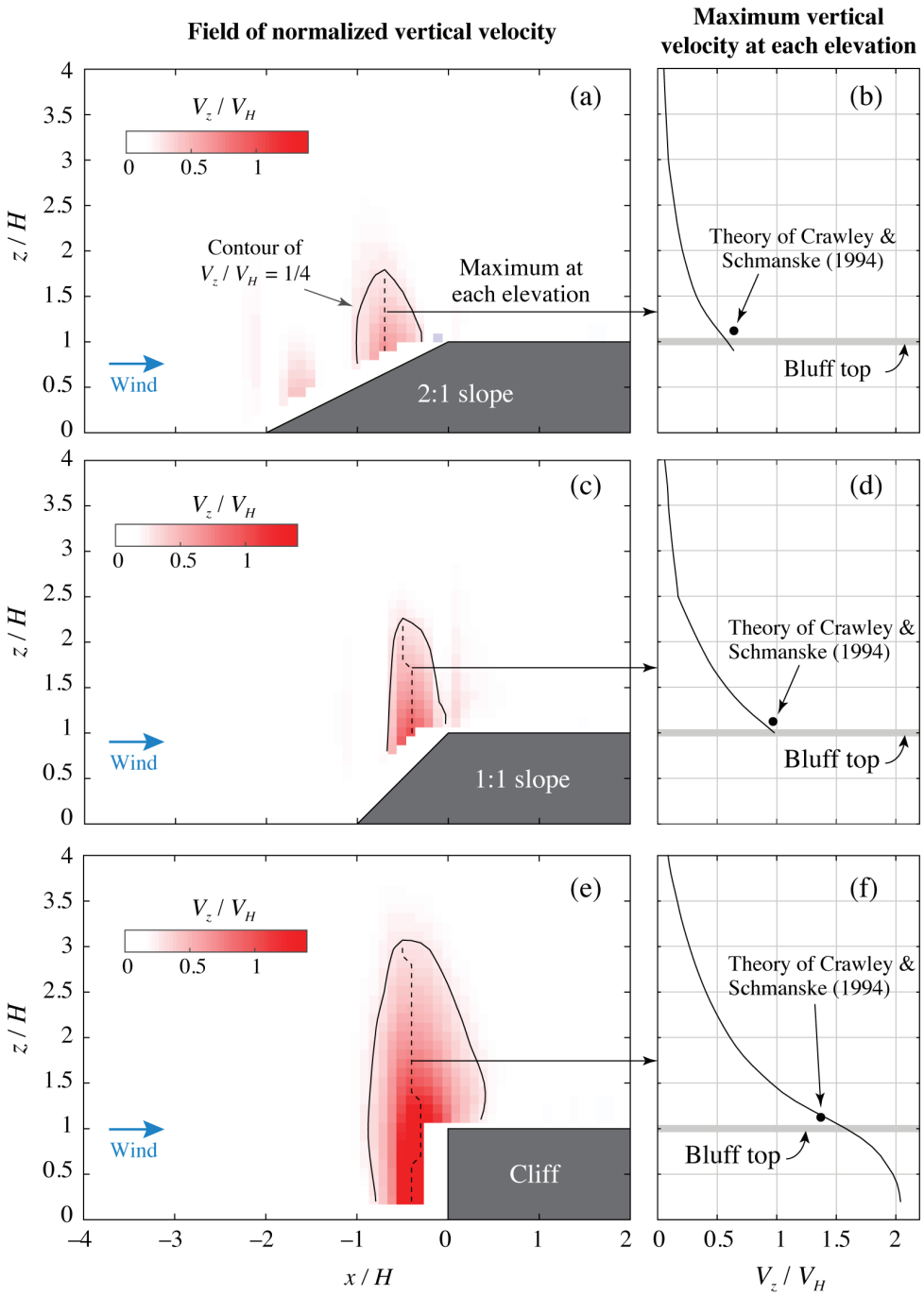


Figure 4: Vertical wind velocities over slopes of varying steepness, deduced from the wind tunnel experiments of Bowen and Lindley (1977). The theory of Crawley and Schmanske (1994) (corresponding to equation 2, valid only for $z/H = 1.125$) is shown for comparison.

elevation at which $V_z(z_1)$ is known; we take $z_1 = 5.5H$, where the vertical flow is small compared to the vertical velocities induced near the topography, such that $V_z(z_1) \simeq 0$.

The calculated vertical velocities V_z for each of the experiments of Bowen and Lindley (1977) are shown in figure 4. The left-hand panels show fields of vertical velocity over each topography, normalized by V_H, which is the wind velocity of the upstream flow at an elevation $z = H$ (se

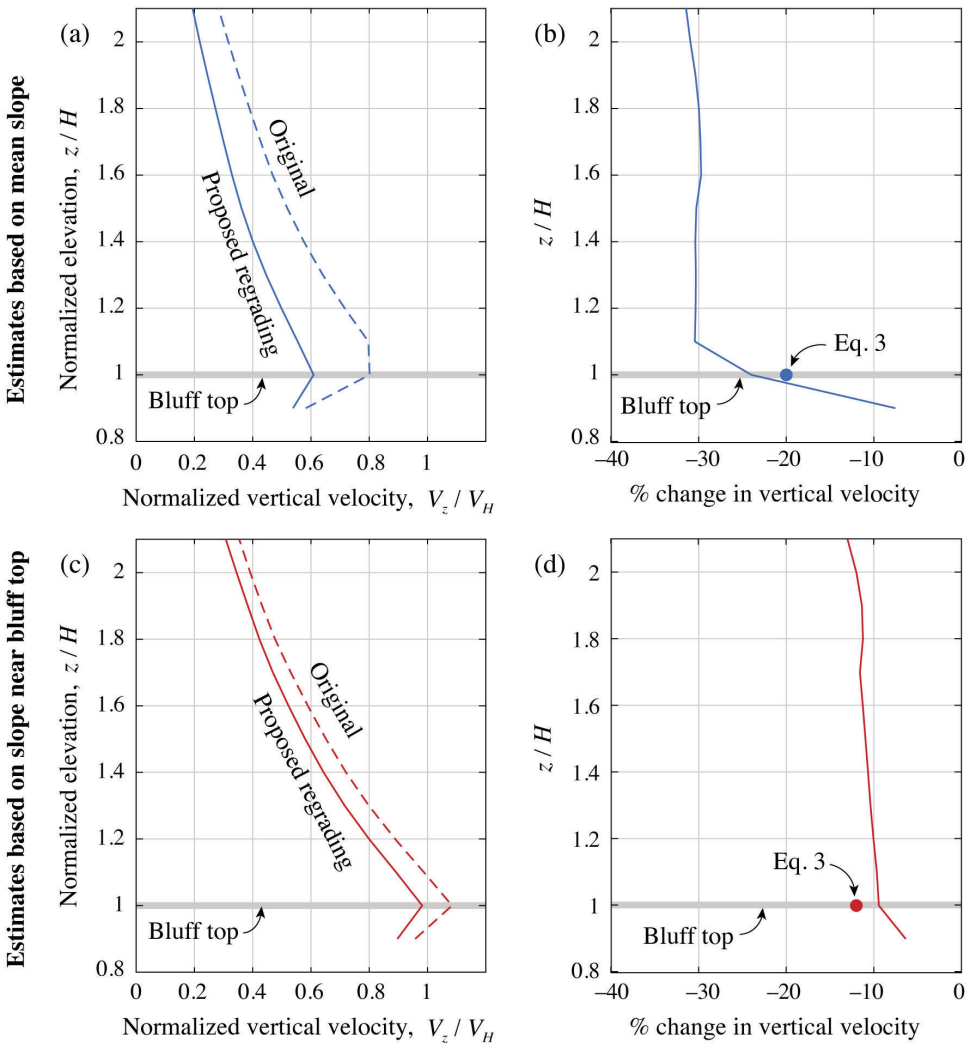


Figure 5: Change in vertical velocity associated with the proposed regrading. (a) and (c) show estimated vertical velocities, whereas (b) and (d) show percentage changes. The top two panels (a) and (b) use the mean slope, whereas the bottom two panels (c) and (d) use the maximum slope near the bluff top. The circles in (b) and (d) show the prediction of the simple approximation in equation 3, which is valid close to the slope surface.

figure 1). The contour corresponding to the arbitrary value $V_z = V_H/4$ is drawn to convey the extent of the region where uplift is experienced (uplift is experienced also outside of this region, although with lower intensity). Within this contour, the line showing the x-location of highest vertical velocity at each z is shown by by a dashed line. The vertical velocity along this line is plotted in the right-hand panels. As a check on our calculation, we compared our calculated V_z for the 2:1 slope with the wind tunnel data of Liu et al. (2016), who measured V_z at selected locations over a similar topography, finding consistent predictions. We also compare our results with the theory of Crawley and Schmanske (1994), which predicts V_z only at an altitude of $H/8$ above the slope, finding good agreement for this altitude, as shown in the right-hand panels of figure 4.

To predict V_z for the slopes relevant to the Rincon bluffs, we interpolate the horizontal velocities of Bowen and Lindley (1977) with respect to slope angle, thereby obtaining approximate horizontal velocities for the slopes shown earlier in figure 2. We then use the same approach described above to

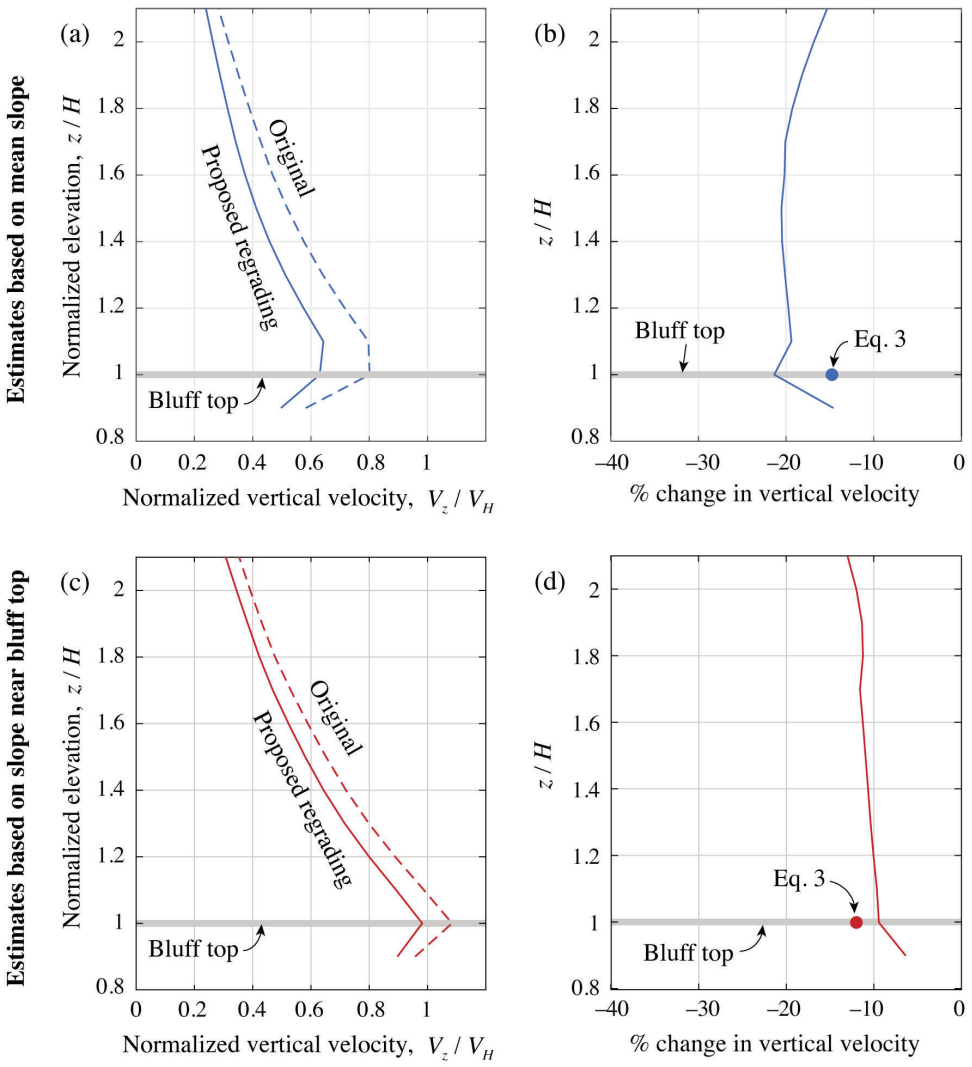


Figure 6: Change in vertical velocity associated with the proposed regrading, for the case involving one fewer bench near the bluff top. (a) and (c) show estimated vertical velocities, whereas (b) and (d) show percentage changes. The top two panels (a) and (b) use the mean slope, whereas the bottom two panels (c) and (d) use the maximum slope near the bluff top. The circles in (b) and (d) show the prediction of the simple approximation in equation 3, which is valid close to the slope surface.

deduce vertical velocities V_z. The maximum vertical velocities at each z are shown in the left-hand panels of figure 5, for both the original bluff and the proposed regrading. The right-hand panels show the percentage change at each z. The analysis based on the mean slope predicts that the vertical velocity will be reduced by approximately 30%, whereas the analysis based on the near-top slope predicts a reduction of around 10%. Panels (b) and (d) also show the simple prediction from equation 3; since this result is valid only close to the slope surface, we display it using circles placed at the bluff top.

For the regrading that involves one fewer bench, the mean slope increases relative to the initially proposed regrading, which brings the predicted reduction in V_z to around 20%, as shown in panel (d) of figure 6. For completeness, predictions for the near-top slope analysis are also reported, although they are the same as in figure 5.

2.4 Effect of introducing horizontal sections (benches) in the topographic profile

As discussed earlier in section 1.3, the introduction of a bench through regrading implies a reduction in the mean slope, and therefore a reduction in vertical velocity; this effect is already accounted for in the mean-slope analysis in section 2.3. To estimate the additional turbulence introduced by the bench, we refer to the wind-tunnel study of Zheng et al. (2018); accoordingly, one may expect that introducing a bench would result in increase in turbulence of the order of 5% at an altitude of around $0.2\,H$ above the topography, corresponding to an altitude of approximately 30 ft above the Rincon bluffs. Based on the data of Zheng et al. (2018), this additional turbulence is expected to become negligible by an altitude of $0.5\,H$ above the topography, corresponding to approximately 75 ft above the Rincon bluffs. Turbulence on the top surface of the bluffs (in the high-turbulence region highlighted in figure 1) is likely to be increased more significantly.

3 Conclusions

Based on a review of the scientific, engineering and soaring literature, the change in vertical airflow associated with a proposed regrading of the Rincon bluffs has been estimated. The approach used simplified slope profiles, together with a re-analysis of published experimental data for slopes of various angles. It is estimated that the proposed regrading would reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to soaring activities, the reduction is expected to be closer to 30%. An alternative proposed regrading, involving one fewer bench near the bluff top, would reduce the airflow velocity by 10% to 20%. Based on available experimental results, the introduction of a bench is expected to provide a small increase in turbulence (of the order of 5%) at an altitude of 30 ft above the front of the bluffs, becoming negligible by an altitude of approximately 75 ft.

Disclaimer

The aerodynamics of wind over complex topography are the subject of ongoing research, and no standard engineering approach exists for the calculations reported here. While every effort has been made to ensure accuracy of the predictions, within the constraints associated with the assumptions and methodologies used, no warranties are made or implied with regards to the predictions obtained from this study.

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List of Figures

1 Sketch of the key aerodynamic features of flow over topography, based on academic literature (e.g. Jackson and Hunt, 1975), engineering codes (e.g. American Society of Civil Engineers, 2017) as well as soaring literature (e.g. Crawley and Schmanske, 1994; Pagen, 1992, 2001). The left-hand panel shows the definition of the reference velocity V_H, which is the velocity of the undisturbed flow at the elevation of the top of the topography. 2

2 (a): comparison of original bluff profile and proposed regrading. (b): proposed regrading without top bench. (c) Approximations to the original profile, based on mean slope (blue) and near-top slope (red). (d): approximations for proposed regrading, and (e) approximations for proposed regrading without top bench. 5

3 Acceleration of flow over slopes of varying steepness, for a given altitude, expressed by the amplification factor A_z, such that $A_z > 1$ represents accelerated flow relative to the undisturbed conditions upstream. Contours are shown at intervals of 0.1. The $A_z = 1.0$ contours are shown by dotted lines. Each panel shows: (a) 2:1 slope, (b) 1:1 slope, and (c) a vertical bluff. Data adapted from the wind tunnel experiments of Bowen and Lindley (1977). 7

4 Vertical wind velocities over slopes of varying steepness, deduced from the wind tunnel experiments of Bowen and Lindley (1977). The theory of Crawley and Schmanske (1994) (corresponding to equation 2, valid only for $z/H = 1.125$) is shown for comparison. 8

5 Change in vertical velocity associated with the proposed regrading. (a) and (c) show estimated vertical velocities, whereas (b) and (d) show percentage changes. The top two panels (a) and (b) use the mean slope, whereas the bottom two panels (c) and (d) use the maximum slope near the bluff top. The circles in (b) and (d) show the prediction of the simple approximation in equation 3, which is valid close to the slope surface. 9

6 Change in vertical velocity associated with the proposed regrading, for the case involving one fewer bench near the bluff top. (a) and (c) show estimated vertical velocities, whereas (b) and (d) show percentage changes. The top two panels (a) and (b) use the mean slope, whereas the bottom two panels (c) and (d) use the maximum slope near the bluff top. The circles in (b) and (d) show the prediction of the simple approximation in equation 3, which is valid close to the slope surface. 10

Appendix J

Transportation Memorandum

February 18, 2021

John Ilasin, Public Works Director/City Engineer
City of Carpinteria
Public Works Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: Evaluation of Rincon Multi-Use Trail Preliminary Design

Dear Mr. Ilasin,

I have completed my review of the Rincon Multi-Use Trail Project plans. The City asked that I review the preliminary plans with regards to potential conflicts between the trail termini and adjacent roadway or parking areas. I reviewed sheets 10, 21, and 37-39 that show layout, signage, and delineation. My comments are as follows:

1. The termination of the trailhead at the Rincon Park parking area cul-de-sac does not appear to be a conflict between bicyclists and motorists. This is a slow speed and mixed vehicle environment, and the vehicle types should mix safely. Many State and County parks along the coast have this type of interaction (i.e. Refugio State Beach).

2. I have a concern about a driver of a motor vehicle believing they can drive on the trail from the parking lot since the entrance to the trail is fairly wide. Although there is going to be a “No Motor Vehicles” sign I would recommend adding a 4’ edgeline around the cul-de-sac to help deter movement onto the trail.

3. The project should consider installing guide signs that indicates where the trail goes or what the name of the trail is for improved user experience. This is extremely helpful for out-of-town tourists.

4. There are more striping details on the detail sheet than the delineation plan such as the hatching, stop legend, and stop bar. These should be added to the delineation plans so the contractor has installation notes and it is clear what they are bidding on and installing.

5. There may end up being a parking issue with the other end of the trail at Carpinteria Ave. Because the trail comes out near the intersection with Hwy 150, there is no place for trail users to park and get directly to the trail. Consider moving the terminus of the trail so that it connects at the cul-de-sac. This would provide more parking for trail users.

Let me know if you have any questions.

Sincerely,

Thomas Mericle, PE, TE
Traffic Engineering
Municipal Services
Interwest Consulting Group, Inc.

Appendix K

County Connector Trail Proposal – Rincon Park Project Components Study

November 19, 2020

County Connector Trail Proposal – Rincon Park Project Components Study:

County of Santa Barbara, California

To Whom It May Concern,

Bengal Engineering is pleased to present this proposal to provide component feasibility associated with the County Connector Trail – Rincon Park Project.

The trail is proposed to run through/near Rincon Park, to the existing Bike Path at Bates Road and Highway 101. We understand a safe route through the County's Rincon Park is of importance. We also understand the engineering challenges involved in investigating the design.

The attached project scope was developed based on discussions during meetings held on 29 September, 1 October, and 5 November with County and SBCAG officials.

Regards,

Scott Onishuk, P.E.



Bengal Engineering

Scope of Work:

Project Administration

This item provides budget for Bengal's internal project administration along with some effort to coordinate with others.

Project Components:

Bengal will investigate project components and determine their feasibility – Components are broken up into West-End and East-End components.



Exhibit 1: various alignments to be studied

West-End Components

This is a new option, based on November 5 meeting:

Project will investigate using 2 trail connections simultaneously—for two different types of users:

1. "Yellow line" trail on ocean side of parking lot for recreational users stopping at park
2. "Orange line" trail on freeway side of parking lot: for "pass though" users

Components of Ocean Side Recreational User Segment

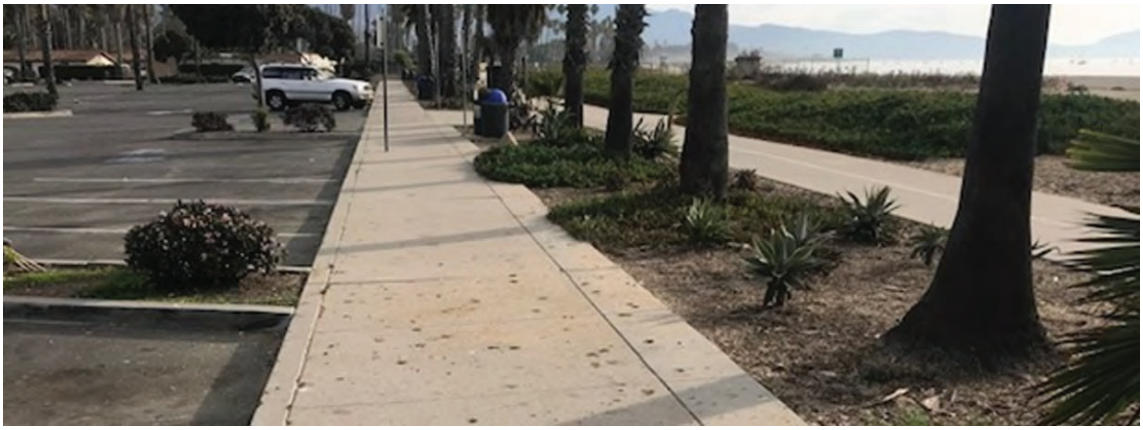


Photo 1: Example provided by Jeff Lindgren: Cabrillo Blvd. Application at Rincon Park would allow recreational users to stop in the park:
Note: sidewalk adjacent to parking lot and separate beach way trail on ocean side of planter

The trail will be 8-feet wide with two 2-foot wide shoulders for a total paved width of 12-feet; this compares to the 16-foot paved width for the rest of the trail to the west. This is a "mixed use path" not a dedicated Class 1 bike path.

On the ocean side of the parked cars, a 5-foot wide sidewalk and a planter strip will separate the mixed-use trail. Because the park is small, the planter strip will likely be narrow: 6 to 8-feet wide is envisioned.



Photo 2: Rincon County Park, looking east from west end of parking lot

Note:

- "yellow line" multi-user path, on a new alignment will replace winding sidewalk in park
- A new raised sidewalk will replace bioswale



Photo 3: Rincon County Park, looking near restroom; note sewer lift station. This area will likely be a "pinch point". Current restroom appears be a potential conflict. Parking may be affected here too.



Photo 4: looking West from Rest Room

Parking Lot Configuration

The project design will preserve parking to the extent possible.

- Preserve head-in parking stall geometry (90-degree stalls): Parking lot will remain generally unchanged to preserve parking spaces and minimize loss of Park space.

- As previously mentioned, behind the cars (on freeway side) separate vehicle drive aisle, between parking lot and trail, using S.B. harbor chain fencing concept.

- Provide new sidewalk adjacent to parking stalls.
- Provide concept to replace the open bioswale and gravel-filled pavers that exist west of the restrooms with current generation permeable pavers or permeable pavement.



Photo 5: "orange line" on freeway side of parking lot: looking east; location of possible "pass-through alignment".

On Freeway side of parking lot, a "pass through" alignment could be provided for users who will not likely stop in the park. Room for this trail will be created by regrading the cut-slope, shifting the toe-of-slope back toward the freeway. Use of a retaining wall to support the cut slope was discussed, but considering 1) the amount of grading which is already required for the project, 2) the opportunity to remove more of the old bridge piers which are buried inside the slope, and 3) the chance to provide a vegetated slope to reduce erosion, the regrading option seems a cheaper and better solution.

This trail will include two 4-foot wide travel lanes, a 2-foot wide paved shoulder on the freeway side and a 3-foot wide paved shoulder on the ocean side (adjacent to the chain-and-post) barrier) for a total paved width of 13-feet.

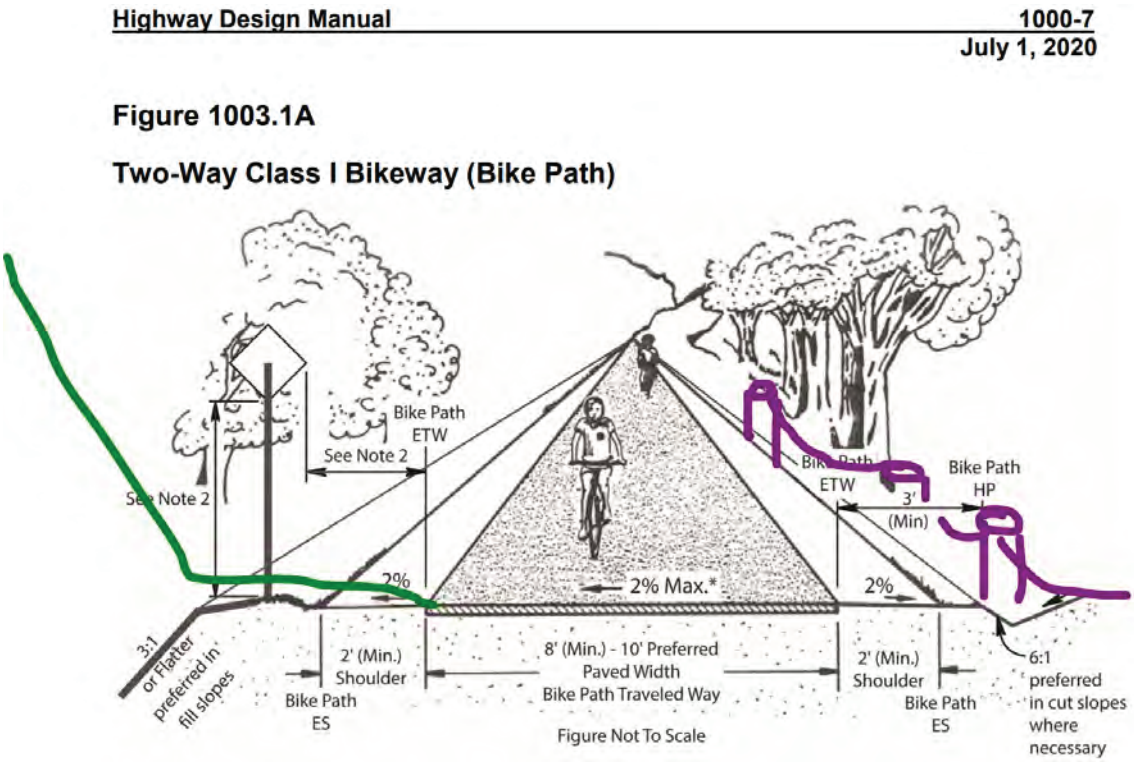


Exhibit 2: Typical Cross section from Caltrans Highway Design Manual with some items of interest for 'Orange Line' alignment.



Photo 6: Santa Barbara Harbor: Chain-and-post barrier concept for use at Rincon County Park

The chain-and-post barrier will require a width on the ocean side of 5-feet (2-feet for the barrier and 3-foot buffer on ocean / traffic side).



Exhibit 1: various alignments to be studied

East-End Components

1. “Pink line” trail, beginning east of sewer lift station, running along southbound off-ramp terminating at Bates Road.

2. “Green line” trail, beginning east of sewer lift station, running outside of the existing parking lot. Trail to terminate at Bates Road.

3. New component, based on 5 November meeting: provide a crossing across the parking lot to the ocean side “yellow line” east of the sewer lift station.



Photo 7: "Green line" alignment will pass along the mountain side of the parking lot

This view is looking easterly



Photo 8: "Green line" alignment looking westerly. Note utility pole and guy wires will be impacted. Sewer lift station is highlighted by yellow circle.



Photo 9: "Pink Line" alignment looking westerly.



Photo 10: Looking easterly from proposed end of "Pink Line" alignment

Deliverable:

1. Draft Project Component Memo - Bengal will provide a summation of the components as noted above. Memo will highlight “pros-and-cons”.
2. Draft Cost Estimates for each alignment
3. Support for a Project Study Workshop – Bengal will create exhibits necessary to present the components for discussion by the project team: Bengal will document the decisions made in the workshop for use in the next item.
4. Using the Project Component Memo and the comments from the workshop, we will create a Preferred Project Component Memo to document the team’s decisions for future use.
5. Updated Cost Estimates: The draft cost estimates provided at the project study workshop will be updated to accommodate the components included in the Preferred Project Component Memo.

Fee:

Bengal Engineering has provided a not-to-exceed budget shown on the attached spreadsheet.

Assumptions/Exclusions:

1. This project will develop planning-level concept plans for future design and consideration provided by the limited budget shown in the Fee Estimate.
2. Because of budget restrictions, we will not be able to include much detail of the areas which will require more engineering effort; specifically the termini of the alignments and the intersection of Bates Road.
3. The concept designs for the alignments will focus on grading, rather than using retaining walls. No walls will be investigated.
4. No subsurface exploration or laboratory testing will be performed.
5. Budget for survey is rough, fill-in topo for planning purposes. This does not include details such as the trees.
6. We assume stakeholders will participate proactively in the project.
7. We assume that the project will proceed uninterrupted.

Appendix L

Tribal Cultural Resources – CONFIDENTIAL

FINAL

ENVIRONMENTAL IMPACT REPORT

CARPINTERIA RINCON TRAIL PROJECT
STATE CLEARINGHOUSE NUMBER 2020100582

Prepared for:

City of Carpinteria Community Development Department
5775 Carpinteria Avenue
Carpinteria, California 93013
Contact: Nick Bobroff, Principal Planner

Prepared by:

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DECEMBER 2021

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
µg/m³	micrograms per cubic meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily trip
AFY	acre-feet per year
amsl	above mean sea level
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	Architectural Review Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measure
BAR	Board of Architectural Review
Basin Plan	Water Quality Control Plan for the Central Coast Basin
BMPs	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEEMOD	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalOES	Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAWet	California Waste Extraction Test
CBC	California Building Code
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CDB	coastal development permit
CDD/P&D	Community Development Department/Planning & Development
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	California Fire Code
CGS	California Geological Survey
CH4	methane
CHRIS	California Historical Resources Information System
CIDH	cast-in-drilled hole
City	City of Carpenteria

Acronym or Abbreviation	Definition
CGP	Construction General Permit
CLUP	Coastal Land Use Plan
CNCL	California Natural Community List
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Santa Barbara
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CRTP	Cultural Resource Treatment Plan
CSFPD	Carpinteria-Summerland Fire Protection District
CUP	conditional use permit
CUPAs	Certified Unified Program Agencies
CVWD	Carpenteria Valley Water District
CY	cubic yards
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DVP	development plan permit
ECAP	Energy and Climate Action Plan
EERP	Enforcement and Emergency Response Program
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESH	environmentally sensitive habitat
ESHA	environmentally sensitive habitat area
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FE	federally endangered
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FP	fully protected

Acronym or Abbreviation	Definition
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
FT	federally threatened
FTA	Federal Transit Administration
GHG	greenhouse gas
GWP	global warming potential
HCFCs	hydrochlorofluorocarbons
HERO	Human and Ecological Risk Office
HFC	hydrofluorocarbons
HHRA	Human Health Risk Assessment
Hz	Hertz
IEPR	Integrated Energy Policy Report
IPCC	Intergovernmental Panel on Climate Change
kBTU	thousand British thermal units
LCP	local coastal plan
L_{dn}	average A-weighted noise level
L_{eq}	equivalent noise level
L_{max}	maximum A-weighted sound level
L_{min}	minimum A-weighted sound level
LOS	Level of Service
LUDC	Land Use Development Code
LUST	leaking underground storage tank
MCV2	Manual of California Vegetation, 2nd edition
mg/kg	milligrams per kilogram
MLD	most likely descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric ton
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
O_3	ozone
OPR	Governor's Office of Planning and Research
PCRs	Post Construction Requirements
PFCs	perfluorocarbons
PGA	peak ground acceleration
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns

Acronym or Abbreviation	Definition
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Preserve	Carpinteria Bluffs Nature Preserve
PSR	Project Study Report
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROC	reactive organic compound
RPS	Renewables Portfolio Standard
RSLs	Residential Screening Levels
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAB	State Allocation Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SBCCO	Santa Barbara County Code of Ordinance
SCCAB	South Central Coast Air Basin
SBCOEM	Santa Barbara County Office of Emergency Management
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDL	state delisted
SE	state endangered
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SLPC	short-lived climate pollutants
SLRVA	Sea Level Rise Vulnerability Assessment
SLs	screening levels
SNA	state not applicable
SNR	state no rank
SO_2	sulfur dioxide
SO_x	sulfur oxides
SPCC	Spill Prevention, Control and Countermeasure
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
ST	state threatened
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCM	Transportation Control Measures
TCR	Tribal Cultural Resource
TDM	transportation demand management

Acronym or Abbreviation	Definition
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
VdB	vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Workers Environmental Awareness Program
WL	Watch List
WQO	water quality objectives
ZEV	zero emissions vehicle

1 Preface

1.1 Purpose

This Final Environmental Impact Report (EIR) has been prepared by the City of Carpinteria (City) for the Carpinteria Rincon Trail Project (project or proposed project). This Final EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (Cal. Pub. Res. Code, Section 21000 et. seq., as amended) and implementing guidelines (Cal. Code Regs., Title 14, Section 15000 et. seq.).

Before approving a project, CEQA requires the lead agency to prepare and certify a Final EIR. The City has the principal responsibility for approval of the proposed project and is therefore considered the lead agency under CEQA Section 21067. According to the CEQA Guidelines, Section 15132, the Final EIR shall consist of:

- The Draft EIR or a revision of the Draft EIR
- Comments and recommendations received on the Draft EIR either verbatim or in summary
- A list of persons, organizations, and public agencies commenting on the Draft EIR
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency

1.2 Format of the Final EIR

This Final EIR consists of the March 2021 Draft EIR and the following three chapters:

1.0 Preface. This chapter summarizes the contents of the Final EIR, the environmental review process, and several minor updates that occurred in the Draft EIR subsequent to the release of the Final EIR for public review.

2.0 Response to Comments. During the 45-day public review period for the Draft EIR, 52 comment letters were received. This chapter contains these comment letters and the City's responses to the comments.

3.0 Errata. Comments that are addressed in Chapter 2.0 may have resulted in minor revisions to the information contained in the March 2021 Draft EIR. Where necessary, deletions to the text are shown in ~~strikeout~~ and additions to the text are shown in <u>underline</u> in all chapters of the Draft EIR where revisions were deemed necessary as a result of received comments. Additionally, through the certification of this Final EIR, where the term "Draft EIR" is used in the text, this is now deemed to be "Final EIR."

1.3 Environmental Review Process

1.3.1 Notice of Preparation

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of the proposed project. The EIR process is intended to facilitate the objective evaluation of

potentially significant direct, indirect, and cumulative impacts of the proposed project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed project's significant effects. In addition, CEQA requires that an EIR identify adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was distributed on October 30, 2020, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City plans to prepare an EIR and to solicit input on the scope and content of the EIR. A public scoping meeting was also held via Zoom video conference on November 17, 2021. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed project. Various agencies, organizations, and individuals submitted 78 written comment letters in response to the NOP. These letters and the NOP were included in Appendix A of the Draft EIR.

1.3.2 Noticing and Availability of the Draft EIR

The Draft EIR was made available for public review and comment pursuant to CEQA Guidelines Section 15087. The 45-day public review period for the Draft EIR started on March 12, 2020 and concluded on April 26, 2021. At the beginning of the public review period, an electronic copy of the Draft EIR and an electronic copy of the Notice of Completion (NOC) were submitted to the State Clearinghouse. Relevant State agencies received electronic copies of the documents. A Notice of Availability (NOA) was distributed to interested parties and filed with the State Clearinghouse. The NOA described where the document was available and how to submit comments on the Draft EIR. The NOA and Draft EIR were also made available to be viewed on the City website at:

https://carpinteriaca.gov/public-works/engineering-division/rincon-multi-use-trail/

During the 45-day public review period, a public hearing was held virtually over Zoom by the City of Carpinteria Environmental Review Committee (ERC) on April 13, 2021. A total of 52 agency, organization, and individual comment letters were received and are included in Chapter 2, Responses to Comments, of this Final EIR.

1.3.3 Final EIR

The Final EIR addresses the comments received during the public review period and includes minor changes to the text of the Draft EIR in accordance with comments that necessitated revisions. This Final EIR will be presented to City decision-makers for potential certification as the environmental document for the proposed project. All agencies who commented on the Draft EIR will be provided with a copy of the Final EIR, pursuant to CEQA Guidelines Section 15088(b). The Final EIR will also be posted on the City's website at:

https://carpinteriaca.gov/public-works/engineering-division/rincon-multi-use-trail/

Pursuant to CEQA Guidelines Section 15091, the City shall make findings for each of the significant effects identified in this EIR and shall support the findings with substantial evidence in the record. After considering the Final EIR in conjunction with making findings under Section 15091, the lead agency may decide whether or how to approve or carry out the project. When a lead agency approves a project that will result in the occurrence of significant effects that are identified in the Final EIR, the agency is required by CEQA to state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record (a statement of findings). A "statement of findings" will be prepared pursuant to CEQA Guidelines Section 15093 and supported by substantial evidence in the record.

1.4 Revisions to the Draft EIR

The comments received during the public review period for the Draft EIR resulted in several minor clarifications and modifications in the text of the March 2021 Draft EIR. In addition, minor editorial corrections have been made in sections of the Draft EIR. These changes are included as part of the Final EIR, to be presented to City decision makers for certification and project approval.

CEQA Guidelines Section 15088.5 identifies when a lead agency must recirculate an EIR. A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. Information includes changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not considered significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. As defined in CEQA Guidelines Section 15088.5(a), significant new information requiring recirculation includes the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The minor clarifications, modifications, and editorial corrections that were made to the Draft EIR are shown in Chapter 3.0, Changes to the Draft EIR, of this Final EIR. None of the revisions that have been made to the EIR resulted in new significant impacts; none of the revisions resulted in a substantial increase in the severity of an environmental impact identified in the Draft EIR; and, none of the revisions brought forth a feasible project alternative or mitigation measure that is considerably different from those set forth in the Draft EIR. Furthermore, the revisions do not cause the Draft EIR to be so fundamentally flawed that it precludes meaningful public review. As none of the CEQA criteria for recirculation have been met, recirculation of the EIR is not warranted. As stated in CEQA Guidelines Section 15088.5(b), "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

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2 Responses to Comments

The Draft EIR was circulated for public review on March 12, 2021 through April 26, 2021, in accordance with the 45-day comment period required under Section 15105(a) of the CEQA Guidelines. A total of 52 comment letters were received on the Draft EIR from agencies, organizations, and individuals as shown in the list below. In response to the comments received during public review and to City of Carpinteria (City) staff input subsequent to distribution of the Draft EIR, minor revisions, clarifications, and/or additions have been made to the document which do not change the conclusions of the Final EIR regarding the project's potential environmental impacts and required mitigation. These minor revisions do not represent significant new information. No new significant environmental impacts would occur from these modifications, and similarly, no substantial increase in the severity of environmental impacts would occur. When a comment is not directed to significant environmental issues, the responses indicate that the comment has been acknowledged and no further response is necessary.

The list of commenters and the unique letter-number designators for each letter are shown in Table RTC-1, List of Commenters. Individual comments within each letter are bracketed and subsequently numbered in the right-hand margin of the comment letter. Bracketed/numbered comment letters are placed before the responses to the letter provided below.

Four topics or issue areas were identified in a large percentage of the comment letters, including concerns about the air flow analysis and related impacts to recreation (soaring opportunities), the magnitude of earthwork or landform modification, impacts to biological resources, and the range of alternatives considered. Since these issue areas were present in multiple comment letters, Dudek created a global response addressing each of these areas. The global responses are presented first, preceding the individual comment letters and responses.

Table RTC-1. List of Commenters

Commenter	Letter No.
State Agency	
Southern California Gas	S-1
California Public Utilities Commission	S-2
California Coastal Commission	S-3
California Department of Fish and Wildlife	S-4
Local Agency	
Santa Barbara County Association of Governments	L-1
Carpinteria Sanitary District	L-2
Carpinteria Sanitary District	L-2a
County of Santa Barbara Planning Department	L-3
County of Ventura Resource Management Agency	L-4
Tribes	
Northern Chumash Tribal Council	T-1
Organizations	
Friends of Bates Beach	O-1
Individuals	
Aaron LaPlante	I-1
E. Arciniega	I-2
E. Arciniega	I-3
Aaron LaPlante	I-4

Table RTC-1. List of Commenters

Commenter	Letter No.
E. Arciniega	I-5
Scott Wuebber	I-6
Myles Connolly	I-7
Ottis Gillespie	I-8
Laura Davalos, PT, DPT	I-9
E. Arciniega	I-10
Ottis Gillespie	I-11
Desmond	I-12
Caleb Pillips	I-13
Michael Hilbreath	I-14
Brandon Stingham	I-15
Jamie Bishop	I-16
Wayne Michelsen	I-17
Randall McCormick	I-18
Mike Harrington	I-19
Adam Zerkel	I-20
Ottis Gillespie	I-21
Robin Cushman	I-22
Ryan Soares	I-23
Jon Lewis	I-24
Betty Winholtz	I-25
Riebeeck van Niekerk	I-26
Jeffrey Longcor	I-27
Jason Lombard	I-28
John Greynald	I-29
Ajay Rajamani	I-30
Rob Sporrer	I-31
Ottis Gillespie	I-32
Tim Barker	I-33
Karl Cameron	I-34
William C. Prechter	I-35
Jorge Granier	I-36
George Jimenez	I-37
Mark Rayburn Patterson, PhD	I-38
Derek Musashe	I-39
Morgan Waterman de Granier	I-40
Derek Arculli	I-41

Global Responses for Topics Common to Multiple Comment Letters

GR1: Impacts Upon Soaring Opportunities / Airflow Study

A number of commenters suggested that the Recreation Section should not have included a discussion on the fundamentals of soaring or Federal Aviation Administration (FAA) regulations pertaining to soaring activities, and also expressed skepticism regarding the conclusions of the airflow analysis study and the determination of a less than significant project impact on existing soaring opportunities. The response below is intended to address these issues, which are common to multiple comments received.

Discussion of Soaring Fundamentals

Responses to the Notice of Preparation (NOP) by members of the soaring community identified the need to assess impacts of the Project on existing opportunities for soaring in the air space above the Project alignment. While members of the soaring community are required to possess an understanding of the principles affecting paragliding or hang-gliding flight, including factors that influence launch and flight duration, members of the general public and decision-makers are unlikely to have familiarity with such principles. Consequently, it is appropriate to provide a summary of fundamentals pertaining to hang-gliding and paragliding, in order for the public to have a basic understanding of the physical conditions needed to support soaring.

The fundamentals description was derived from the *Elementary Pilot Training Guide* (British Hang-gliding and Paragliding Association, 2021). As a reference for beginning soaring pilots, the guide provides straight-forward discussion of flight principles and wind effects for soaring, using explanations that should be understandable for new pilots as well as interested individuals that do not engage in soaring.

Federal Aviation Administration (FAA) Regulations on Soaring

For each environmental issue area (organized by individual sections or chapters), the EIR provides a summary of the federal, state and local regulations that pertain to the given issue area. Adopted General Plan Policies, ordinances, and regulations, often govern the activities or development allowed on a given property or may be a component of the significance thresholds established for that issue area.

In that NOP responses identified the need to address Project impacts on existing opportunities for soaring in the air space above the Project alignment, it is appropriate to present FAA regulations on soaring as part of the regulatory discussion in the Recreation Section of the EIR.

Airflow Analysis Study

Multiple commenters expressed the perception that the Airflow Analysis Report "specifically states it is based on theory and not intended for this purpose." This perception is evidently based upon the disclaimer provided at the end of the report, which is standard for an aerodynamics analysis of this type. The report disclaimer neither represents the study is based on theory alone, nor that the conclusions are inapplicable to the analysis of airflow alterations resulting from the proposed topographic modifications. The analysis methodology and the intent of the disclaimer are discussed in detail below.

Modeling is commonly employed in the evaluation of environmental effects that could result from a proposed action. Agricultural land conversion, air quality emissions, noise levels, and traffic generation typically are analyzed with the aid of models. The models use equations, which are based upon the measurement of various characteristics

associated with existing activities, to predict these same characteristics for a proposed new project or action. As the number of measurements of characteristics from existing activities increases, the statistical integrity of the data and equations improves, and the model results become more accurate; but the model results remain a prediction, and are not guaranteed to 100 percent reflect actual future conditions. With respect to environmental aerodynamics, a comprehensive model for the prediction of airflow alterations from topographic modification has not been developed at this time (Luzzatto-Feliz, *Email Communication*, June 2021). The airflow analysis report (*Airflow Analysis for the Proposed Regrading of the Rincon Bluffs*, Paolo Luzzatto-Feliz, PhD, January 22, 2021) therefore incorporates existing data from field measurements of air flow over large-scale topographic features, from aerodynamic experiments conducted with scaled models in wind tunnels, from engineering standards for wind stress on buildings, and from published literature addressing wind flow over topography as related to soaring activities, to evaluate potential changes in airflow dynamics associated with the project.

Wind amplification is an important concept in the discussion of air flow over topography. When a mass of air which is moving horizontally over a level surface (e.g., wind blowing over the ocean surface) encounters a hill or cliff, the air volume in front of the hill is compressed into a smaller volume which flows at a faster rate over the hill/cliff, compared to the remainder of the air mass much higher above the hill. In other words, the wind speed approaching the hill at elevations below the top of the hill will be lower than the wind speed as it passes over the top of the hill. As discussed in the air flow analysis study, extensive experiments in 1977 with scaled models in a wind tunnel investigated the effects of changing the angle of the slope, relative to the amount of wind amplification produced by the slope. These original wind tunnel experiments concluded that increasing the angle of the slope for gentle slopes (i.e., slopes from 4:1 or 14 degrees to 2:1 or 27 degrees) did result in wind speed increases. However, for slopes steeper than 2:1, the maximum flow velocity no longer increased with an increase in the slope angle; and likewise decreases in slope angle that do not reduce the slope to less than 2:1 did not decrease the maximum wind velocity. Equations from the wind tunnel experiments were developed to address the wind amplification related to steepness of the slope; subsequent researchers have conducted environmental measurements of wind flow over slopes with varying slope angle, and showed that, for the front and top regions of the topography, field measurements at full scale agreed closely with the wind tunnel experiments. It should be noted that the existing bluff face along the project site has a slope angle greater than 2:1, and the resulting slope angle following the re-grading under the proposed project or under Alternative 3 would also maintain a slope angle greater than 2:1. Because of this, horizontal wind speeds at low altitudes over the bluff top are not expected to be altered by the project.

Vertical wind speed, or uplift, is of interest to the soaring community and is also produced when horizontal wind encounters a slope. Soaring literature contains simple equations for converting horizontal wind speed to a vertical wind speed component, which involves the sine of the slope angle. These equations are again based upon those developed from wind tunnel experiments. For more complex topography, for instance, a slope that has sections of varying steepness or which includes benches, researchers have identified an appropriate semi-empirical approach to estimate uplift. The semi-empirical approach generally involves applying the equations developed from wind tunnel experiments using simple slope models, compare the prediction results of these equations against data from vertical air flow measurements on existing large-scale complex topography in the environment, and make adjustments to the applied equation until the predicted vertical wind speeds are close to those measured. Researchers have identified two approaches that have been successful for the prediction of vertical wind velocities produced from flow over complex topography. The first approach is to use the mean or average slope degree across the entire face of the slope. The second approach uses the average slope degree over the upper portion of the slope (approximately the top third of the slope face), which is immediately below the wind flow amplification zone.

The air flow analysis report employs both of these approaches to predict changes to vertical wind velocities from slope angle modification (i.e., regrading), and reports the results of each approach.

The vertical wind speed prediction approach using the average slope degree of the upper third portion of the slope is based upon research and environmental wind measurements by Crawley & Schmanske (1994). The equation resulting from this approach was specifically focused on vertical wind speeds closer to the surface of the topography, which are important for low elevation soaring operations including take-off and landing maneuvers. Using this approach, vertical wind speeds within the zone that extends upward approximately 20 feet from the bluff top are predicted to be reduced by no more than 10 percent. This predicted reduction in vertical wind speed at low altitudes addresses the re-grading of the bluff face for the proposed project and for Alternative 3. This equation and method is considered to be most accurate within approximately 20 vertical feet of the evaluated topographic feature; the other equation (described below) is appropriate for predicting wind speed alterations at higher elevations above the ground.

The vertical wind speed prediction approach using the average slope degree of the entire slope was developed by researchers to provide a conservative assessment of potential wind speed alterations from slope modification, at altitudes up to a height (elevation) equal to the height of the topographic feature. This approach predicts a potentially conservative vertical wind speed reduction from proposed project regrading of between 25 and 30 percent for elevations within 30 feet above the bluff-top, and approximately 30 percent at elevations above 30 feet over the bluff. For Alternative 3, this approach predicts a vertical wind speed reduction of approximately 20 percent for elevations up to approximately 120 feet above the bluff top.

The disclaimer at the end of the airflow analysis report (Page 11, Luzzatto-Feliz, January 2021) is standard for the type of predictive modeling contained in the report. Sufficient research was performed in the study to identify and compare technical experts' analytical approaches which included wind tunnel experiment results, environmental measurements of horizontal and vertical wind velocity effects associated with topography, and calculations employed for estimating wind velocities for soaring. As indicated in the airflow analysis report, results from the application of appropriate formulas to predict wind velocity changes from the project were checked against published results from various research and were found to compare favorably (Page 9, Luzzatto-Feliz, January 2021). The disclaimer is intended simply to indicate the analysis is predictive in nature, and as with all modeling efforts, future conditions could vary slightly from the predicted conditions.

Conclusion of Less Than Significant Impact Regarding Soaring Opportunities

Published data for the Torrey Pines Gliderport indicate tandem hang-gliders (which can carry pilot and passenger or instructor and student) require a horizontal wind speed between 7 and 15 mph, while tandem para-gliders require wind speed between 10 and 18 mph. According to the U.S. Hang Gliding and Paragliding Association, the ideal wind speed for launching solo gliders is from 5 to 20 mph (https://www.ushpa.org/page/hang-gliding-frequently-asked-questions). This horizontal wind speed range ensures the air movement across the "wing" of the glider is sufficient to produce lift, thereby making launch (take-off) feasible. These data reflect a range of at least 50 percent wind speed across which launch of tandem gliders is feasible, with a range of 75 percent for solo glider launch. Research findings from the air flow analysis indicate, that for slopes steeper than 2:1 (27 degrees), a change to the average slope face does not result in changes to air flow amplification or horizontal wind speeds along the top of the slope. (Page 11, Luzzatto-Feliz, January 2021). Existing slopes, and those resulting from the project or Alternative 3, would each remain greater than 2:1. Hence no decrease in the horizontal wind speeds immediately above the bluff are anticipated from the project, and the ability to launch gliders from areas adjacent to the project alignment would not be affected.

Vertical wind velocities, which affect the ability for a hang-glider or para-glider to increase their altitude and thus extend flight duration, could be reduced in the air space above the trail alignment under the Project and Alternative 3, compared to existing conditions. Using an approach following the methodology of an analysis of topographic effects upon air flow that was conducted specifically for soaring that, as discussed above, employed a specific altitude for determining vertical wind speeds from different slope angles and using the average slope degree for the upper slope, the air flow analysis predicts only a maximum of 10 percent reduction in the vertical wind speeds within approximately 20 vertical feet of the bluff top (refer to additional explanation above). Thus, very low altitude soaring flights over the project alignment are not expected to be substantially affected under most conditions.

Vertical wind velocities at altitudes greater than 30 feet above the bluff face could be reduced by up to 30 percent, meaning there could be fewer opportunities for gliders to gain altitude and extend the duration of their flights in the area above the project alignment, as compared to existing conditions. Based again upon the reported 50 percent range in horizontal wind speeds for successful launch and flight at Torrey Pine Gliderport, and a 75 percent wind speed range for solo glider launch (USHPA), a reduction by 30 percent of the vertical wind speeds at higher elevations over the project alignment is not expected to result in a substantial decrease in soaring opportunities. In addition, the existing bluff face to the west of the trail crossing over the UPRR alignment would not be modified by the project, and therefore ambient air flow conditions along this bluff face would remain unchanged.

Further, as discussed in Section 3.11.4 of the Draft EIR, CEQA requires an analysis of physical impacts to the environment; it does not require analysis of social and economic impacts resulting from a project. (*Preserve Poway v. City of Poway* (2016) 245 Cal.App.4th 560, 566, 579-580; CEQA Guidelines, § 15064(e).) The airflow analysis report demonstrates that any potential adverse impacts on the usability of air space above the proposed trail alignment are unlikely to cause significant physical impacts on the environment. (See, e.g., *Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839 (reasoning that loss of convenience is merely an example of a social problem, and without an accompanying physical change to the environment, CEQA does not require its analysis); CEQA Guidelines, § 15131(a).) Section 3.3.4 of the Final EIR further evaluates the extent to which the project's topographic changes associated with regrading result in a less than significant environmental impact to migratory avian species. As such, the airflow analysis report provides an expert opinion, based on substantial evidence, that the project will not result in a significant environmental impact.

GR2: Earthwork/Landform Modification

Several commenters highlighted concerns with the volume of earthwork necessary to implement the proposed project and indicated that additional effort should be completed to identify alternatives for trail development that could further reduce earthwork volumes and landform modification. One commenter correctly provided a comparison of the amount of earthwork between the original trail proposal (2015) and the current proposal, indicating the original design involved substantially less earthwork. However, that original design was later found via geotechnical investigation to be infeasible due to the presence of active landslide areas along the originally proposed (2015) trail alignment (Carpinteria Rincon Trail Project Draft EIR, Page 6-9).

With respect to the modification of landforms, the proposed project would re-contour manufactured slopes originally created for the past and current UPRR alignments, the former State Highway 2, and U.S. Highway 101. The re-manufacture of such slopes would result in minimal change to the existing appearance of the slopes, in that they already exhibit more regular planar characteristics than the undulating surfaces that pre-dated the transportation corridor mass grading activities affecting all of the slopes along the trail alignment. Existing sparse vegetation on sloped areas would be replaced with an appropriate assemblage of native, drought-tolerant species using hydro-

seeding and individual container plants, such that short-term visual impacts from earthwork and vegetation removal would be adequately mitigated.

The City and County local coastal plans do reference Coastal Act Section 30251, which requires that the scenic and visual qualities of coastal areas shall be considered and protected, and that new development is sited and designed to minimize alteration of natural land forms and also be subordinate to the character of its setting. The project is consistent with Coastal Act Section 30251 based on the following considerations included in the trail design:

a) Earthwork would largely affect manufactured slope areas—containing debris and excavated material from previous railroad and state highway construction projects—not natural landforms. The top elevation of local ridges within the project area would be preserved, thus maintaining the most visible aspect of site topography which relates to the ridges and bluff-top east and west of the project site.

b) The trail itself would remain a subordinate feature in the visual environment of the site, with a scale that would not draw attention away from the high slopes and ridges against which it is set. The resulting landforms from earthwork to construct the trail would have a similar appearance to both existing slopes along the alignment, as well as to the manufactured slopes extending eastward and westward from the project alignment along the UPRR and U.S. Highway 101 corridors.

c) As part of the remanufacturing of the ocean-side slope east of the existing UPRR alignment, the abandoned former railroad bench cut would be largely filled in, such that the bluff face would continue to have a prominent bench cut into its face, but in a new location slightly higher on the bluff face in order to achieve the necessary trail slope profile. In this respect, the visual condition of a bench cut traversing the face of the manufactured slope would not differ significantly from the existing condition.

d) Once re-manufactured slopes are revegetated (as proposed) such slopes would be more compatible with the natural surrounding than the historic cut slopes remaining from the railroad and state highway construction. Because the project proposes to reduce the slope angle of manufactured slopes (compared to existing), run-off velocity for storm run-off would be reduced, erosion of the bluff face would be reduced, and additional moisture would be retained to support re-planted native and drought-tolerant plants.

With regard to the smaller volume of earthwork identified for the original trail proposal, substantial height retaining walls were proposed as an alternative to earthwork. The original trail design would have necessitated approximately 1,000 feet of retaining wall, with a maximum height of 14 feet. That design was prepared without the benefit of specific geotechnical investigation methods, which have subsequently identified deep-seated landslides along the former extensive switchback section that would have extended eastward from the UPRR rail crossing. The original alignment, due to the presence of severely unstable slope sections, has since been deemed infeasible by the project engineers. Another aspect of the original retaining wall design is that they were intended to anchor the trail itself but would not have addressed soil creep or rock fall from steep manufactured slopes above the elevation of the trail. Thus, trail users would not have been as protected from risk of falling earth materials and the trail itself could have been subject to more intensive maintenance or repair activities. The current design anchors the trail itself on one bench (situated on a low angle slope), with a more stable low-angle slope above it.

Consequently, while earthwork volumes would increase under the current proposal, the resulting slopes and landforms would have greater long-term stability, retaining walls (which are generally more prominent visually) would be completely avoided, and slope angles more conducive to successful revegetation would result, as compared to the original design from 2015. With regard to a proposal which respects the scenic qualities of coastal

areas and remains visually subordinate to the character of the setting, the current proposal is more consistent with coastal policy mandates than the original 2015 alignment. In addition, as discussed above, the original alignment that theoretically could have involved lower earthwork volumes has been proven infeasible. Any trail project within this highly modified environment characterized by remnant manufactured slopes from current and relic transportation corridors by necessity must address correction of unstable steep slope faces, leading to what could appear to be "excessive" grading.

The engineering design for Alternative 3 was specifically driven by an intent to minimize overall project earthwork volumes. Alternative 3 would result in a reduction of 40 cubic yards of excavation compared to the proposed project (with exported material reduced by 121 cubic yards). In this regard, Alternative 3 represents the greatest opportunity to minimize excavation and exported soil earthwork volumes to implement the project. Once again, it is worth reiterating that the slopes along the trail alignment have been subject to previous modification to accommodate transportation projects, and therefore the proposed earthwork would affect manufactured slopes and not natural landforms. Additionally, the remnant slope faces in most cases are steeper than current engineering standards would recommend (and which would be corrected via the project), and the grading to create the benches for the trail are dictated, in part, by the maximum grade percent which is acceptable under ADA. In fact, an approximately 690 foot portion of the trail south of the UPRR crossing with Alternative 3 would marginally exceed the 5 percent maximum ADA trail slope face (this 690-foot segment of the trail would be constructed with trail surface of 6 percent slope) in order to capitalize on as much of the former railroad bench as possible and thereby minimize project earthwork.

The engineering design evaluation to create Alternative 3 informed the project development team, and the proposed project has been subsequently revised to remove the previously proposed mid-elevation bench above the trail segment south of the UPRR alignment. This design change reduces the earthwork volume by 11,346 CY (9.6 percent reduction) for the currently proposed version of the project, compared to the previous version of the proposed project evaluated in the Draft EIR. Alternative 3 further reduces the volume of excavated and exported materials (40 CY less excavation, 121 CY less exported earth material). Alternative 4 was determined to have a very similar total volume of earthwork as the proposed project but would increase export material volumes by approximately 10,000 CY (as compared to the project). Alternative 2 was initially thought to involve substantially less earthwork, but additional geotechnical investigations indicate the presence of extensive landslide features that would require massive retaining structures; as well, available engineering and geotechnical methods for stabilizing the landslide mass are not known to be feasible. The alternatives investigated represent three different potential alignments for the trail, with the degree of topographic modification being a chief factor in the identification of potential alignments. The earthwork for each alignment has been identified for comparison, with total variance between the most and least volume of earthwork at approximately 10 percent. Consequently, the EIR authors do not believe that additional alternatives for the purpose of minimizing earthwork volumes would be warranted in order to meet the criteria for sufficiency of alternatives analysis under CEQA Section 15126.6(d).

GR3: Biological Resources

Commenters have indicated that the field surveys have failed to detect some plant and wildlife species that are present within the project alignment, and that further alternatives should be developed and studied in order to avoid or minimize project impacts upon environmentally sensitive habitat areas (ESHA).

Dudek biologists have conducted general biological resources surveys of the project site in multiple instances, during the spring season of five separate years (2011, 2018, 2019, 2020 and 2021). Because of the history of the design development and subsequent re-design efforts for the proposed trail, the site has been evaluated for the

presence of biological resources much more extensively than typically occurs for a development proposal. Dudek biologists are therefore confident that all important biological resources present within and adjacent to the project alignment and all alternatives have been identified.

According to City of Carpinteria General Plan/Local Coastal Land Use Plan Figure OSC-1, the entire area east of Bailard Avenue and lying between U.S. Highway 101 and the beach is included in an ESHA overlay. While not all area included within the ESHA overlay may have sensitive resources present, it would not evidently be feasible to implement a trail connecting the eastern terminus of Carpinteria Avenue to the northern terminus of the Coast Bike trail (at the southern end of Rincon Beach Park) without impacting some area designated as ESHA. It should be noted that no ESHA designation has been applied by the County of Santa Barbara for the portion of the Rincon Trail alignment within their jurisdiction.

While the total native plant community impact area appears to substantially increase under the current proposal as compared to the original proposal (Alternative 2), this is because of greater area involved with slope re-manufacturing. What must be kept in mind, however, is that the regrading of the slopes to have lower slope angles will enhance the success of the revegetation effort. The original proposal (Alternative 2) would not have included as extensive modification of slopes but would have incorporated substantial retaining walls (which would not provide area for replanting); in essence, the vertical retaining wall area under Alternative 2 represents a larger overall hardscape footprint for the project that would be unavailable to support vegetation, as compared to the current proposal. In this regard, the current proposal, while producing a larger area of impact due to more extensive earthwork area, would have lower residual (permanent) impacts upon native plant communities and ESHA than the original proposal. Mitigation has been required for the impacts to native plant communities (ESHA) including a mandatory restoration plan within both the City of Carpinteria and County of Santa Barbara portions of the project. The final restoration plan will include performance standards and an appropriate combination of hydro seeding and container plants to support long-term revegetation of the re-manufactured slopes.

GR4: Alternatives

A substantial number of commenters expressed support for implementation of Alternative 4 instead of the Project. Due to this expression of interest by members of the public, Santa Barbara County requested each of the alternatives identified in the EIR include sufficient depth of analysis to support a potential approval based on any of the alternatives.

The No Project Alternative (Alternative 1) would not entail any approvals and would simply perpetuate all existing conditions within the trail alignment. No further analysis was deemed necessary to address this alternative. Alternative 2 was previously addressed in a certified mitigated negative declaration (MND); analysis from the MND was summarized in the Alternative 2 discussion in the EIR, as updated with findings from more recent geotechnical investigations. Hence the Alternative 2 analysis presented in the Draft EIR is considered to contain sufficient detail to satisfy CEQA; it must be recognized, however, that due to the need for extraordinary structural engineering and landslide stabilization components that could entail unique impacts to the environment, subsequent environmental review would likely be necessary to implement the trail based on the original alignment (Alternative 2).

The alignment for Alternative 3 is substantially the same as for the project, and the area of potential effect is also principally the same as for the project. Alternative 3 involves a slight shift in the trail alignment on the south side of the UPRR corridor, in order to intersect the historic rail bench at a more westward location to employ more of the existing bench for the trail, and the incorporation of a 6 percent trail surface slope for an approximately 690 foot section of the trail (compared to 5% for the proposed project). Identification of relative impacts of this design and

the applicability of prescribed mitigation measures are adequate under the Alternative 3 discussion of the EIR to support an approval based on this design, without the need for any bolstering of the existing discussion.

Alternative 4 includes a portion (east of the UPRR trail crossing) that is outside of the alignment that has been studied for the project. Notably the biological resources and potential cultural resources within this portion of Alternative 4 were not previously surveyed. Dudek conducted a biological survey of this portion of the trail unique to Alternative 4, and also re-evaluated the findings from the record search conducted for archaeological resources. The discussion under Alternative 4 has been updated accordingly, and now adequately identifies relative impacts of this design and the applicability of prescribed mitigation measures to support an approval based on this design, without the probable need for subsequent environmental review under CEQA (refer to Chapter 3, Alternatives).

Comment Letter S1

Hello Nick – Does the Rincon Trail/EIR have impacts to utilities such as SoCalGas or water, sewer, telecom, electric/Edison, etc? Thanks, Tim. S1-1

From: Nick Bobroff <nickb@ci.carpinteria.ca.us>
Sent: Thursday, March 11, 2021 4:43 PM
To: Nick Bobroff <nickb@ci.carpinteria.ca.us>
Subject: [EXTERNAL] Public Release of the Draft Environmental Impact Report for the Carpinteria Rincon Trail Project

*** EXTERNAL EMAIL - Be cautious of attachments, web links, and requests for information ***

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Response to Comment Letter S1

Southern California Gas
Timothy Mahoney
March 18, 2021

S1-1 The commenters questions whether the EIR outlines impacts to utilities such as gas, water, sewer, telecommunications, electric.

The proposed project's impacts to utilities, such as gas, water, sewer, telecom, electric, have been analyzed in Section 3.14 of the Draft Environmental Impact Report (EIR). As discussed in this section, the project would not create additional demands in the areas of natural gas, electricity, or telecommunications facilities and therefore no impacts to these utilities would occur. In addition, impacts to water and wastewater would be less than significant.

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Comment Letter S2

Hi Nick,

Thanks for our brief phone discussion today regarding the Project DEIR. Please ensure that UP received a copy of the report for any comment. You may forward it to Ms. Peggy Ygbuhay at pygbuhay@up.com. S2-1

Sincerely,

Oliver Garcia, PE
Utilities Engineer
Rail Crossings & Engineering Branch - Rail Safety Division
California Public Utilities Commission
320 West 4th Street, Suite 500 | Los Angeles, CA 90013
☎ Cell (213) 369-4674

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Response to Comment Letter S2

California Public Utilities Commission
Oliver Garcia, PE
April 1, 2021

S2-1 The commenter requests that the City ensures that Union Pacific Railroad (UPRR or UP) received a copy of the EIR.

The City, UPRR, and the project engineer have been working together for the past year on an easement and encroachment agreement for the proposed bridge over-crossing of the UPRR corridor. City Public Works notified UPRR of the availability of the EIR and provided a link to download the document from the City's website. The UPRR project contact has also been added to the project notification list for all future meetings, document releases, etc.

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Comment Letter S3

STATE OF CALIFORNIA— CALIFORNIA NATURAL RESOURCES AGENCY GAVIN NEWSOM, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT OFFICE
89 SOUTH CALIFORNIA STREET, SUITE 2000
VENTURA, CA 93001
VOICE (805) 585-1800

April 26, 2021

Nick Bobroff, Principal Planner
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

RE: Draft Carpinteria Rincon Trail Project Environmental Impact Report

Dear Mr. Bobroff,

Commission staff has reviewed the Draft Carpinteria Rincon Trail Project Environmental Impact Report (DEIR) regarding the proposed realignment and redesign of the Carpinteria Rincon Trail located within the City of Carpinteria and Santa Barbara County, and we appreciate the opportunity to provide comments for your consideration. S3-1

The originally circulated Mitigated Negative Declaration (MND) for the Rincon Trail, which was subsequently approved by the City through CDP No. 15-1760, included a 12 foot wide and 4,000 foot long shared-use trail, a 110 foot long clear- span bridge over the Union Pacific Rail Road (UPRR) alignment, 17 public parking spaces and a rest area with three picnic tables, signage, lighting and a storm drainage collection system including an on- site bioswale and a 5,000 gallon cistern to provide water for native landscaping during dry months. That project also included 30,000 cubic yards of cut, 7,000 cubic yards of fill and 23,000 cubic yards of export. In 2019 a Subsequent MND (SMND) was prepared, because the project was proposed to be modified to avoid areas with historic landslides, to eliminate the need for retaining walls, to shorten the path length, and to ensure accessibility of the trail for persons with disabilities pursuant to Americans with Disabilities Act (ADA) and Architectural Barriers Act requirements. The modified project included a 16 foot wide and approximately 2,800 foot long shared-use trail, a 160 foot long clear-span bridge over the UPRR alignment, and a storm drainage collection system including new drain outlets to the ocean. That project also included 104,000 cubic yards of cut, 10,300 cubic yards of fill and 94,100 cubic yards of export. The SMND was approved by the Carpinteria Planning Commission, but that decision was appealed to the City Council. Although the appeal of the Planning Commission's approval of the SMND was never heard by the City Council, the City Council decided to move forward with the preparation of a focused EIR. S3-2

The subject DEIR is the product of the focused EIR effort and includes the analysis of four project alternatives: no project/no build (Alternative 1), maximize existing benchwork/topography alternative (Alternative 2), steeper slopes/reduced earthwork alternative (Alternative 3), and freeway adjacent trail avoiding bluff face alternative (Alternative 4). Alternative 3 is identified as the environmentally superior alternative and S3-3

includes the same alignment and project features as the modified project from the SMND, but would result in 15,000 less cubic yards of earthwork. Despite the improvement in the amount of grading, the proposed project and selected alternative raise issues regarding grading and landform alteration, native vegetation communities, and public access. The entire project is located in the Coastal Zone, but spans both the jurisdiction of the City of Carpinteria (City) and County of Santa Barbara (County). Because the Commission has certified a LCP for both the City and County, the standard of review for the proposed project would be the respective LCP policies and provisions.

S3-3 Cont.

Grading and Landform Alteration

The originally approved project included 30,000 cubic yards of cut, 7,000 cubic yards of fill, and 23,000 cubic yards of export while the modified realignment and redesign analyzed in the SMND included 104,000 cubic yards of cut, 10,300 cubic yards of fill and 94,100 cubic yards of export. Alternative 3 would result in a reduction of 15,000 cubic yards of grading compared to the project proposed in the SMND; however, this is still a 62,300 cubic yard increase in the total amount of grading compared to the original project. The City's LCP contains Coastal Act Section 30251, which requires that the scenic and visual qualities of coastal areas shall be considered and protected and that new development is sited and designed to minimize alteration of natural land forms and also subordinate to the character of its setting. The proposed project will result in a significant amount of grading and landform alteration at the subject site. While grading impacts were analyzed in the DEIR, it was determined that with the incorporation of mitigation measures the proposed project would not result in any significant impacts as a result of grading. However, in order to determine consistency with the certified LCP, additional siting and design alternatives to further minimize grading and landform alteration should be analyzed.

S3-4

ESHA

Coastal Act Section 30240, which is incorporated into the City's LCP, requires that Environmentally Sensitive Habitat Areas (ESHA) be protected to the maximum extent feasible. The draft DEIR includes an analysis of temporary and permanent impacts to various vegetation communities, including ESHA; however, it appears that the only permanent impacts identified are those impacts specific to the trail footprint and impacts as a result of vegetation removal are considered temporary. The Commission has historically considered temporary impacts to be those where: 1) there is not significant ground disturbance (i.e. earthwork including grading that disturbs seedbank); and 2) vegetation recovers to comparable size/age class within 12 months from the initial disturbance. All other impacts are considered permanent. The EIR should include more information on the expected temporary and permanent impacts consistent with the Commission's approach and as necessary revise Table 3.3-5 to reflect the totals of temporary and permanent impacts, and required mitigation.

S3-5

Public Access

The originally approved project included the construction of 17 public parking spaces and a rest area with picnic tables at the western terminus of the Rincon Trail, located along Carpinteria Avenue. However, the selected alternative does not include the

S3-6

construction of these public access amenities, and the DEIR indicates that instead, the existing dirt lot would continue to provide informal parking. However, based upon the information included within the DEIR, it is unclear which portions of the dirt areas along Carpinteria Avenue are intended to function as parking for the proposed trail, and if those areas are actually available for public use. In order to facilitate maximum public access to the Rincon Trail, and to ensure consistency with the public access policies of the LCP, the final EIR should analyze project alternatives that include construction of the previously approved, or similar, public access components.

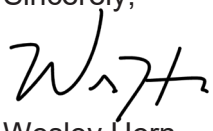
S3-6 Cont.

Each of the issues identified in this letter, as well as other impacts identified in the environmental review process, should be analyzed in the context of alternative project designs. As described above, an analysis of project alternatives is critical to ensure that adverse impacts to coastal resources are avoided to the maximum extent feasible, and that unavoidable impacts are minimized and mitigated. Please note that the comments provided herein are preliminary in nature. More specific comments may be appropriate as the project develops, and Coastal Commission staff requests notification of any future activity associated with this project or related projects. Again, thank you for the opportunity to comment.

S3-7

S3-8

Sincerely,



Wesley Horn
Coastal Planner, Southern California Caltrans Liaison
California Coastal Commission

cc: Tami Grove, Statewide Transportation Program Manager, CCC
Shannon Fiala, Coastal Program Manager
Jacqueline Phelps, South Central Coast Supervisor, CCC

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Response to Comment Letter S3

California Coastal Commission
Wesley Horn
April 26, 2021

S3-1 The City acknowledges the comment as an introduction to comments that follow. No further response is required.

S3-2 The commenter describes the project proposed under the 2015 Mitigated Negative Declaration (MND) and the 2019 Subsequent MND and provides background to the EIR. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR, and therefore, no further response is required.

S3-3 The commenter describes the four alternatives outlined in the EIR as well as the jurisdictions within which the proposed project falls. The commenter states that the standard of review for the proposed project would be the respective local coastal program (LCP) policies and provisions. As described in Section 3.9.4, the proposed project would be consistent with the Carpinteria General Plan/Coastal Land Use Plan and Santa Barbara County Coastal Land Use Plan, that serve as the City's and County's Local Coastal Land Use Plan, which ensures that the local government's land use plans, zoning ordinances, zoning maps, and implementation actions meet the requirements, provisions and polices of the California Coastal Act. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR, and therefore, no further response is required.

S3-4 The commenter expresses concern regarding the aesthetic effects of the grading and landform alternation associated with the proposed project and Alternative 3. The commenter suggests that, in order to comply with Coastal Act Section 30251, referenced in the City's LCP, additional siting and design alternatives to minimize grading and alternation should be analyzed.

See Global Response GR2, Earthwork/Landform Modification. In short, the EIR authors do not believe that additional alternatives for the purpose of minimizing earthwork volumes would be warranted in order to meet the criteria for sufficiency of alternatives analysis under CEQA Section 15126.6(d). In addition, minor alterations to the project and to Alternative 3 were accomplished to reduce earthwork volumes, including the removal of a previously proposed mid-elevation bench for the trail segment south of the UPRR alignment (project and Alternative 3), a narrower path width for the portion of the trail south of the UPRR alignment (Alternative 3), and slightly steeper slope of 6 percent for a 690 foot portion of the trail segment south of the UPRR alignment (Alternative 3).

S3-5 The commenter provides background information on Environmentally Sensitive Habitat Areas (ESHA), per Coastal Act Section 30240 and the City's LCP, and states that permanent impacts should expand beyond those specific to the trail footprint and include those that result from vegetation removal. In addition, the commenter requests that the EIR should include more information on the expected temporary and permanent impacts consistent with the Coastal Commission's approach and revise Table 3.3-5 to reflect the new totals of temporary and permanent impacts and required mitigation.

This comment has been addressed in replacement Section 3.3 Biological Resources, including Table 3.3-5 and associated text including required mitigation by reclassifying all project impacts upon

biological resources to permanent impacts. It was determined that the impacts previously defined as temporary were more permanent in nature when associated with impacts to vegetation communities. Furthermore, the mitigation ratio for impacts to S3 native vegetation communities was updated to 4:1 and the mitigation ratio for impacts to S4 and S5 native vegetation communities was updated to 2:1. These mitigation ratios apply to the associated vegetation communities and are not altered for on-site versus off-site mitigation involving native habitat restoration.

S3-6 The commenter expresses concern that the proposed project and alternatives do not include the construction of public access amenities previously included in other CEQA documentation, such as 17 parking spaces and a rest area with picnic tables, to be located at the western terminus of the proposed trail, along Carpinteria Avenue. The commenter is also unclear as to which portions of the dirt areas along Carpinteria Avenue would function as parking for the proposed trail, and if those areas are available for public use.

As discussed in Chapter 2 of the EIR, vehicle parking at the trailhead on the western end would be provided via an existing dirt lot adjacent to the Carpinteria Avenue terminus and available on-street parking in the area; no improvements to the existing informal dirt parking lot are proposed under the Carpinteria Rincon Trail project. However, as part of a separate, future project, the City of Carpinteria intends to provide parking spaces for visitors to the Rincon Bluffs Preserve property that is located immediately adjacent to the western end of the trail, which also would be available for recreationalists to access the trail at this point. It should also be noted that the proposed trail would close a gap in the existing regional bicycle path system, thus allowing access to the trail for pedestrians and cyclists without the need for vehicular use and reducing potential parking demands. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR, and therefore, no further response is required.

S3-7 The commenter suggests that all issues identified in this letter (see responses S3-1 through S3-6, above), should be analyzed for each proposed alternative, to ensure that adverse impacts to coastal resources are avoided to the maximum extent feasible, and that unavoidable impacts are minimized and mitigated.

Per CEQA Guidelines Section 15126.6(d), an EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. (*County of Inyo v. City of Los Angeles* (1981) 124 Cal.App.3d 1). The analysis of the project did not identify any unavoidable significant impacts, which is the paramount consideration for the development of alternatives to the proposed action. However, given potentially significant impacts were identified, the EIR included four distinct alternatives to the project, each with an intent to lessen or avoid the significant impacts of the proposal. Information on each alternative, including involved grading quantities, has been provided in Section 6.0; the relative severity of each impact is also compared to the project, and the necessity under each alternative for implementation of mitigation measures identified for project impacts is identified. Therefore, per CEQA Guidelines Section

15126.6(d), a full analysis of each proposed alternative, including specific mitigation measures to address unique impacts of such an alternative, is not required.

S3-8 The commenter states that comments provided in this letter are preliminary and that more specific comments may be appropriate as the project develops. The commenter states that Coastal Commission staff requests notification of any future activity associated with the project or related projects.

The Coastal Commission will be notified of any future activity associated with the project. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR, and therefore, no further response is required.

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Comment Letter S4

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 28, 2021

Nick Bobroff
Principal Planner
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013
NickB@ci.carpinteria.ca.us

Subject: Comments on the Draft Environmental Impact Report for the Carpinteria Rincon Multi-Use Trail, SCH #2020060534, Santa Barbara County

Dear Mr. Bobroff:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) for the Carpinteria Rincon Multi-Use Trail (Project). The City of Carpinteria (City) is the lead agency preparing a DEIR pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et. seq.) with the purpose of informing decision-makers and the public regarding potential environmental effects related to the Project.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

S4-1

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & Game Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & Game Code, § 2050 *et seq.*) or the Native Plant Protection Act (NPPA; Fish & Game Code, § 1900 *et*

S4-2

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seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code. S4-2 Cont.

Project Location: The Project would extend from the eastern end of Carpinteria Avenue, in the City of Carpinteria, to Rincon Beach County Park, in unincorporated Santa Barbara County. The Carpinteria Bluffs Nature Preserve lies to the east of the Project and the Project is bordered by the Rincon Bluffs Preserve.

Project Description/Objectives: The proposed Project includes the construction of a paved 16-foot-wide trail (10-foot-wide path with 3-foot-wide paved shoulder along both sides); an approximately 2,800-feet-long clear-span bridge over the Union Pacific Railroad alignment; parking facilities; fencing; signage; and, a storm drainage collection system, with new drain outlets to the ocean. The bridge would be approximately 160-feet-long, with a width of between 14-feet and 16-feet. S4-3

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Comment 1: Adequacy of CEQA-Evaluation for Rare Plants

Issue: The DIER states cliff malacothrix (*Malacothrix saxatilis var. saxatilis*), south coast branching phacelia (*Phacelia ramosissima var. austrolitoralis*), and woolly seablite (*Suaeda taxifolia*) plants will be impacted by the Project. The loss of locally rare species was not fully analyzed in the DEIR.

Specific impact: The removal of individuals of these three species will contribute to their local and overall decline.

Why impact would occur: The DEIR discloses the total number of individuals present but does not specify how many will be impacted by the project. The DEIR concluded impacts to these three species, with no mitigation proposed, would not be significant. The DEIR does not contain sufficient analysis to support this conclusion for the following rare plants: S4-4

- Cliff malacothrix is ranked 4.2 (fairly endangered in California), limited distribution by the California Native Plant Society (CNPS). There are only 18 recent (1980-present) observations of this plant documented in Santa Barbara County.
- South coast branching phacelia is ranked 3.2 (fairly endangered in California) by CNPS. This plant is known from only 39 records (1980-present) in Santa Barbara County.
- Woolly seablite is ranked 4.2 (fairly endangered in California) by CNPS. This plant is known from only 23 recent records (1980-present) in Santa Barbara County.

Many of the plants listed by the CNPS as California Rare Plant Rank 3 and 4 meet the definitions of the California Endangered Species Act of the California Fish and Game Code and are eligible for state listing. Many California Rare Plant Rank 3 and 4 plants are significant locally, and CDFW recommends that they be evaluated for impact significance during

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preparation of environmental documents relating to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380 (CEQA-rare). To assist botanists in evaluating California Rare Plant Rank 3 and 4 species for CEQA consideration the California Native Plant Society (CNPS) has prepared a technical memorandum titled *Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis* (https://www.cnps.org/wp-content/uploads/2020/02/crpr4_technical_memo.pdf).

This Project contains rare vegetation alliances and *The Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis* indicates List 4 plants that are associated with rare vegetation alliances should be fully evaluated in CEQA.

S4-4 Cont.

Evidence impact would be significant: The DEIR analysis does not acknowledge the limited number of occurrences of these plant species in Santa Barbara County. Given the limited number of occurrences for these species, the DEIR should acknowledge the significance of these impacts. For example, this Project would impact one of 18 occurrences of Cliff malacothrix documented in the last 40 years in the county and provide no mitigation for this impact. CDFW asserts impacting one of 18 known recent occurrences should be considered significant without mitigation.

This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

The Project may result in impacts to CEQA-rare species without including any specific avoidance and minimization measures

Given the current number of recent documented occurrences of each of these plants in Santa Barbara County, impacts to cliff malacothrix, south coast branching phacelia, and woolly seablite plants should be considered significant under CEQA unless they are clearly mitigated below a level of significance.

Inadequate avoidance, minimization, and mitigation measures for impacts to these CEQA-rare plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

S4-5

Recommendation #1: When analyzing the current range and extent of CNPS rank 3 and 4 plants, current status and trends for each species should be assessed in context to the local distribution and recent (last 20 years per the Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource *Impact Analysis* recommendations) population status.

S4-6

Comment 2: Mitigation for Impacts to Rare Plants

Issue: Mitigation that would replace individuals or occupied land directly impacted by the Project was not proposed.

S4-7

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Specific impact: The removal of individuals of these three species will contribute to their local and overall decline.

Why Impact Would Occur: Project implementation includes grading, vegetation clearing, trail/road construction, soil compaction, utilities construction, road maintenance, and other activities that may result in direct mortality, population declines, or local extirpation of vegetation communities.

Evidence impact would be significant: The DEIR does not provide any specific requirements to replace the number of cliff malacothrix, south coast branching phacelia, and woolly seablite plants impacted. CEQA Guidelines, sections 15070 and §15071 require the document to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

S4-7 Cont.

Mitigation Measure #1: CDFW recommends the DEIR include mitigation that addresses the loss of these individual plants as well as the land/habitat in which they grow. The specific habitat that supports rare plants, and the current density per acre of these plants, should be assessed when formulating mitigation strategies.

S4-8

Mitigation Measure #2: Given the current status of these rare plants, CDFW recommends the Project be redesigned to avoid impacts to these rare plant species. If avoidance cannot be achieved, CDFW recommends conserving a currently unprotected occurrence of these plant species, including a conservation easement and funding to manage the species in perpetuity. CDFW recommends due to the limited number of recent occurrences of cliff malacothrix (18) and woolly seablite (23) in Santa Barbara county, that the number of individuals as well as the acreage of land that supports them (density) be conserved at a 3:1 ratio. Given South coast branching phacelia has a slightly higher number of occurrences (39) in Santa Barbara County, CDFW recommends that the number of individuals as well as the acreage of land that supports them (density) be conserved at a 1.5:1 ratio.

Recommendation #1: Any mitigation for CEQA-rare plant impacts should include specific, measurable criteria for success. Monitoring for CEQA-rare vegetation communities should occur for a sufficient period to allow trends to be analyzed and demonstrate the occurrence is stable over time. No negative trend in CEQA-rare plant individuals (counted separately as flowering, seed set and non-flowering individuals), and no positive trend in non-native plant cover should occur over the monitoring period.

S4-9

Recommendation #2: When considering mitigation options, CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.

Transplantation is rarely successful in establishing rare plants at new locations. A study by CDFW (Fiedler, 1991) found that, even under optimum conditions with ample time for planning,

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transplantation was effective in only 15% of cases studied. Other reviews (e.g. Allen, 1994; Howald, 1996) have found similar problems digging up, transporting, and replanting plants, bulbs, rhizomes or seeds imposes a tremendous stress on a plant. They can easily die in the process. Scientifically-tested, reliable methods for salvage, propagation, translocation or transplantation are not available for many rare species. Transplantation can also cause problems at the target site. Genetic contamination can occur if the plant being transplanted can exchange genetic material with local taxa. Disturbance at the target site may facilitate invasion by non-native invasive species (CNPS, 1991).

Recommendation #3: CDFW recommends a Documented Conservation Seed Collection of the impacted rare plant species be made and deposited at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when seed from CNPS ranked 1-4 plants, CEQA-rare, and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. This collection preserves the genome, and any unique alleles that are present in any given occurrence, for future study and reintroduction projects.

Funding should be provided to maintain the collection, as well as conduct periodic germination and viability tests, in perpetuity. Documented conservation collections (long-term storage) are important for conserving rare, gene pool representative germplasm designated for long-term storage to provide protection against extinction and as a source material for future restoration and recovery.

S4-9 Cont.

Recommendation #4: A weed management plan should be developed for the Project area and implemented during the duration of this Project. On-going soil disturbance promotes establishment and growth of non-native weeds. As part of the Project, non-native weeds should be prevented from becoming established. The Project area should be monitored via mapping for new introductions and expansions of non-native weeds.

S4-10

Comment 3: Mitigation for Sensitive Vegetation Communities

Issue: The DEIR states approximately 3.55 acres of CDFW/county/city sensitive vegetation community habitats would be temporarily impacted due to construction and an additional 0.76-acres CDFW/county/city habitats would be permanently impacted due to construction. The DEIR states the temporary impacts would be mitigated at a 1:1 ratio and permanent impact at a 3:1 ratio. The DEIR states a future plan will be prepared to further address this mitigation.

Sensitive vegetation communities are a defined by their dominant plant species, such as California Brittle Bush –Ashy Buckwheat Scrub Alliance and have a separate ranking system than that of individual rare plants, which are covered in Comment 1, above.

CDFW is concerned the 1:1 ratio for “temporary impacts” may not be adequate.

S4-11

Specific Impact: CEQA Guidelines sections 15070 and 15071 require the DEIR to analyze if the Project may have a significant effect on the environment as well as review if the Project will “avoid the effect or mitigate to a point where clearly no significant effects would occur.”

The DEIR states the 1:1 mitigation may occur on “other properties” due to the lack of available area on the Project site for mitigation. Due to the rare nature of these vegetation communities, and the land which supports them, CDFW is concerned about the deferral of mitigation to other,

S4-12

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unidentified properties that may or may not be suitable or even available for appropriate mitigation. Given that most coastal bluff habitat is rare in nature, it is unclear if rare habitats at other properties will be impacted to provide mitigation for this Project.

The DEIR does not indicate if the rare plants mentioned in Comment 1 above, will be impacted by trying to fit all the required sensitive vegetation community mitigation on non-impacted parts of the Project site. The DEIR should disclose if any sensitive vegetation community mitigation will occur within or around areas occupied by cliff malacothrix, south coast branching phacelia, and woolly seablite plants.

S4-12 Cont.

In order to analyze if a project may have a significant effect on the environment, the location, species composition, and success criteria of proposed mitigation information is necessary to allow the Department to comment on alternatives to avoid impacts, as well assess the adequacy of the mitigation proposed.

S4-13

Why Impact Would Occur: Project implementation includes grading, vegetation clearing, trail/road construction, soil compaction, utilities construction, road maintenance, and other activities that may result in direct mortality, population declines, or local extirpation of vegetation communities.

Evidence Impact would be significant: Removing a perennial plant from the ground is a permanent impact resulting in its death, replacing it is considered mitigation. All impacts that remove perennial plants from the ground should be considered under the same lens whether the restoration occurs in the same area as the impacts or in new areas. Both scenarios may or may not produce successful new individuals or the targeted vegetation community assemblage. Both scenarios result in: 1) the loss of established individuals; and, 2) the replacement planting of new individuals. Both scenarios incur temporal losses as well as intensive management to ensure the desired habitat is re-created. Both are at risk for failure and are a community of same-aged individuals lacking the age stratification and complexity of the original habitat.

Inadequate avoidance, minimization, and mitigation measures for impacts to these CEQA-rare vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

S4-14

Mitigation Measure #1: CDFW recommends avoiding any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. CDFW recommends all impacts to the S3 sensitive vegetation communities (California Brittle Bush –Ashy Buckwheat Scrub Alliance, Encelia californica Association and Lemonade Berry Scrub Alliance, Rhus integrifolia Association) (0.59-acres) should be mitigated at a 4:1 ratio and impacts to the S4 and S5 communities (3.73-acres) be mitigate at a 2:1 ratio due to the overall decline of coastal bluff/scrub habitats region wide.

S4-15

All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a

S4-16

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recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968). S4-16 Cont.

Mitigation Measure #2: Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in MCV2, ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meets the alliance membership requirements. S4-17

CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant. S4-18

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife resources, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (California Code of Regulations, tit. 14, § 753.5; Fish and Game Code, § 711.4; Public Resources Code, § 21089). S4-19

Conclusion

CDFW appreciates the opportunity to comment on the DEIR to assist the City of Carpinteria in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Kelly Schmoker, Senior Environmental Scientist, at (626) 335-9092 or by email at Kelly.Schmoker@wildlife.ca.gov. S4-20

Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

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ec: CDFW
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CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources			
	Mitigation Measure	**Timing**	**Responsible Party**
REC-Bio-1-CEQA-Rare Plants	When analyzing the current range and extent of CNPS rank 3 and 4 plants, current status and trends for each species should be assessed in context to the local distribution and recent (last 20 years per the Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource *Impact Analysis* recommendations) population status.	Prior to Finalizing the EIR	City of Carpinteria
MM-Bio-1-CEQA-Rare Plants	CDFW recommends the DEIR include mitigation that addresses the loss of these individual plants as well as the land/habitat in which they grow. The specific habitat that supports rare plants, and the current density per acre of these plants, should be assessed when formulating mitigation strategies.	Prior to Finalizing the EIR	City of Carpinteria
MM-Bio-2-CEQA-Rare Plants	Given the current status of these rare plants, CDFW recommends the Project be redesigned to avoid impacts to these rare plant species. If avoidance cannot be achieved, CDFW recommends conserving a currently unprotected occurrence of these plant species, including a conservation easement and funding to manage the species in perpetuity. CDFW recommends due to the limited number of recent occurrences of cliff malacanthix (18) and woolly seablite (23) in Santa Barbara county, that the number of individuals as well as the acreage of land that supports them (density) be conserved at a 3:1 ratio. Given South coast branching phacelia has a slightly higher number of occurrences (39) in Santa Barbara County, CDFW recommends that the number of individuals as well as the acreage of land that supports them (density) be conserved at a 1.5:1 ratio.	Prior to Finalizing the EIR	City of Carpinteria
MM-Bio-3-CEQA- Rare Plants	Any mitigation for CEQA-rare plant impacts should include specific, measurable criteria for success. Monitoring for CEQA-rare vegetation communities should occur for a sufficient period to allow trends to be analyzed and demonstrate the occurrence is stable over time. No negative trend in CEQA-rare plant individuals (counted separately as flowering, seed set and non-flowering individuals), and no positive trend in non-native plant cover should occur over the monitoring period.	Prior to Finalizing the EIR	City of Carpinteria
REC-Bio-2-CEQA-Rare Plants	Any mitigation for CEQA-rare plant impacts should include specific, measurable criteria for success. Monitoring for CEQA-rare vegetation communities should occur for a sufficient period to allow trends to be analyzed and demonstrate the occurrence is stable over time. No negative trend in CEQA-rare plant individuals (counted separately as	Prior to Finalizing the EIR	City of Carpinteria

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	flowering, seed set and non-flowering individuals), and no positive trend in non-native plant cover should occur over the monitoring period.		
REC-Bio-3-CEQA-Rare Plants	When considering mitigation options, CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant. Transplantation is rarely successful in establishing rare plants at new locations. A study by CDFW (Fiedler, 1991) found that, even under optimum conditions with ample time for planning, transplantation was effective in only 15% of cases studied. Other reviews (e.g. Allen, 1994; Howald, 1996) have found similar problems digging up, transporting, and replanting plants, bulbs, rhizomes or seeds imposes a tremendous stress on a plant. They can easily die in the process. Scientifically-tested, reliable methods for salvage, propagation, translocation or transplantation are not available for many rare species. Transplantation can also cause problems at the target site. Genetic contamination can occur if the plant being transplanted can exchange genetic material with local taxa. Disturbance at the target site may facilitate invasion by non-native invasive species (CNPS, 1991).	Prior to Finalizing the EIR	City of Carpinteria
REC-Bio-4-CEQA-Rare Plants	CDFW recommends a Documented Conservation Seed Collection of the impacted rare plant species be made and deposited at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when seed from CNPS ranked 1-4 plants, CEQA-rare, and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. This collection preserves the genome, and any unique alleles that are present in any given occurrence, for future study and reintroduction projects. Funding should be provided to maintain the collection, as well as conduct periodic germination and viability tests, in perpetuity. Documented conservation collections (long-term storage) are important for conserving rare, gene pool representative germplasm designated for long-term storage to provide protection against extinction and as a source material for future restoration and recovery.	Prior to Finalizing the EIR	City of Carpinteria
REC-Bio-5-CEQA-Rare Plants	A weed management plan should be developed for the Project area and implemented during the duration of this Project. On-going soil disturbance promotes establishment	Prior to Finalizing the EIR	City of Carpinteria

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	and growth of non-native weeds. As part of the Project, non-native weeds should be prevented from becoming established. The Project area should be monitored via mapping for new introductions and expansions of non-native weeds.		
MM-Bio-4-CEQA- Rare Plants Sensitive Vegetation Communities	CDFW recommends avoiding any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. CDFW recommends all impacts to the 5 sensitive vegetation communities (4.32-acres) should be mitigated at a 3:1 ratio due to the overall decline of coastal bluff/scrub habitats region wide. All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).	Prior to Finalizing the EIR	City of Carpinteria
MM-Bio-5-CEQA Sensitive Vegetation Communities	Success criteria should be based on the composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basil and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in MCV2, ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meets the alliance membership requirements. CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies	Prior to Finalizing the EIR	City of Carpinteria

	have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA		

Response to Comment Letter S4

California Department of Fish and Wildlife
Erinn Wilson-Olgin
April 28, 2021

S4-1 The commenter provides an introduction, background information, and gives thanks for the opportunity to comment; however, the comment does not pertain to the adequacy of the EIR.

No response needed.

S4–2 The commenter identifies themselves, their jurisdiction, and divulges their responsibility by law to provide, as available, biological expertise during public agency environmental review efforts. The commenter describes that they are also submitting comments as a Responsible Agency under CEQA. The commenter describes that they have regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority, and recommends the City obtain appropriate authorization under the Fish and Game Code. Additionally, if the project may result in "take" of species protected under the California Endangered Species Act or the Native Plant Protection Act, the commenter again recommends the City obtain appropriate authorization under the Fish and Game Code. The comments do not pertain to the adequacy of the EIR.

No response needed.

S4-3 The commenter acknowledges the project location and project description/objectives. The commenter explains that their comments and recommendations are offered to assist the City in identifying the project's impacts and mitigation on fish and wildlife (biological) resources. The comments do not pertain to the adequacy of the EIR.

No response needed.

S4-4 The commenter raises the issue of adequacy of the CEQA evaluation for rare plants which lacks the number of individuals that would be impacted and falls short of a sufficient analysis on the significance of the impacts on each species. The commenter recommends that evaluating California Native Plant Society (CNPS) plants listed as California Rare Plant Rank (CRPR) 3 and 4 be evaluated for impact significance during preparation of the CEQA EIR. The commenter includes the CEQA Guidelines, §15125 (c) and/or §15380, for which the rare plants should be evaluated. The three plant species: cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*; CNPS CRPR 4.2), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*; CNPS CRPR 3.2), and woolly seablite (*Suaeda taxifolia*; CNPS CRPR 4.2) are not considered locally rare in Santa Barbara County as they are not included on the Rare Plants of Santa Barbara County list (Wilken 2018); however they are considered locally rare in Ventura County as they are included on the Checklist of Ventura County Rare Plants (Magney 2020).

Section 3.3 Biological Resources has been updated to include a resource impact analysis for each of these plant species, notwithstanding that the entire project is located within Santa Barbara County. Research was conducted to define CEQA Guidelines §15125 (c) and/or §15380 as included below.

CEQA Guidelines §15125 Environmental Setting (c) states:

Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project. The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed, and it must permit the significant effects of the project to be considered in the full environmental context.

CEQA Guidelines §15380 Endangered, Rare, or Threatened Species states:

(a) "Species" as used in this section means a species or subspecies of animal or plant or a variety of plant.

(b) A species of animal or plant is:

(1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or

(2) "Rare" when either:

(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or

(B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.

(c) A species of animal or plant shall be presumed to be endangered, rare, or threatened, as it is listed in:

(1) Sections 670.2 or 670.5, Title 14, California Code of Regulations; or

(2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.

(d) A species not included in any listing identified in subdivision (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b).

(e) This definition shall not include any species of the Class Insecta which is a pest whose protection under the provisions of CEQA would present an overwhelming and overriding risk to man as determined by:

(1) The Director of Food and Agriculture with regard to economic pests; or

(2) The Director of Health Services with regard to health risks.

Neither Section 670.2, Title 14 California Code of Regulations nor Section 670.5, Title 14 California Code of Regulations include cliff malacothrix, south coast branching phacelia, or woolly seablite.

Neither Section 17.11, Title 50 Code of Federal Regulations nor Section 17.12 Code of Federal Regulations include cliff malacothrix, south coast branching phacelia, or woolly seablite.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 3 and 4 plant species based on the number of documented occurrences in Santa Barbara County and Ventura County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate.

S4-5 The commenter raises the issue that the DEIR does not acknowledge the limited number of occurrences of the CNPS CRPR 3 and 4 species in Santa Barbara County and that this information is needed to assess the significance of the specific impact relative to each species.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each CNPS CRPR 3 and 4 plant species based on the number of documented occurrences in Santa Barbara County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate.

S4-6 The commenter recommends that when analyzing the current range and extent of CNPS CRPR 3 and 4 plants, current status and trends for each species should be assessed in context with the local distribution and population status in the last 20 years.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each CNPS CRPR 3 and 4 plant species based on the number of documented occurrences in Santa Barbara County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate.

S4-7 The commenter raises the issue that the DEIR does not provide any specific requirements to replace the number of cliff malacothrix, woolly seablite, and south coast branching phacelia individuals impacted.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each CNPS CRPR 3 and 4 plant species based on the number of

documented occurrences in Santa Barbara County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate. Since the evaluation for impact significance for each CNPS CRPR 3 and 4 plant species concluded that impacts would be less than significant, no mitigation is required for CNPS CRPR 3 and 4 plant species.

S4-8 The commenter recommends the DEIR include mitigation that addresses the loss of CNPS CRPR 3 and 4 plant species as well as the land/habitat in which they grow.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each CNPS CRPR 3 and 4 plant species based on the number of documented occurrences in Santa Barbara County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate. Since the evaluation for impact significance for each CNPS CRPR 3 and 4 plant species concluded that impacts would be less than significant, no mitigation is required for CNPS CRPR 3 and 4 plant species. Mitigation is included for native coastal bluff scrub and coastal scrub vegetation communities.

S4-9 The commenter recommends the project be redesigned to avoid impacts to CNPS CRPR 3 and 4 plant species. If avoidance cannot be achieved, the commenter recommends conserving a currently unprotected occurrence of these plant species, including a conservation easement and funding to manage the species in perpetuity.

This comment has been addressed in Section 3.3 Biological Resources including an updated evaluation for impact significance for each CNPS CRPR 3 and 4 plant species based on the number of documented occurrences in Santa Barbara County, the type locality, occurrences at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has sustained heavy losses (declining), occurrences exhibiting unusual morphology or occurring on unusual substrates, species maintained on Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service sensitive species lists, and taxa associated with a habitat that is declining in California at a significant rate. Since the evaluation for impact significance for each CNPS CRPR 3 and 4 plant species concluded that impacts would be less than significant, no mitigation is required for CNPS CRPR 3 and 4 plant species.

S4-10 The commenter recommends a weed management plan should be developed for the project area and implemented during the duration of the project.

Section 3.3 Biological Resources includes MM-BIO-4, a Habitat Mitigation and Monitoring Plan that includes a detailed maintenance plan to include removal of invasive non-native species within areas with native plant restoration. Since the project includes impacts to areas not included in the Habitat

Mitigation and Monitoring Plan, a new mitigation measure MM-BIO-6 Weed Management Plan was added to Section 3.3 Biological Resources to address invasive weed establishment and spread.

S4-11 The commenter raises concern that the 1:1 ratio for "temporary impacts" may not be adequate.

This comment has been addressed in Section 3.3 Biological Resources including Table 3.3-5 and associated text including required mitigation by updating all impacts to permanent impacts. It was determined that the impacts previously defined as temporary were more permanent in nature when associated with impacts to vegetation communities; therefore, all project impacts were updated to be permanent impacts. Furthermore, mitigation ratios for impacts to S3 native vegetation communities was updated to 4:1 and mitigation ratios for impacts to S4 and S5 native vegetation communities were updated to 2:1. These mitigation ratios apply to the associated vegetation communities and are not altered for on-site versus off-site mitigation native habitat restoration.

S4-12 The commenter raises a concern regarding the potential future need for mitigation outside of the project boundaries, and the lack of specific identification of other non-project properties that may or may not be suitable or even available for appropriate mitigation. Additionally, the commenter raised concerns that the previously mentioned CNPS CRPR 3 and 4 plant species may be impacted by establishing habitat restoration mitigation on non-impacted parts of the project site.

This comment has been addressed in Section 3.3 Biological Resources within MM-BIO-5 Habitat Mitigation and Monitoring Plan. Text has been updated to state that prior to identifying habitat restoration mitigation areas, both within the project area and adjacent lands, the habitat shall be surveyed for sensitive vegetation communities and special-status plant species, to ensure avoidance of impacts during habitat restoration implementation. Additionally, potential adjacent mitigation lands shall be assessed to ensure sites are suitable and appropriate for implementation of habitat restoration for the impacted native vegetation communities.

S4-13 The commenter states that to analyze if a project may have a significant effect on the environment, the location, species composition, and success criteria of proposed mitigation information is necessary to allow the commenter to comment on alternatives to avoid impacts, as well as assess the adequacy of mitigation proposed.

This comment has been addressed in Section 3.3 Biological Resources within MM-BIO-5 Habitat Mitigation and Monitoring Plan. The text has been updated to state that prior to grading, the project related native coastal bluff scrub and coastal scrub vegetation communities shall be assessed by vegetation community type for species composition, associated plant cover, and dominant plant species. This project site native vegetation community data shall be used to define performance standards for native habitat restoration by vegetation community type and for non-native plant species.

S4-14 The commenter states that removing a perennial plant from the ground is a permanent impact resulting in its death, replacing it is considered mitigation. All impacts that remove perennial plants from the ground should be considered under the same lens whether the restoration occurs in the same area as the impacts or in a new area.

This comment has been addressed in Section 3.3 Biological Resources including Table 3.3-5 and associated text including required mitigation by updating all impacts to permanent impacts. It was

determined that the impacts previously defined as temporary were more permanent in nature when associated with impacts to vegetation communities; therefore, all project impacts were updated to be permanent impacts. Furthermore, the mitigation ratio for impacts to S3 native vegetation communities was updated to 4:1 and the mitigation ratio for impacts to S4 and S5 native vegetation communities was updated to 2:1. These mitigation ratios apply to the associated vegetation communities and are not altered for on-site versus off-site mitigation native habitat restoration.

S4-15 The commenter recommends avoiding any sensitive natural communities found on the project. If avoidance is not feasible, the project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. The commenter recommends all impacts to the S3 sensitive vegetation communities (California Brittle Bush – Ashy Buckwheat Scrub Alliance, Encelia californica Association and Lemonade Berry Scrub Alliance, Rhus integrifolia Association) should be mitigated at a 4:1 ratio and impacts to the S4 and S5 communities be mitigated at a 2:1 ratio due to the overall decline of coastal bluff/scrub habitat region wide.

This comment has been addressed in Section 3.3 Biological Resources including Table 3.3-5 and associated text including required mitigation by updating all impacts to permanent impacts. It was determined that the impacts previously defined as temporary were more permanent in nature when associated with impacts to vegetation communities; therefore, all project impacts were updated to be permanent impacts. Furthermore, mitigation ratios for impacts to S3 native vegetation communities were updated to 4:1 and mitigation ratios for impacts to S4 and S5 native vegetation communities were updated to 2:1. These mitigation ratios apply to the associated vegetation communities and are not altered for on-site versus off-site mitigation native habitat restoration.

S4-16 The commenter states that all revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The commenter recommends that the restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. The commenter recommends that the areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, § 65965-65968).

This comment has been addressed in Section 3.3 Biological Resources MM-BIO-5 Habitat Mitigation and Monitoring Plan as this is a restoration plan. The text has been updated to state that the Habitat Mitigation and Monitoring Plan shall be approved by CDFW prior to any ground disturbance. The Habitat Mitigation and Monitoring Plan includes requirements for restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals.

S4-17 The commenter recommends that the success criteria should be based on the specific composition of the vegetation communities being impacted. The commenter recommends that the success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. The commenter recommends that in the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat.

The commenter recommends that the success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by the commenter, CDFW. The commenter recommends that success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in MCV2, ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meet the alliance membership requirements.

This comment has been addressed in Section 3.3 Biological Resources MM-BIO-5 Habitat Mitigation and Monitoring Plan. The text has been updated to state that the success criteria shall include percent cover (both basal and vegetative), species diversity, density, and abundance. This project site native vegetation community data shall be used to define performance standards for native habitat restoration by vegetation layers (tree, shrub, grass, and forb) for each vegetation community type and for non-native plant species. The text remains that the restoration areas shall be irrigation free for at least 3 years and the performance standards have remained stable (no negative trend for richness/ diversity/ abundance/ cover of native species and no positive trend for invasive/non-native cover for each vegetation layer) for at least 3 years.

S4-18 The commenter states that they, CDFW, do not recommend topsoil salvage or transplantation as viable mitigation options.

Comment noted. Proposed mitigation does not include topsoil salvage or transplantation.

S4-19 The commenter states that the project, as proposed, would have an impact on fish and/or wildlife resources, and assessment of filing fees is necessary. The fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by the commenter, CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (California Code of Regulations, tit. 14, § 753.5; Fish and Game Code, § 711.4; Public Resources Code, § 21089).

Comment noted. No response necessary.

S4-20 The commenter states that they, CDFW, appreciate the opportunity to comment on the DEIR to assist the City of Carpinteria in identifying and mitigating project impacts on biological resources.

Comment noted. No response necessary.

Comment Letter T1

Hello Nick,

NCTC supports the local tribal governments recommendations, thank you. T1-1

Fred Collins
NCTC

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Response to Comment Letter T1

Northern Chumash Tribal Council
Fred Collins
April 1, 2021

T1-1 The commenter indicates that the Northern Chumash Tribal Council supports the recommendations identified by local tribal governments.

The City acknowledges receipt of the comment. However, the comment does not address the adequacy or completeness of analysis provided in the EIR. Therefore no response is necessary.

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Comment Letter O1

Friends of Bates Beach

A Non-Profit California Corporation
1072 Casitas Pass Road Suite 427 Carpinteria CA 93013
Email: friends@friendsofbatesbeach.org
Website: www.friendsofbatesbeach.org

April 26, 2021

Mr. Nick Bobroff, Principal Planner
Community Development Department
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013

Re: Rincon Trail Environmental Impact Report

Dear Mr. Bobroff:

I watched the online public hearing of April 13, 2021 concerning the recently published Environmental Impact Report (March 2021) for the proposed Rincon Trail to be built just south of Carpinteria. I have a few questions and concerns I would like to bring to the Planning Committee's attention. O1-1

1. Draining onto the Beach

These references are Slide 9 of the presentation and section 2.7.3 and 3.8.1 of the EIR Report

While the report concludes the five drainage pipes will adequately remove any storm water from the proposed trail, the report is silent about the effect of the water on the beach below. The conversation about an hour into the hearing did not consider you may be creating stream gullies across the sand to the water from the end of the pipes. We believe there is a significant possibility for the Bates Beach (northern) section to be split into several partitions over time from erosion cause by this water runoff, thus harming the enjoyment of that area by future beachgoers. While we concede that in the years when we experience heavier winter storms, sand does rebuild the beach's sand there, we are concerned there is no discussion about how the long-term "gullification" of the beach cannot be mitigated by this winter sand. We don't want to lose our future beach use for the convenience of the drainage from above. O1-2

2. Removal of Concrete Brik-Brak



Also, in previous proposal versions, the concrete "brik-brak" near drain #5 was slated to be removed as a safety hazard since it is the result of a landslide from above several years ago (see photo, left). It butts up against the retaining wall and eventually we feel it will break through that wall due to further erosion onto the beach. I see no mention of this in the report and the testimony of Mr. Roberts at the hearing indicates this safety hazard is going to be left in place. We think this is a mistake and we ask that it be removed since all the heavy equipment necessary to do so will be right there anyway during the trail construction. O1-3

3. Parking Lot ADA Non-Compliance

There is no mention in the EIR report about the potential danger at the terminus of the Alternative 3 Trail, the one most of the committee seems to favor, although there were a few comments made at the hearing about this. This trail alternative empties into the North Rincon (Bates) Beach parking lot, which, when filled, holds approximately 150 cars. During the summer, this lot is filled with overflow spilling into illegal areas and angles and also onto Bates Road below. Anyone who parks there will testify how hard it is to see oncoming or passing cars or bicyclists driving past when pulling out of these right-angled parking spots. Near misses are common. With the anticipated additional traffic from the trail through the parking lot we feel there will be an increased number of accidents and not just near misses. O1-4

Our recommendation: the parking lot be restriped so cars park at oblique angles instead of 90 degrees, in such a way as to increase visibility for drivers to see what is behind them. Also, that a designated bike lane be placed against the north side of the parking lot to help keep those exiting the Trail physically separate from the parked cars. This will have the net effect of slightly reducing the number of parking spaces, but it can be mitigated by installing an Uber/Lift pickup area near the restrooms so people can use alternative transport to the beach. O1-5

Also as has been noted in a previous hearing, the parking lot is at the top of a steep hill, one which exceeds the recommended slope angle for ADA compliance. The trail is supposed to be ADA-accessible with the idea that the parking lot will act as the connector between the Carpinteria part of the trail and the Ventura County section of the trail that begins at the bottom of the parking lot hill. In our opinion, the steep angle of the hill is unsafe for bikes, skateboards, and people using other motorized scooters who may want to continue on the trail from Carpinteria to Ventura. They wil pick up speed and be a danger to traffic at the intersection where the parking lot meets Bates Road. We have no suggestion for mitigation but feel someone smarter than us address this concern. O1-6

We point out that the Alternative 4 trail avoids all parking lot dangers, even though we see the committee members at the hearing wanting to prioritize the ability to see the ocean from the second half of the Alternative #3 option as its highest priority. Therefore, these safety concerns must be addressed. O1-7

We wish to add, however, that the EIR (page 2.15) states "Vehicle parking at the trailhead on the western end would be provided via an existing dirt lot adjacent to the Carpinteria Avenue terminus; no improvements to the informal dirt parking lot are proposed." This might solve the problem of reduced parking slots in the Rincon Beach parking lot, except that we see the city is considering using this area for an "auto camp" of permanent rental trailers. This park is not part of the Trail discussion, but we feel its possible intrusion must be considered as part of the parking lot discussion. O1-8

4. Bridge Safety

This references Section 2.7.2 of the EIR and specifically page 2-12.

The EIR says: *"...the bridge for the Carpinteria Rincon Trail will have some similar characteristics, except that UPRR requires high "safety fences" for the full length of the bridge to protect the trains from potential objects thrown from the bridge platform."*

There is no further description of these "high" fences, and we have a question about potential suicides from the bridge to the passing trains below. Can the committee please provide more complete information about this fencing and if they are designed to prevent any kind of climbing or jumping as well as the indicated tossing of objects onto the tracks below? O1-9

5. Wind Pattern Analysis and the Paragliders

This references Slide 19 of the presentation and also pages 3.3.6 of the EIR and several public speakers.

We sympathize with our friends in the paraglider community who claim that the loss of up to 30% of the wind uplift by Alternative #3 will effectively destroy their ability to exist at this beach. The testimony at the hearing downplayed this conclusion, as I heard at least one member of the panel claim the paragliders can operate safely with winds as low as a 10 to 20% loss (the EIR does not say that). The committee seems determined to ignore these hobbyists in favor of the hikers and bikers and the ocean view. We are sad to see this as the paragliders are a tradition at Bates Beach and definitely add to the ambiance and cultural heritage of the community. We are sorry to see the committee take their concerns so lightly. We want to go on record as supporting our flying friends and hope some compromise can be found. O1-10

In conclusion we appreciate the ability to comment on the findings of the Environmental Impact Report and we hope our concerns will be address by the committee at a future hearing. O1-11

Sincerely,



Gary Mussell
Director, Friends of Bate Beach

Response to Comment Letter O1

Friends of Bates Beach
Gary Mussell, Director
April 26, 2021

O1-1 The City acknowledges the comment as an introduction to comments that follow. No further response is required.

O1-2 The commenter expresses concern regarding effects of the water on the beach from the five drainage pipes that will be used to remove stormwater from the proposed trail and concerns regarding creation of stream gullies across the sand to the water from the end of the pipes. The commenter expresses concern that there is no discussion about long-term gullification associated with erosion.

Comment is acknowledged. The creation of drainage gullies across the beach are not anticipated from the project, due to several reasons. First, the drainage area of the trail surface is small compared to the area within the project alignment, and therefore run-off volumes from the trail surface would be limited. Second, the southern portion of the trail would be served by 5 separate drain outlets, thereby dividing the entire volume of trail run-off into one fifth for each of the outlets. Third, each of the drain outlets would have rock rip-rap at the openings to dissipate the energy of the released water, avoiding the creation of gullies on the beach face. Finally, surface water run-off from the trail would primarily occur in winter, when the beach profile is regularly reworked and replenished by winter storm wave action.

O1-3 The commenter suggests that the existing concrete brik-brak should be removed, as it is an existing safety hazard.

Comment is acknowledged; however, the concrete debris mentioned in the comment is associated with a former state highway, and it is not the responsibility of the project to remove these remnants.

O1-4 The commenter expresses safety concerns regarding Alternative 3, associated with cyclists traversing the parking lot located at the eastern terminus of the trail alignment.

It is assumed that the commenter is referencing both the proposed project and Alternative 3, which each involve termination of the proposed trail at the western end of the Rincon Beach County Park parking lot. As discussed in Section 3.12 (Transportation) of the Draft EIR, the City's consulting traffic engineer determined there would not be a significant hazard associated with introducing additional cyclists traversing the Rincon County Beach Park parking lot. Vehicle maneuvers in the parking lot involve low speeds, and signage in the parking area would alert drivers to cyclists passing through the area. Signage at the terminus of the trail leading into the parking area would also alert cyclists to reduce speed and employ appropriate caution when riding through the parking lot.

O1-5 The commenter provides recommendations for improving safety.

The City acknowledges and appreciates the commenter's suggestions regarding bicycle safety. See Response O1-4 (above) for a response to bicycle safety concerns. No further response is required

because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

01-6 The commenter expresses concern regarding ADA compliance associated with the proposed project.

As discussed in Section 2.5 of the EIR, the existing benched slope with steep surface angle would be regraded in order to achieve compliance with ADA pathway slope requirements, making the project consistent with ADA requirements. It should be noted the refined Alternative 3 would incorporate a trail surface slope that marginally exceeds the maximum acceptable slope of 5 percent (the trail would have a slope of 6 percent) for a 690 foot portion of the segment south of the UPRR alignment. This marginally steeper slope surface may not result in a practical limitation to access by mobility challenged individuals, and an exception may be available in accordance with U.S. Access Board (USAB) guidelines for the 690-foot trail segment exceeding 5%, such that the entire trail could potentially achieve ADA compliance.

01-7 The commenter expresses support for Alternative 4, in particular relating to safety issues. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR.

The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

01-8 The commenter states that vehicle parking provided at the trailhead on the western end may solve the problem of reduced parking. However, the commenter expresses concern that the City is considering this location for an auto camp of permanent rental trailers and suggests that possible intrusion is considered in the EIR.

Comment is acknowledged. The informal dirt parking area at the eastern terminus of Carpinteria Avenue is within the City-owned right-of-way for Carpinteria Avenue and would not be affected by potential future development of an auto camp on the adjacent privately-owned parcel.

01-9 The commenter expresses safety concerns regarding the proposed bridge, especially regarding climbing, jumping, and tossing objects into the tracks below.

As a facility constructed within their right-of-way, UPRR has approval authority for the final bridge design and will ensure it is consistent with their safety standards regarding the expressed concerns of the commenter. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

01-10 The commenter expresses concern regarding the loss of 30 percent of wind uplift and expresses support for the soaring community and their inability to use this site once the project is approved.

Please refer to Global Response GR1.

01-11 The commenter provides a concluding statement.

The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter L1

SBCAG
santa barbara county association of governments

260 North San Antonio Road., Suite B ▪ Santa Barbara, CA ▪ 93110
Phone: 805/961-8900 ▪ Fax: 805/961-8901 ▪ www.sbcag.org

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April 15, 2021

City of Carpinteria
c/o: Matt Roberts, Parks & Recreation Director
5775 Carpinteria Avenue
Carpinteria, CA 93013

Subject: **Support of the Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) as the environmentally superior alternative in the Carpinteria Rincon Multi-Use Trail Draft Environmental Impact Report (DEIR).**

Dear Mr. Roberts:

Thank you for the opportunity to review and provide comment on the DEIR for the Carpinteria Rincon Multi-Use Trail project (project). SBCAG appreciates its partnership with the City of Carpinteria to advance this project to complete a long-standing gap in the statewide California Coastal Trail, improve public safety, and enhance non-vehicular travel alternatives along the Highway 101 corridor that connects communities and regional coastal resources. SBCAG respectfully submits the following comments in support of Steeper Slopes/Reduced Earthwork Alternative (Alternative 3), as the environmentally superior alternative as expressed in the project's DEIR. L1-1

SBCAG agrees that Alternative 3 meets stated project objectives while reducing overall environmental impacts, including reducing the volume of earthwork required for the project i.e., 15,000 less cubic yards (approximately an eight percent reduction) translating to fewer haul trucks and greenhouse gas emissions during construction. It also reduces construction-related noise impacts and has less of an impact upon recreational options, specifically in regard to concerns expressed for paragliding and hang-gliding activities occurring on private properties above the trail alignment. In addition to the DEIR, SBCAG recognizes that Alternative 3 reflects a design that has advanced and gained approvals from Union Pacific Railroad, California Public Utilities Commission, and other stakeholders. It is also the only alternative that can be delivered within the timeline for construction to meet a funding deadline of June 2022, since other alternatives are more preliminary in nature and would require significant re-design efforts. L1-2

Again, SBCAG appreciates the opportunity to provide comments on the DEIR and looks forward to reviewing the Final Environmental Impact Report. SBCAG has long valued coordination with partner agencies like the City of Carpinteria to bring about important multi-use opportunities in our region and along the Highway 101 corridor. If you have any questions regarding this response, please call Fred Luna, SBCAG Director of Project Delivery and Construction, at (805) 961-8926 or by email at fluna@sbcag.org. L1-3

Sincerely,

Marjie Kirn, Executive Director
Santa Barbara County Association of Governments

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Response to Comment Letter L1

Santa Barbara County Association of Governments
Marjie Kirn
April 15, 2021

L1-1 The City acknowledges the comment as an introduction to comments that follow. No further response is required.

L1-2 The commenter provides general support for Alternative 3 and agrees that it would reduce potential environmental impacts. The comment does not raise any issue concerning the adequacy of the Draft EIR. No response is required.

L1-3 The City acknowledges the comment as conclusionary remarks. No further response is required.

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Comment Letter L2

Hi Nick –

The Carpinteria Sanitary District commented on this project in late 2019. Refer to the attached letter, which we suggest be added to the record for CEQA purposes. Based on the critical nature of sewer infrastructure in the vicinity of the City's proposed project, we offer the following additional comments on the DEIR. L2-1

- Extension of the trail on the freeway side of the bluff east of the railroad crossing, if this is the selected or preferred alternative, must not interfere with or in any way compromise the District's existing 4-inch diameter HDPE force main in this location. Civil design should be coordinated to ensure this outcome. L2-2
- Within the entire project area, the trail design should ensure that the District has continued access to the 4-inch diameter HDPE force main located parallel to US 101 and approximately 5 feet south of the southbound shoulder. The proposed trail should not inhibit or impair future access, up to and included excavation for repair and/or replacement of the existing pipeline. L2-3
- DEIR Appendix K evaluates extended routes through the Rincon Beach Park. Aerial images for the graphics in this appendix do not show the District's wastewater lift station. Although this critical infrastructure is mentioned in the narrative, it is unclear how the City intends to construct a pathway in proximity to this facility. It is crucial that this facility remain accessible at all times for emergency response and that pipelines and buried infrastructure be protected. The District has a legal easement from the County of Santa Barbara in this vicinity for both buried and surface improvements. L2-4

Thank you for the opportunity to comment on this project. L2-5

Craig Murray, P.E.
General Manager
Carpinteria Sanitary District
5300 Sixth Street
Carpinteria, CA 93013
P 805.684.7214 x112
C 805.451.7804

NOTE: Our Administration Office has temporarily relocated to 1110 Eugenia Place. Please continue to use 5300 Sixth Street as our mailing address.

CARPINTERIA
Sanitary District

5300 Sixth Street
Carpinteria, CA 93013
Phone (805) 684-7214 * Fax (805) 684-7213

October 31, 2019

Nick Bobroff
Community Development Department
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, California 93013

Subject: Project No. 19-2015-CUP/CDP
Carpinteria Rincon Trail Project

Dear Mr. Bobroff;

Thank you for the opportunity to provide comments on the subject project. The project applicant proposes to construct a 2,800-foot long paved multi-use trail extending from the eastern terminus of Carpinteria Avenue in the City of Carpinteria to Rincon Beach Park in the County of Santa Barbara, near the Ventura County line. The proposed trail would be 16 feet in width (comprised of a 10-wide path with a 3-foot paved shoulder along each side of the trail). The trail project includes a new 160-foot long clear span pre-fabricated bridge crossing over the UPRR alignment. Grading and earthwork quantities necessary to cut the trail bench and stabilize slopes in the project area estimated at 104,000 cubic yards of cut, 10,300 cubic yards of which would be used for fill on-site. The remaining 94,000 cubic yards of cut material would be exported offsite. A storm drain collection system is proposed for the trail alignment, with new drain outlets to the ocean. L2-6

The Carpinteria Sanitary District (District) has the following initial comment:

- The District has a 4-inch diameter HDPE sewer force main that is located immediately north (5 feet to 30 feet) of the proposed trail alignment. At stations 21 through 23.5, the proposed trail is approximately five (5) horizontal feet from the force main. It also appears the proposed trail is 5 to 10 vertical feet from the force main. This force main is a high priority subsurface installation that provides sewer service to the Rincon Point community. L2-7

- Contractors excavating, boring, drilling, sinking fenceposts or other subsurface work must take extreme precaution to ensure the force main is protected during the construction of the trail. The District should be notified when excavation activities are occurring between stations 21 through 24. This should be noted on the construction drawings. L2-8

If you have any questions regarding the comments provided by the District, please contact me at (805) 684-7214, ext. 13.

L2-9

Sincerely,
CARPINTERIA SANITARY DISTRICT

Lance Lawhon
Engineering Technician

C: Bengal Engineering

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Response to Comment Letter L2

Carpinteria Sanitary District
Craig Murray, PE
March 15, 2021

L2-1 The comment references a previous letter, provided to the City by Carpinteria Sanitary District. Responses to the referenced letter are provided in comments L2-6 through L2-9, below. The comment also introduces comments that follow. No further response is required.

L2-2 The comment expresses concern regarding potential interference with Carpinteria Sanitary District's 4-inch high-density polyethylene (HDPE) force main associated with extension of the proposed trail on the freeway side of the bluff, east of the railroad crossing.

The location of the force main and the need to exercise extreme caution during project construction located in close proximity to the force main will be noted on plans; in order to heighten overall awareness, the sewer force main location will be surveyed and flagged in the field for those sections immediately adjacent to project construction work zones..

L2-3 The comment expresses concern regarding access to the 4-inch HDPE force main.

The location of the force main and requirements to preserve access to this force main location following project construction will be noted on plans; in order to heighten overall awareness, the sewer line location will be surveyed and flagged in the field for those sections immediately adjacent to project construction work zones. The City will also make compliance with the comments in this letter a project condition of approval of the CUP/CDP.

L2-4 The comment expresses concern regarding the Carpinteria Sanitary District's wastewater lift station and ensuring that this facility remains accessible at all times for emergency response and that pipelines and buried infrastructure are protected.

Comment is noted. The existing wastewater lift-station along the north side of the Rincon Beach County Park would only be within the potential alignment for Alternative 4. Should Alternative 4 be implemented for development of the trail, the final trail engineering design would be required to avoid impacts to the wastewater lift station and connected sewer lines.

L2-5 The City acknowledges the comment as conclusionary remarks. No further response is required.

L2-6 This comment provides an accurate summary of the project and does not raise any issue concerning the adequacy of the Draft EIR. No response is required.

L2-7 This comment outlines the location of the 4-inch HDPE force main.

Thank you for identifying the location of District sewer collection lines in the project vicinity.

L2-8 The comment expresses concern regarding the existing HDPE force main and requests that the City takes precaution during construction in this area. The commenter requests that the City notifies the

Carpinteria Sanitary District when excavation occurs between stations 21 through 24 and requests the location of these facilities be identified on construction drawings.

The location of sewer lines and the need to contact the District for work near these lines will be noted on plans. In order to heighten overall awareness, the sewer line location will be surveyed and flagged in the field for those sections immediately adjacent to project construction work zones. The City will also make compliance with the comments in this letter a project condition of approval of the CUP/CDP.

L2-9 The City acknowledges the comment as conclusionary remarks. No further response is required.

Comment Letter L3

County of Santa Barbara
Planning and Development

Lisa Plowman, Director
Jeff Wilson, Assistant Director
Steve Mason, Assistant Director

May 3, 2021

Nick Bobroff, City of Carpinteria
5775 Carpinteria Avenue,
Carpinteria, CA 9301
Email: nickb@ci.carpinteria.ca.us

Re: Carpinteria Rincon Multi-Use Trail Notice of Preparation for an Environmental Impact Report – Public Comment

Dear Mr. Bobroff:

The County of Santa Barbara Planning and Development Department reviewed the City of Carpinteria's Rincon Multi-Use Trail Environmental Impact Report (EIR) and appreciates the opportunity to provide the comments listed below. L3-1

1. **Alternatives Analysis** L3-2
   - The County of Santa Barbara requests that the alternatives in the EIR are analyzed such that any alternative can be approved during the County of Santa Barbara's permitting process. Specific analysis, such as project information, grading quantities, and mitigation measures for each project alternative, is requested to be included in the EIR.

2. **Trail Location** L3-3
   - The alternatives analysis should discuss the ocean views visible from the trail and access to coastal resources as well as the required earthwork for the proposed alignment and for all alternative alignments.

3. **Policy Consistency** L3-4
   - The County's permit will include a policy consistency analysis with the County's Comprehensive Plan. It is recommended that the EIR provide information throughout the document, and specifically in the Land Use section, to address the relevant County policies, including:

     Recreation
     - **Coastal Land Use Plan Policy 7-33**: To encourage walking and biking as alternatives to travel by automobile, the County shall strongly encourage development of

new pedestrian and/or bicycle-friendly paths along the highway corridor. Improvements to Highway 101 shall not remove existing bikeways or pedestrian paths or preclude the development of proposed bikeways or pedestrian paths that are identified in the County's Comprehensive Plan, Coastal Land Use Plan and community plans, without providing comparable or better replacement facilities.

- **Coastal Act 30211**. Development shall not interfere with the public's right of access to the sea where acquired through use, custom, or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

- **Coastal Act Policy 30252**. The location and amount of new development should maintain and enhance public access to the coast by: (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation; (5) assuring the potential for public transit for high-intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not- overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

- **Coastal Act Policy 30210**. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners and natural resource areas from overuse.

- **Coastal Act Policy 30212.5** Wherever appropriate and feasible, public-facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

- **Coastal Act Policy 30213**. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

- **CLUP Policy 7-8**: Increased opportunities for beach access shall be provided in the Carpinteria planning area.

L3-4
Cont.

Geologic:

- **CLUP Policy 3-13:** Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

- **CLUP Policy 3-14:** All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Environmentally Sensitive Habitat:

- **Coastal Act Policy 30240 (b).** Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Visual:

- **Coastal Act Policy 30251.** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

- **CLUP Policy 4-3:** In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Transportation:

- **Circulation Element Policy 5C:** The County shall continue to develop programs that encourage the use of alternative modes of transportation including, but not limited to, an updated bicycle route plan, park and ride facilities, and transportation demand management ordinances.

L3-4 Cont.

5. Future Notices

When they become available, please send a copy of all notices of City decision-maker hearings regarding the project and the Final EIR Notice of Determination to:

L3-5

- Dan Klemann, Deputy Director of Long Range Planning, via email at dklemann@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101.
- Ciara Ristig, Senior Planner, via email at cristig@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101
- Tess Harris, Supervising Planner, via email at tharris@countyofsb.org or mail at 123 E. Anapamu Street, Santa Barbara, CA 93101

L3-5 Cont.

Thank you for the opportunity to provide comments on the Draft EIR. If you have any questions or require further information, please contact me at (805) 568-2086 or Mr. Seawards at (805) 568-2518.

Regards,

Lisa Plowman, Director
Planning & Development Department

cc: Travis Seawards, Deputy Director, Development Review Division
Dan Klemann, Deputy Director, Long Range Planning Division
Tess Harris, Supervising Planner, Development Review Division
Ciara Ristig, Senior Planner, Development Review Division
File

Response to Comment Letter L3

County of Santa Barbara Planning and Development
Lisa Plowman
May 3, 2021

L3-1 The City acknowledges the comment as an introduction to comments that follow. No further response is required.

L3-2 The commenter requests that the City analyzes each alternative outlined in the DEIR, and includes specifics such as project information, grading quantities, and mitigation measures.

Per CEQA Guidelines Section 15126.6(d), an EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. (*County of Inyo v. City of Los Angeles* (1981) 124 Cal.App.3d 1). The analysis of the project did not identify any unavoidable significant impacts, which is the paramount consideration for the development of alternatives to the proposed action. However, given potentially significant impacts were identified, the EIR included four distinct alternatives to the project, each with an intent to lessen or avoid the significant impacts of the proposal. Information on each alternative, including involved grading quantities, has been provided in Section 6.0; the relative severity of each impact is also compared to the project, and the necessity under each alternative for implementation of mitigation measures identified for project impacts is identified. Therefore, per CEQA Guidelines Section 15126.6(d), a full analysis of each proposed alternative, including specific mitigation measures to address unique impacts of such an alternative, is not required.

Rather, the alternatives analysis is intended to identify whether the proposed project, or an alternative to the proposal, has the greatest potential for minimization of environmental impacts, while achieving the primary objectives of the proposed project. Insofar as several alternatives appear to offer opportunities to reduce impacts as compared to the proposed project, as much detail as possible is provided regarding the impacts and mitigations associated with each of the alternatives, although subsequent environmental review to satisfy CEQA may need to be performed in some issue areas if one of the alternatives is selected for implementation in favor of the proposed project.

L3-3 The commenter requests that the alternative analysis discusses ocean views visible from the trail, access to coastal resources, and required earthwork for the proposed alignment and all alternative alignments.

See response L3-2, above. The alternative analysis included an analysis of aesthetic and recreational impacts, as they compare to the proposed project, consistent with CEQA Guidelines Section 15126.6(d). In addition, per Section 6.6 of the Draft EIR, Alternative 2 would result in 46,000 cubic yards (CY) of cut and 10,500 CY of fill; Alternative 3 would result in 96,077 CY of cut and 10,570 CY of fill, and Alternative 4 would result in 105,300 CY of cut and 710 CY of fill.

L3-4 The commenter suggests that various policies from the County of Santa Barbara (County's) Comprehensive Plan should be included in the EIR. These policies have been added in Section 3.9.2 of the EIR (see Chapter 3, Errata).

L3-5 The commenter requests that future notices are sent to addresses for County representatives provided in this comment. The City will provide notices to the County representatives at addresses indicated in this comment. No further response is required.

Comment Letter L4

COUNTY of VENTURA

RESOURCE MANAGEMENT AGENCY
CHARLES R. GENKEL
Environmental Health Director

April 27, 2021

City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013
ATTN: Nick Bobroff, Principal Planner

Carpinteria Rincon Trail, Environmental Document Review – Notice of EIR Preparation, (RMA REF # 19-012-1)

Ventura County Environmental Health Division (Division) staff reviewed the information submitted for the subject project. Proposed Carpinteria Rincon Multi-Use Trail (Project) includes the construction of:

- A shared use trail;
- A clear-span bridge;
- A stormwater drainage collection system with new drain outlets to the ocean up to the western end of Rincon Beach County Park and the Ventura County Line in Santa Barbara County.

L4-1

The Division provides the following comments:

1. Project includes the construction of three new stormwater drainage outlets south of the Union Pacific Railroad alignment. California Health and Safety Code, Section 115880 (c) (4) (B), requires that testing shall be conducted on a weekly basis if the beach is located on an area adjacent to a storm drain that flows in the summer. Contact the State Water Resources Control Board, Ocean Standards Unit for any changes with Santa Barbara County's sampling sites.

L4-2

2. The construction and use of the stormwater drainage outlets have the potential for proliferation of vectors, including mosquitoes. Monitoring and controlling mosquito activities from these sites can reduce exposure of the public from vector-borne diseases.

L4-3

If you have any questions, please contact me at 805/654-5040 or Paolo.Quinto@ventura.org.

Paolo Quinto, R.E.H.S.
Land Use Section
Environmental Health Division

HALL OF ADMINISTRATION #1730
805-654-2813 • FAX 805-654-2480 • 800 South Victoria Avenue, Ventura, CA 93009 • vcrma.org

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Response to Comment Letter L4

County of Ventura Community Development Department
Paolo Quinto
April 27, 2021

L4-1 The City acknowledges the comment as an accurate overview of the project and an introduction to comments that follow. No further response is required.

L4-2 The commenter states that weekly testing shall be conducted for the new stormwater drainage outlets, which should be coordinated with the State Water Resources Control Board, Ocean Standards Unit.

This comment does not raise any issue concerning the adequacy of the Draft EIR. Testing and sampling of proposed stormwater drainage outlets shall be performed in accordance with all existing laws and regulations. No further response is required.

L4-3 The commenter expresses concern regarding the proliferation of vectors, including mosquitoes, associated with new stormwater drainage outlets and recommends monitoring and controlling mosquito activities from these sites to reduce exposure to vector-borne diseases.

This comment does not raise any issue concerning the adequacy of the Draft EIR. The City appreciates the recommendation regarding monitoring and control of mosquitos; it is anticipated that the City and County will both follow guidelines and practices established by the Mosquito and Vector Management District of Santa Barbara County in the maintenance procedures for their respective portions of the trail alignment. No further response is required.

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Comment Letter I1

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Thanks Nick, it must wrench on your soul to know you are killing a magical recreational activity (paragliding/hang gliding) for so many people in our beautiful, unique little town. I think you are a surfer and can relate. Hope you get outside and play more than you dont, life is short. I1-1

Aaron LaPlante

Response to Comment Letter I1

Aaron LaPlante
March 12, 2021

I1-1 The City acknowledges the comment as general opposition to the project. No further response is required.

Comment Letter I2

****EXTERNAL EMAIL****

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Mr.Nick

8 very much disturbs me. That the EIR, still does not have the monarch butterfly habitat that is there. It doesn't have the migratory bird act. I2-1

The monarchs are in the eucalyptus trees on the East Side of the freeway there as well as the multi million dollar homes each year. The migratory birds fly up-and-down that cliff face by weekly to Tri weekly from the carpenter Rhea salt March to the Venter a salt marsh all of these are going to be affected drastically! The endangered species of plant life on the front of that cliff face isn't even being considered. How is this possible under federal law? How is this no concern to your environmental impact report? I2-2

Response to Comment Letter I2

E. Arciniega
April 9, 2021

I2-1 The commenter expresses concern regarding the presence of monarch butterfly habitat, stated in the comment letter to be present in eucalyptus trees on the East Side of the freeway and the absence of discussion regarding the Migratory Bird Treaty Act.

As discussed in Section 3.3.4, impacts to monarch butterfly individuals and monarch butterfly overwintering sites would be less than significant. Although monarch butterflies are known to occur near the project site along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek, no impacts to this monarch overwintering site are anticipated since the overall height of the slope within Rincon Beach County Park south of Highway 101 will not be reduced, as work includes proposed terraces to stabilize the hill but will not decrease its overall height, and therefore no changes to the wind conditions at the overwintering site are expected. Additionally, this overwintering site is largely protected by the hill below the single residential development at 637 Bates Road, and any possible changes to weather and wind patterns due to project implementation would not affect the protective contour this hill independently provides. In addition, as discussed in Section 3.3.4, 22 species of native birds were detected on site, including several with the potential to nest there. Nests, eggs and nestlings of all native bird species are protected by the Migratory Bird Treaty Act and the California Fish and Game Code, as discussed in Section 3.3.4 of the Draft EIR. Vegetation clearing and grading, if occurring during the nesting season (typically mid-February to August), have the potential to destroy nests, eggs and nestlings, which could violate these regulations. However, with implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-6, project impacts to nesting and migratory birds would be reduced to less than significant.

I2-2 The commenter expresses concern regarding endangered plant species on the cliff face.

As discussed in Section 3.3.4, no special-status plant species were observed; thus, impacts to special-status plant species would be less than significant.

Comment Letter I3

****EXTERNAL EMAIL****

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Ok so....
Mr.Nick

It still very much disturbs me. That the EIR, still does not have the monarch butterfly habitat that is there. It doesn't have the migratory bird act. It doesn't even have a true Wind report on it! I3-1 I3-2

The monarchs are in the eucalyptus trees on the East Side of the freeway there as well as the multi million dollar homes each year. That will be highly affected by your committees ignorance. The migratory bird act, that fly up-and-down that cliff face bi to Tri weekly from the Carpinteria salt Marsh. to the Ventera salt marsh all of these are going to be affected drastically! The endangered species of plant life on the front of that cliff face isn't even being considered. How is this possible under federal law? How is this no concern to your environmental impact report? I3-3

How is this Committee Bypassing FEDERAL LAW? How are you ignoring a nearly endangered Species monarch butterfly flies?
The TUFFEST migratory bird acts known thruout the USA? Based here in CA?
Endsngered plant life Species that a big growing on the front of that Hill for well since the old highway was there they've been there for decades one of very few areas they actually grow in our whole state I3-4

Turning a blind eye, to these things, will get you nowhere. Want you start your gonna have to replace at all. Costing you hundreds of millions of dollars. For the 6 million dollars year after. I3-5
To top it off this trail is not Ada compliant. Simply because it is Ada compliant from highway 150 down to the park it does not meet Ada compliancy down through the parking lot to connect to the other trail. That is also not Ada compliant coming out of the parking lot. I3-6

Response to Comment Letter I3

E. Arciniega
April 9, 2021

I3-1 The commenter expresses concern regarding an absence of reference in the EIR to monarch butterfly habitat and the Migratory Bird Treaty Act.

See response I2-1, above.

I3-2 The commenter states that no true wind report was included.

A detailed analysis of the alterations to air flow patterns above the bluffs resulting from project implementation was completed for the EIR; the Airflow Analysis report was provided as Appendix I of the Draft EIR. The comment does not pertain to the adequacy of the EIR. No further response is required.

I3-3 The commenter expresses concern regarding the presence of monarch butterfly habitat, stated in the comment letter to be present in eucalyptus trees on the East Side of the freeway; the Migratory Bird Treaty Act; and endangered plant species. The commenter believes that the project does not comply with federal law regarding monarch butterflies and the Migratory Bird Treaty Act.

See response I2-1, above.

I3-4 The commenter expresses concern regarding endangered plant species.

See response I2-2, above.

I3-5 The commenter expresses general opposition to the project and economic concerns. The comment does not pertain to the adequacy of the EIR. No response is required.

I3-6 The commenter expresses concern that the proposed trail is not compliant with the Americans with Disabilities Act of 1990 (ADA).

As discussed in Section 2.5 of the EIR, the existing benched slope would be regraded in order to achieve compliance with ADA pathway slope requirements, making the project consistent with ADA requirements. It should be noted the refined Alternative 3 would incorporate a trail surface slope that marginally exceeds the maximum acceptable slope of 5 percent (the trail could have a slope of 6 percent) for a 690 foot portion of the segment south of the UPRR alignment. This marginally steeper slope surface may not result in a practical limitation to access by mobility challenged individuals, and an exception may be available in accordance with USAB guidelines for the 690-foot trail segment exceeding 5 percent, such that the entire trail could potentially achieve ADA compliance. The comment does not pertain to the adequacy of the EIR. No further response is required.

Comment Letter I4

Hi Nick, I encourage you to take a progressive approach to parks and rec and embrace the unique sport of paragliding and hang gliding in Carpinteria. I4-1
There are no federal rules that prevent free flight on the bluff and any local rules would be superceded by the Federal Aviation Administration. I4-2

Dubai built a 1200 foot high mini mountain just for free flight that people come to from all over the world. I am sure you can create a one of a kind flight park at the Bluff and have a bike path too. What a tourist attraction that would be! I4-3

Love ya mahn!

Aaron

Aaron LaPlante
Carpinteria Unified School District
805-886-1435
aaron@cusd.net

Response to Comment Letter I4

Aaron LaPlante
March 12, 2021

I4-1 The commenter expresses general opposition to the project, which does not pertain to the adequacy of the EIR. No further response is required.

I4-2 The commenter states that no existing federal rules prevent free flight at the project site and local rules would be superseded by the Federal Aviation Administration. This comment does not pertain to the adequacy of the EIR. No further response is required.

I4-3 The commenter provides a description of an artificial 1,200-foot high mountain that was constructed to support free flight opportunities and suggests that the City consider creating something like this instead of the proposed project. This comment does not pertain to the adequacy of the EIR. No further response is required.

It still very much disturbs me. That the EIR, still does not have the monarch butterfly habitat that is there. It doesn't have the migratory bird act. It doesn't even have a true Wind report on it! I5-1 I5-2

The monarchs are in the eucalyptus trees on the East Side of the freeway there as well as the multi million dollar homes each year. That will be highly affected by your committee's ignorance. The migratory bird act, that fly up-and-down that cliff face bi to Tri weekly from the Carpinteria salt Marsh. to the Ventera salt marsh all of these are going to be affected drastically! The endangered species of plant life on the front of that cliff face isn't even being considered. How is this possible under federal law? How is this no concern to your environmental impact report? I5-3

How is this Committee Bypassing FEDERAL LAW? How are you ignoring a nearly endangered Species monarch butterfly flies?
The TOUGHEST migratory bird acts known throughout the USA? Based here in CA?
Endangered plant life Species that a big growing on the front of that Hill for well since the old highway was there they've been there for decades one of very few areas they actually grow in our whole state I5-4

Turning a blind eye, to these things, will get you nowhere. Once you start you're gonna have to replace it all. Costing you hundreds of millions of dollars. For the 6 million dollars a year after. I5-5
To top it off this trail is not Ada compliant. Simply because it is Ada compliant from highway 150 down to the park it does not meet Ada compliance down through the parking lot to connect to the other trail. That is also not Ada compliant coming out of the parking lot. This trail is a True FAILURE on Both ends!!! It is going to cost the city Millions of dollars in the end. I5-6
The Air flow report IS Not one done in that area. It does not even correspond to the project. OUR MILLION Dollar homes are going to be SEVERELY AFFECTED! Once this hill is CUT away at such a slope. The perfect Wind Shadow that is built by Nature and the Current slope. SHIELDs our Homes from MOST of the 40-50MPH winds post frontal with each storm. Allowing the Monarchs to be here throughout the winter protected in all of our trees. I5-7

A true Fallacy, is being pushed in search of exactly what?

A State ruling that is not in compliance with Regulations and FEDERAL LAW!~! All being ignored!~! I5-8

On Thu, Apr 8, 2021, 3:34 PM Nick Bobroff <nickb@ci.carpinteria.ca.us> wrote:

Response to Comment Letter I5

E. Arciniega
April 14, 2021

I5-1 The commenter expresses concern regarding the presence of monarch butterfly habitat and an apparent neglect of requirements of the Migratory Bird Treaty Act.

See response I2-1, above.

I5-2 The commenter states that no wind report was included.

See response to I3-2, above.

I5-3 The commenter expresses concern regarding the presence of monarch butterfly habitat, stated in the comment letter to be present in eucalyptus trees on the East Side of the freeway; the Migratory Bird Treaty Act; and endangered plant species. The commenter believes that the project does not comply with federal law regarding monarch butterflies and the Migratory Bird Treaty Act.

See response I2-1, above.

I5-4 The commenter expresses concern regarding endangered plant species.

See response I2-2, above.

I5-5 The commenter expresses general opposition to the project and economic concerns. The comment does not pertain to the adequacy of the EIR. No response is required.

I5-6 The commenter expresses concern that the proposed trail is not compliant with ADA and expresses economic concerns associated with the project.

As discussed in Section 2.5 of the EIR, the existing benched slope would be regraded in order to achieve compliance with ADA pathway slope requirements, making the project consistent with ADA requirements. The proposed project would terminate at the west (north) end of the parking lot for Rincon Beach County Park, and would not modify conditions present in the parking lot or the roadway segment at the south end of the parking lot; as such, the concerns expressed by the commenter regarding ADA compliance of the parking lot and southern vehicle exit to the parking area are not applicable to the proposed project. In addition, the City acknowledges that this comment raises economic issues that do not appear to relate to any physical effect on the environment. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. No further response is required.

I5-7 The commenter expresses concern regarding the Airflow Analysis provided as part of the Draft EIR and states that this Airflow Analysis does not correspond to the project. In addition, the comment expresses economic concerns associated with proposed cut slopes, and concerns regarding the monarch butterfly.

Refer to global response GR1 regarding the air flow analysis and determination of project impacts on existing soaring opportunities. Regarding the commenter's economic concerns, the City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. Regarding monarch butterfly concerns, please refer to response I2-1, above. No further response is required.

I5-8 The commenter express general opposition to the project and states that the project is not in compliance with federal law.

The comment does not pertain to the adequacy of the EIR. Regarding the commenter's previous concerns associated with compliance with federal law regarding monarch butterflies and the Migratory Bird Treaty Act, please see response I2-1, above. No further response is required.

Comment Letter I6

Nick, I understand their are some changes to the Bates soaring hill in Carpenteria. I've traveled to Carpenteria many times to bike and also fly Bates, with the proposed changes to accommodate a bike trail. I must tell you that the bike trail would probably be best on the other side to avoid the congestion of a parking lot and as a pilot I believe the change to the Bates hill will significantly reduce the available lift.

With Bates soaring ruined I'll no longer visit Carpenteria. I hope you value the input from pilots who love Bates and select an alternative bike path Thank you for your attention S. Wuebber Belgrade, MT

I6-1

Response to Comment Letter I6

Scott Wuebber
April 16, 2021

I6-1 The commenter expresses support for the construction of the proposed trail on the freeway side of the ridge-top (Alternative 4) to avoid congestion of the parking lot and to prevent project-related reductions in the existing available lift along the bluff-top for soaring activities.

It is assumed that the commenter supports Alternative 4 instead of the proposed project. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I7

Hi Nick, I've written to you before but wanted to reach out again and ask that you consider all proposals that would allow all users of the area under discussion to enjoy this magic spot.

As an active cyclist living in Ojai, I have to tell you that the section of 101 that we take from the overpass down to the offramp is a stretch I look forward to as I can coast and hit decent speed, oftentimes giving me a nice break before that long exposed stretch past Rincon and La Conchita.

I7-1

Paragliding is another passion of mine and Bates is a world class site. Surely we can find a way that works for everyone.

Please do everything you can to help ensure that we don't lose this site.

I'm happy to discuss at any time and appreciate your consideration and time.

Best,

M.

Myles Connolly
International Mobile: +1 949 338 2987
Email: contactmyles@yahoo.com
Skype: mylesconnolly

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Response to Comment Letter I7

Myles Connolly
April 16, 2021

I7-1 The City acknowledges the comment and notes that it expresses opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I8

Nick Bobroff

April 16, 2021

Principal Planner

Community Development Department

City of Carpinteria 5775 Carpinteria CA 93013

Hello Mr. Bobroff and readers of this letter,

During the Zoom Webinar meeting on April 13, 2021, Alternative #4, which would mostly be built next to the Southbound 101 freeway, was unanimously supported by the Environmental Review Committee, as the "Environmentally Superior Alternative." I agree. I8-1

Several questions asked during the meeting, were left unanswered and several conclusions, of the Focused Environmental Impact Report, did not seem to be an adequate or a complete analysis. I hope those questions can be answered and given to the public and the summary of the conclusions can be adjusted to be more reasonable and be supported by applicable information and facts, for the previous Alternative, and the recommended Alternative. I8-2

In the City of Carpinteria, except for that portion of the current bike route that is on the Southbound, US highway 101 bridge, between highway 150 and Bates Road, which is approximately 14 feet wide, there is no portion of the bike route, that is close to being 16 feet wide. With the choice of the Committee being Alternative #4, that width can and should be no wider, than 8 feet (with a few exceptions, for "Switchbacks,"). This will be more in harmony with the landscape and closer to the Project Description (see attachment 1). Reducing the width of the bridge over the Union Pacific Railroad Crossing to 8 feet wide and making it more in line with the Southbound 101 freeway, will be a significant cost savings and less intrusive, to the environment. I8-3

The presentation on April 13, showed an aerial depiction of the "Little Diamondhead," Bluff (to the west of the County parking lot) as having "...existing drainage pipes." There are rusted remnants of corrugated drain pipes, but there are no existing, functional drain pipes, as depicted by the diagrams presented (See attachments 2, 2a, 2b, 2c, 2d.) in the Zoom meeting. My attachments (except #2) show current conditions, but do reflect conditions, that I have seen, in 15 years of flying at Bates. One large, rusted section, ended up on the beach, and laid there for months, until high tide, took it out to sea. I8-4

I will submit additional comments and questions and attachments, during the public comment window to do so. I8-5

Respectfully,

Ottis Gillespie

Oxnard, CA 93036

1



SOURCE: Bengal Engineering

Illustration 4 Representative Steel Framed Bikepath Bridge

The approximate location of the Carpinteria Rincon Trail bridge over the UPRR alignment (the magenta colored line) is shown in Illustration 5, below. The relative elevation of the bridge can be compared to the US Highway 101 bridge over the UPRR corridor (just above the elevation of the pictured train).

I8-6



SOURCE: Bengal Engineering

Illustration 5 Approximate Profile and Location for Rincon Trail Bridge

2

Drainage

The proposed trail project includes an integrated storm drainage system to ensure storm water run-off from the recontoured bluff face and the trail surface is conveyed to the ocean efficiently, avoiding potential erosion of slopes along the trail alignment. Along the portion of the trail north of the UPRR alignment, a concrete swale (v-ditch) would convey water along the trail edge, where it would be released into an existing surface drainage swale now serving US Highway 101. This swale connects to an existing storm drain that crosses underneath the UPRR alignment, and then descends to the beach level. This storm drain is labelled as "1" in illustration 6. No improvements are proposed to storm drain 1, and the trail storm drain volumes contributed to this storm drain would be negligible compared to existing flows already contributed from portions of US Highway 101.



SOURCE: Bengal Engineering

Illustration 6 Major Storm Drainage Components of the Project

On the south side of the UPRR alignment, a concrete drainage swale would also carry surface run off from the recontoured bluff face and trail, conveying such drainage along the side of the trail until it reaches one of the storm drain inlets lower in elevation. A total of 5 vertical storm drains would convey this storm water from the trail to the beach elevation, for the trail segment south of the UPRR alignment (refer to Illustration 6). Drains #3 and #6 (shown in light blue in illustration 6) are existing and would be re-used, including rehabilitation of existing piping; drains #2,# 4, and #5 (shown in magenta in illustration 6) would be newly developed for the project.

I8-6
Cont.



I8-6
Cont.

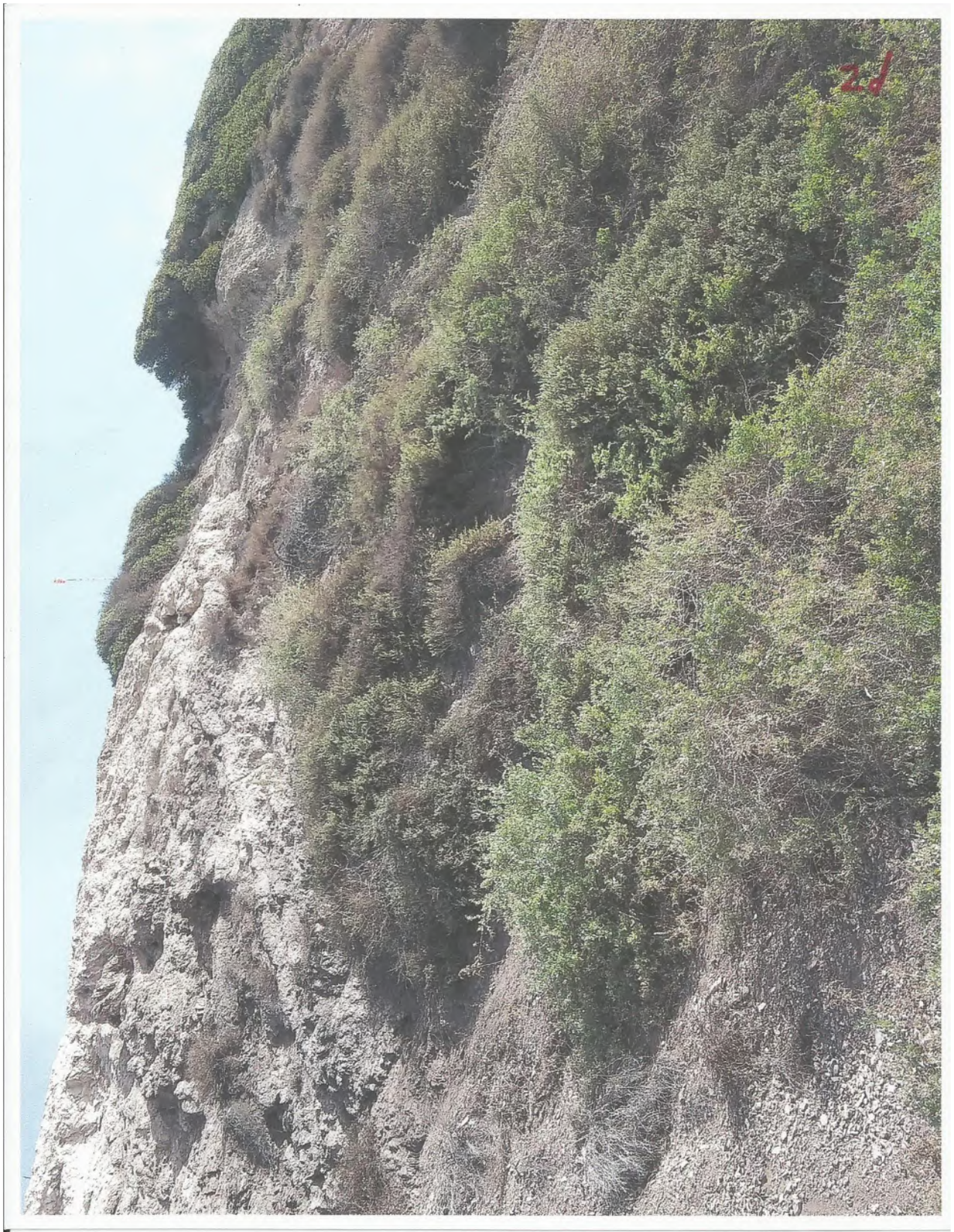
26



I8-6
Cont.



I8-6
Cont.



I8-6
Cont.

Response to Comment Letter I8

Ottis Gillespie
April 16, 2021

I8-1 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I8-2 The commenter states that questions were left unanswered during the meeting held on April 13, 2021, pertaining to the adequacy and conclusions of the Draft EIR. The commenter hopes that these questions are answered and that conclusions are adjusted.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not identify specific questions left unanswered from the environmental review committee hearing, nor does it raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I8-3 The commenter suggests that the width of the proposed bike route should be no wider than 8 feet, with the exceptions of switchbacks. The commenter explains potential benefits associated with limiting the proposed trail width to 8 feet.

The City acknowledges the comment and notes that it raises issues, including economic issues, that do not appear to relate to any physical effect on the environment. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I8-4 The commenter states that no existing, functional pipes are present at certain locations depicted in the Draft EIR, based on photographs shown in comment I8-6. The drainage pipes referenced in this comment are represented as drains #2, #4, and #5 in Illustration 6 of the Draft EIR.

The City notes that the comment provides background information relative to the existing condition of drainage structures identified in the EIR. The project description indicates that existing drainage structures would be repaired/replaced, and three new drainage outlets would be developed under the proposed project. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. No further response is required or provided.

I8-5 The commenter states that they will provide additional comments during the public review period. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I8-6 The commenter provides illustrations of current conditions of the existing drain pipes on site compared to excerpts taken from the Draft EIR. Please refer to response I8-4, above. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

Comment Letter I9

Good afternoon Nick,

I hope this email finds you well. I have recently joined the paragliding community here in Santa Barbara but have been enjoying outdoor recreation up here my entire life. As a cyclist and someone that loves to ride the route from Santa Barbara down to Ventura, I was excited to hear of a route that would keep me off the freeway. I greatly appreciate all the work that has gone in to planning this bike route, but I would love to see some small changes. I am also someone who has dreamed of paragliding off Bates since I first saw some pilots there 5 years ago when officially moving to Santa Barbara. It was not until taking up the sport myself that I realized how important air flow is to the sport of flying. Without the right air flow, it is either unsafe or impossible to stay up in the air. I hope that the new bike path being constructed can keep both of my hobbies safe and possible in the future. I9-1 I9-2

I did sign the petition that was created with approximately 2000 signatures, but I wanted to do more in reaching out to you. I loved that ten environmental review committee recommended the alternate 4 route that would build a bike path on the North side of bates. Coastal soaring at bates makes Carpinteria truly special and unique and should not be lost due to this bike route. I appreciate the cities consideration in reaching out to the soaring community to truly understand the impact that this bike route could potentially create. I look forward to a bike route that is safe for bikers as well as the soaring community. I9-3 I9-4

Thank you for your time and consideration,

Laura Davalos, PT, DPT
ldavalos@sbch.org
805-569-8900 ext. 82238

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Response to Comment Letter I9

Laura Davalos
April 19, 2021

I9-1 The commenter provides personal background and introductory remarks regarding the proposed project. The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I9-2 The commenter expresses the importance of airflow in paragliding and expresses hope that implementation of the proposed project would not hinder both bicycling and paragliding.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I9-3 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I9-4 The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. No further response is required or provided.

It still very much disturbs my self and others in our small group of houses. That the EIR, still does not have the monarch butterfly habitat that is here and across the freeway in the Eucalyptus trees. It doesn't have the migratory bird act. The sea birds fly up an down our coast multiple times a week! It doesn't even have a true Wind report on it! As a life time pilot (Private,military, commercial) The wind report is 100% wrong! WE have a perfect wind shadow. Created by the Current bluff/cliff face. I10-1

Think of putting a 800-1000' horse shoe over the freeway and our homes!
You will DESTROY it. Creating a Extremely large Coriolis spin to the air that will come straight off the back of the 45° bluff, across the freeway 2 times! Right through our homes. Potentially even causing car accidents as cars swerve vack an forth passing thru it! I10-2

The monarchs are in the eucalyptus trees on the East Side of the freeway there as well as within our multi million dollar homes each year. Harbored here all Winter throught our trees! That will be highly affected by your committee's ignorance.
The migratory bird act, that all fly up-and-down the current cliff face bi to Tri weekly from the Carpinteria salt Marsh. to the Ventera salt marsh all of these are going to be affected drastically!
The endangered species of plant life on the front of that cliff face isn't even being considered. I ask you, How is this possible under federal law? How is this no concern to your environmental impact report? I10-3

How is this Committee Bypassing FEDERAL LAW? How are you ignoring a nearly endangered Species monarch butterflies? The TOUGHEST migratory bird acts known throughout the USA? Based here in CA?
Endangered plant life Species that are growing on the front of that Cliff/Hill since the old highway was there. They have been there for decades one of very few areas they actually grow in our whole state. I10-4

Turning a blind eye, to these things, will get you nowhere. Once you start you're gonna have to replace it all. Costing you hundreds of millions of dollars. For the 6 million dollars a year that you are all after. I10-5

To top it off this trail is not of Ada compliance. Simply because it is Ada compliant from highway 150 down to the park it does not meet Ada compliance down through the parking lot! Or to connect to the other trail that goes Behind our homes!. That is also not Ada compliant coming out of the parking lot. This trail is a True FAILURE on Both ends!!! It is going to cost the city Millions of dollars in the end. I10-6

The Air flow report IS Not one done in that area. It does not even correspond to the project. OUR MILLION Dollar homes are going to be SEVERELY AFFECTED! Once this hill is CUT away at such a slope. The perfect Wind Shadow that is built by Nature and the Current slope. SHIELDs our Homes from MOST of the 40-50MPH winds post frontal with each storm. Allowing the Monarchs to be here throughout the winter protected in all of our trees. I10-7

A true Fallacy, is being pushed in search of exactly what? FAILURE? I10-8
Trail 4 is the only proposal that virtually eliminates all the Above!! Yet still not compliant down through the parking lot. I10-9

A State ruling that is not in compliance with Regulations and FEDERAL LAW!~! How is your one little rule book ignoring all the Above?! I10-10

I truly question this boards actions. That will not meet the objectives! Or finances

Response to Comment Letter I10

E. Arciniega
April 20, 2021

I10-1 The commenter expresses concern regarding the presence of monarch butterfly habitat and the neglect of requirements under the Migratory Bird Treaty Act.

See response I2-1, above.

I10-2 The commenter states that no wind report was included; states that the wind report is incorrect; and expresses concern regarding impacts to freeways, homes, and car accidents associated with wind.

See response to I3-2, above. In addition, please refer to Global Response GR1, Air Flow Analysis.

I10-3 The commenter expresses concern regarding the presence of monarch butterfly habitat, stated in the comment letter to be present in eucalyptus trees on the East Side of the freeway; the Migratory Bird Treaty Act; and endangered plant species. The commenter believes that the project does not comply with federal law regarding monarch butterflies and the Migratory Bird Treaty Act.

See response I2-1, above.

I10-4 The commenter expresses concern regarding endangered plant species.

See response I2-2, above.

I10-5 The commenter expresses general opposition to the project and economic concerns. The comment does not pertain to the adequacy of the EIR. No response is required.

I10-6 The commenter expresses concern that the proposed trail is not compliant with the ADA and expresses economic concerns associated with the project.

See response I5-6, above.

I10-7 The commenter expresses concern regarding the Airflow Analysis provided as part of the Draft EIR and states that this Airflow Analysis does not correspond to the project. In addition, the comment expresses economic concerns associated with proposed cut slopes, and concerns regarding the monarch butterfly.

Please refer to Global Response GR1, Air Flow Analysis; Global Response GR2, Landform Modification; and response I2-1 regarding monarch butterfly impacts.

I10-8 The commenter expresses general opposition to the project. The City acknowledges the comment and notes that it expresses opposition to the proposed project, but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I10-9 The commenter expresses support for Alternative 4, but states that Alternative 4 is still not ADA-compliant through the parking lot.

The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. Regarding ADA compliance, see response I5-6, above. Alternative 4 would not route any portion of the trail through the Rincon Beach County Park parking lot, instead aligning the path along the northern side of the parking lot, and achieving a trail slope that is ADA compliant. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I10-10 The commenter states that the project is not in compliance with federal law and states that the project will not meet objectives or finances.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Regarding the commenter's previous concerns associated with compliance with federal law regarding monarch butterflies and the Migratory Bird Treaty Act, please see response I2-1, above. No further response is required.

Comment Letter I11

Nick Bobroff

April 21, 2021

Principal Planner

Community Development Department

City of Carpinteria 5775 Carpinteria Ave. Carpinteria, CA 93013

Hello Mr. Bobroff and readers of this letter,

This is my second reply to the Zoom webinar meeting on April 13,2021 of the Environmental Review Committee. The presentation summary by Dudek and Bengal Engineering seemed to exclude completed construction details and their costs. Is the completion of "earth work," and a concrete reinforced bridge buttress, on the terrace, almost level, to the Southbound US 101, near the eastern edge of the King property (see attachments 1, 1a,), included, in the estimated two-year construction window? What were the costs and under what guidelines and environmental usage parameters were used? I11-1

We have been shown grey scale illustrations, yellow and magenta line drawings and sandy scale drawings of the proposed sections of the Multi Use Trail, that start from highway 150 and terminate in the County parking lot (see attachments 2.1, 2.2, 2.3). What does the complete M.U.T., with support bracing, drain pipes, landscaping, bridge size, safety fencing, look like? How much will it cost? What are the costs, to date? With California Department of Transportation employees, taking a ten percent, salary cut, is it prudent to continue? Can traffic barriers, be placed on the existing Southbound US 101 bridge, on and off ramps at highway 150 and Bates Road, to protect bicyclists? Will the Southbound US 101 traffic off ramp at Bates Road be realigned, to the North, to allow more space, for bicyclists? I11-2

Committee member Lohaus pointed out that a small portion of the M.U.T., at Little Diamondhead, will not have a Pacific Ocean view with Alternative #4. How will this be different, from the lack of a Pacific Ocean view, on the north side of the King property? The Pacific Ocean is clearly visible for the 10-mile stretch of the existing bike path into Ventura. I11-3

The summary presentation, included a statement that there would be, "...no significant impact on soaring activities...." I would like to submit the link, to the Santa Barbara Soaring Association's, Aaron LaPlante's video, "Preserving Free Flight at Bates Bluff (see attachment video link)." I described in the Zoom meeting, that it is the deflection, of the prevailing South west wind, that generates lift and the lift band, that we paragliders and hang gliders, fly in. Little Diamondhead, for free flight, is like Cape Canaveral for powered rocket and Shuttle launches. There was a perception, that only "wind speed," which would not be affected, was the only factor, in considering, free flight opportunities at Little Diamondhead. Wind velocity is a factor, for paraglider and hang glider pilots, but not the only one for ridge soaring. There would be an almost 95% reduction, in ridge soaring opportunities, if Little Diamondhead is destroyed, and a reconfigured land mass, with; support structures, drain pipes, lower angle of inclination, and a elevated man- made pathway (with unsightly safety fencing), were to be built. I11-4

I will submit additional comments and questions and attachments, during the public comment window to do so. I11-5

April 21, 2021

Respectfully,

Ottis Gillespie 4/21/2021

Ottis Gillespie

Oxnard, CA 93036

Aaron Laplante's Santa Barbara Soaring Association, video link to "Preserving Free Flight at Bates Bluff."

https://youtu.be/SVIdEfWHMpE

1



I11-6



I11-6
Cont.

2.1

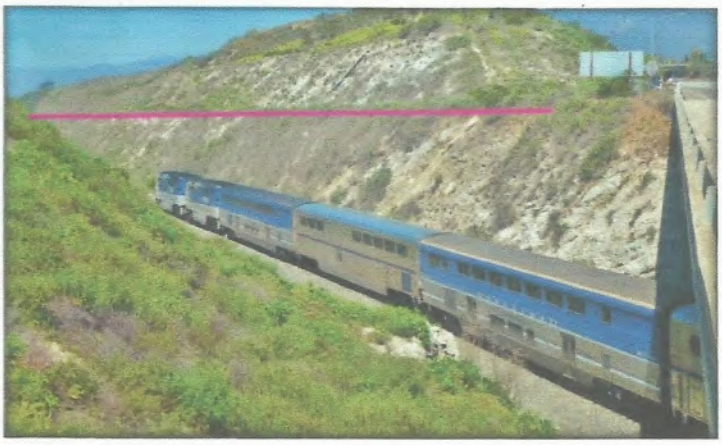


SOURCE: Bengal Engineering

Illustration 4 Representative Steel Framed Bikepath Bridge

The approximate location of the Carpinteria Rincon Trail bridge over the UPRR alignment (the magenta colored line) is shown in Illustration 5, below. The relative elevation of the bridge can be compared to the US Highway 101 bridge over the UPRR corridor (just above the elevation of the pictured train).

I11-6
Cont.



SOURCE: Bengal Engineering

Illustration 5 Approximate Profile and Location for Rincon Trail Bridge

2.2

Drainage

The proposed trail project includes an integrated storm drainage system to ensure storm water run-off from the recontoured bluff face and the trail surface is conveyed to the ocean efficiently, avoiding potential erosion of slopes along the trail alignment. Along the portion of the trail north of the UPRR alignment, a concrete swale (v-ditch) would convey water along the trail edge, where it would be released into an existing surface drainage swale now serving US Highway 101. This swale connects to an existing storm drain that crosses underneath the UPRR alignment, and then descends to the beach level. This storm drain is labelled as "1" in illustration 6. No improvements are proposed to storm drain 1, and the trail storm drain volumes contributed to this storm drain would be negligible compared to existing flows already contributed from portions of US Highway 101.

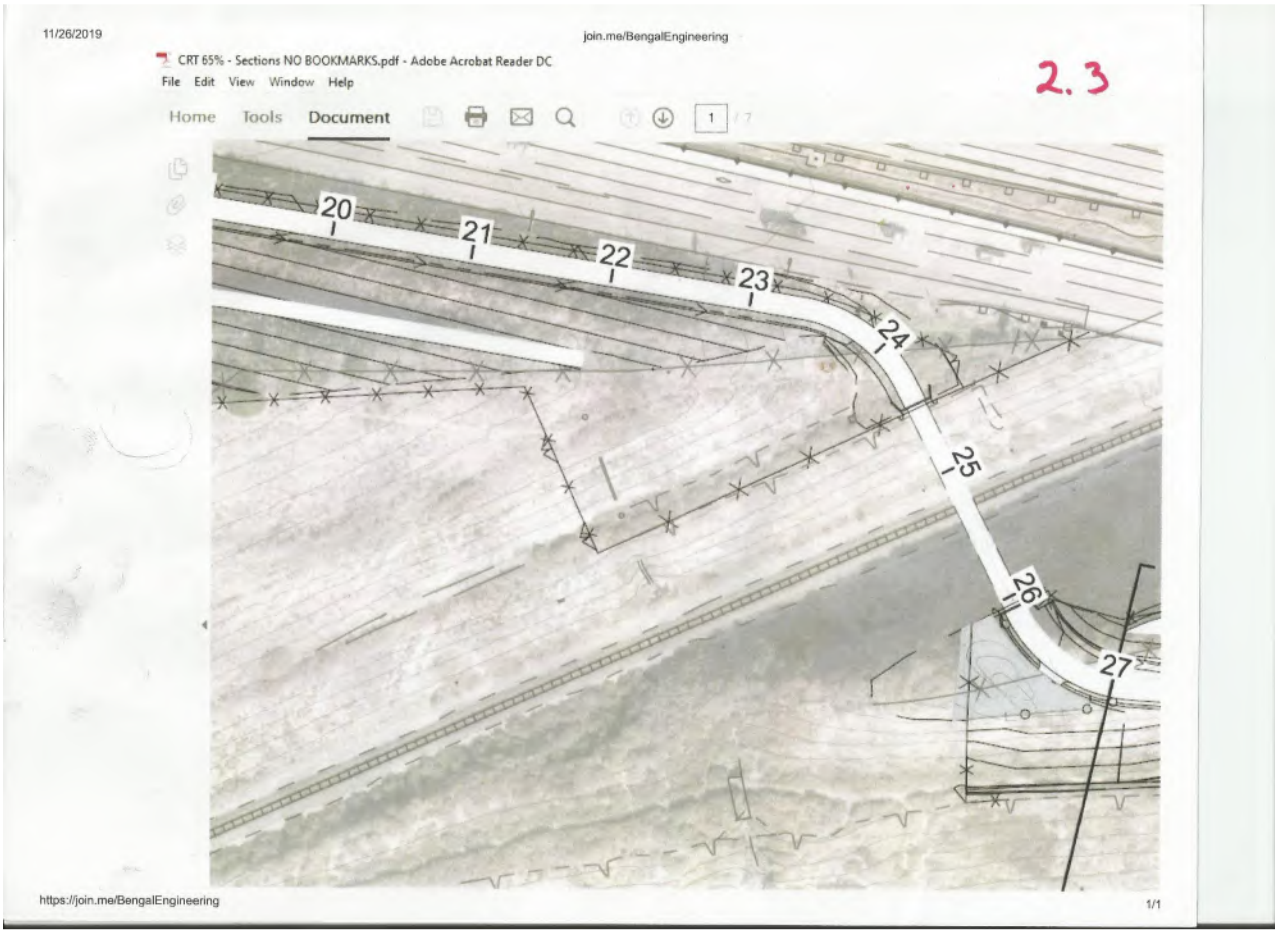


SOURCE: Bengal Engineering

Illustration 6 Major Storm Drainage Components of the Project

On the south side of the UPRR alignment, a concrete drainage swale would also carry surface run off from the recontoured bluff face and trail, conveying such drainage along the side of the trail until it reaches one of the storm drain inlets lower in elevation. A total of 5 vertical storm drains would convey this storm water from the trail to the beach elevation, for the trail segment south of the UPRR alignment (refer to Illustration 6). Drains #3 and #6 (shown in light blue in illustration 6) are existing and would be re-used, including rehabilitation of existing piping; drains #2,# 4, and #5 (shown in magenta in illustration 6) would be newly developed for the project.

I11-6
Cont.


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I11-6
Cont.

Response to Comment Letter I11

Ottis Gillespie
April 21, 2021

I11-1 The commenter states that the April 13, 2021 presentation omitted details regarding construction and costs. The commenter asks if various components associated with construction of the project would occur within the two-year construction window.

Regarding the construction window, as stated in Section 3.2.4, it was assumed that construction would commence in March 2022[1] and would be completed by approximately March 2024. This construction schedule includes site preparation (2 months); grading (11 months); trail construction (5 months); bridge construction (1 month); paving (2 months); and architectural Coating (1 month). Regarding the commenter's economic concerns, the City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I11-2 The comment pertains to Illustrations 4, 5, and 6 of the Draft EIR, which have been included in this letter (see comments I11-6). The commenter asks what the complete proposed trail would look like and expresses economic concerns regarding the proposed project. The commenter suggests implementation of traffic barriers to protect cyclists and asks if the Southbound U.S. 101 off ramp would be realigned to account for the proposed project.

Visual simulations of the proposed project have been included as Figure 3.1-2 of the Draft EIR. Regarding the commenter's economic concerns, the City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. The City also acknowledges and appreciates the commenter's suggestions regarding traffic barriers and notes there are no plans for realignment of the Southbound U.S. 101 off ramp at this time. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I11-3 The comment expresses concern regarding lack of an ocean view associated with a portion of Alternative 4.

The City acknowledges that a portion of the trail proposed under Alternative 4 would not have an ocean view. Although it could affect Alternative 4's ability to meet all or most project objectives, this does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I11-4 The comment expresses concern regarding the loss of wind and velocity associated with the proposed project.

[1] The analysis assumes a construction start date of March 2022, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

See Global Response GR1, Air Flow Analysis.

I11-5 The commenter states that they will provide additional comments during the public review period. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I11-6 The comment provides illustrations of several existing benches used informally as a pedestrian path and excerpts of the Draft EIR. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. No further response is required or provided.

Comment Letter I12

Hello Nick, having just heard the good news, I just wanted to extend my heartfelt thanks to you and the environmental review committee for choosing the bike path extension alternative which allows both paragliding the Little Diamondhead bluff and biking or walking on the bike path to coexist, a very wise choice indeed. Many thanks to you all.

I12-1

Sent from my iPad

Response to Comment Letter I12

Desmond
April 23, 2021

I12-1 The commenter expresses support for Alternative 4 and would like to thank the City for choosing this alternative. As a clarification, the Environmental Review Committee voted to recommend approval of the EIR to the Planning Commission with revisions, and expressed a preference for Alternative 4. This vote by the ERC does not constitute a decision for the City to move forward on approval of the project or any of the alternatives in the EIR. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. It should be noted that the City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I13

Hi Nick,

Writing again to let you know I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation. We'd be thrilled to see the city also support this compromise solution. I13-1

Thank you!

--
Caleb

On Wed, Nov 25, 2020, 3:25 PM Caleb Phillips <cphillips@smallwhitecube.com> wrote:

> Hi Nick,
>
> I live in Colorado but visit Santa Barbara to paraglide. It's where I learned, and is one of the best places for the sport in the country. The Bates beach ridge is a world class location for ridge soaring. A bike path is a great addition to the area and would be enjoyed by many, but there certainly must be a way to add a bike path and save this renowned free flying site? Appreciate your consideration and thanks for recieving input from the community. I13-2
>
> Cheers,
>
> Caleb Phillips

Response to Comment Letter I13

Caleb Phillips
April 23, 2021

I13-1 The commenter expresses support for Alternative 4 and would like to thank the City for choosing this alternative. As a clarification, the Environmental Review Committee voted to recommend approval of the EIR to the Planning Commission with revisions, and expressed a preference for Alternative 4. This vote by the ERC does not constitute a decision for the City to move forward on approval of the project or any of the alternatives in the EIR. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. It should be noted that the City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I14

Good morning Nick,

Mike Hilbreath here. I am an avid hang gliding pilot and have frequented the Bates flying site in the past. I have stayed local and spent money at the local restaurants and businesses. I feel that the Bates Flying Site could be preserved, and the cycling community could be served with proper design of the changes to the Bates Site. And, Carpinteria would retain a facility that brings in revenue to the city and the business people who live and work in Carpinteria. I14-1

If you would like to discuss this subject more, I could be available at any time. Thank you Nick.

-
Best regards,
Michael

Response to Comment Letter I14

Michael Hilbreath
April 23, 2021

I14-1 The City acknowledges the comment and notes that it expresses general opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I15

Good morning,

I appreciate the work that the city is attempting to do to put in a new bike path. I realize that planning this is a lot of work and I appreciate the work on this to help bikers. However, I would like the city to follow the recommendation of the Environmental Review committee to use Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation. I15-1

Free flight is a very special sport that does not have a ton of locations where it can be done. Biking on the other hand can be done basically anywhere. Please do not destroy the coastal soaring site with the initial bike path route.

Coastal soaring sites in California draw thousands of pilots from all over the globe who want to experience the magical costal soaring sites. It would be unwise to destroy this form of tourism and reduce the cash inflows to the city and reduce the business that soaring tourists bring. I15-2

Please follow the recommendation for Alternate 4 and preserve free flight soaring at Bates! I15-3

Sincerely,
Brandon Stringham

Response to Comment Letter I15

Brandon Stringham
April 23, 2021

I15-1 The commenter expresses appreciation to the City regarding planning a new bike path and expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I15-2 The commenter expresses the importance of free flight and expresses general opposition towards the proposed project. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I15-3 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I16

Dear Nick,

The draft EIR for the Rincon Trail Project dismisses the significant impact of the project on recreation. Pilots leave no trace and have been using the ridge as-is for decades. The extensive earth moving on the south face of the bluff will significantly change wind flow and cancel flying. I16-1

Rather than reach out to any local pilots, the City of Carpinteria paid for a wind study that estimates a maximum 30% reduction in velocity - and then asserts that 30% is insignificant. That magnitude of change is quite significant to those who use the ridge for soaring. I16-2

The City is brushing aside pilots to muscle through a project involving soil removal, concrete and chain link fences, all to maintain an ocean view for cyclists for a mere few tenths of a mile. The draft EIR downplays the blight this will create for millions of motorists. I16-3

A bike path on the north side of Bates bluff would safely link the bike paths and preserve free flight. I agree with the Environmental Review Committee's decision to recommend Alternative 4. I16-4

It seems a big waste of taxpayer funds to try and prop up a lot more concrete on the south facing side of the Bates bluff, and downright unnecessary to destroy a coastal soaring site. I16-5

Coastal soaring at Bates makes Carpinteria truly special and unique. I'm writing to express hopes for a compromise on an ocean view for the short stretch of the bike path extending along Bates bluff, and for the City to proceed with Alternative 4. I16-6

Thank you for your time and consideration.

Sincerely,

Jamie Bishop, Santa Barbara Soaring Association member, Santa Barbara resident, and cyclist

Response to Comment Letter I16

Jamie Bishop
April 23, 2021

I16-1 The commenter states that the Draft EIR dismisses significant impacts to recreation resulting from wind flow. The proposed project's impacts to recreation, associated with wind flow, have been analyzed in Section 3.11. As discussed in this section, impacts to recreation would be less than significant. In addition, see Global Response GR1.

I16-2 The commenter states that the maximum 30 percent reduction in velocity is significant to soaring. See Global Response GR1.

I16-3 The comment expresses general opposition towards the proposed project. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I16-4 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I16-5 The comment expresses concern regarding tax-payer funds to be expended on construction and maintenance associated with the proposed project. The City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. No further response is required or provided.

I16-6 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I17

Dear Nick, et.al.,

Thank you for your detailed study and continued planning of the bike path reroute along Bates Ridge. I am a long time hang-glider pilot and recently signed the petition to maintain Bates Ridge in a manner to preserve the hang-gliding activities that have been enjoyed there for decades. I hope you appreciate the special place this is, and support it's preservation.

Hang-gliding is suffering a loss of flying sites all over the country.
Mainly this is due to development around the sites and the associated loss of landing zones and access to launches. In some situations, it is a result of changing geography and impact to wind conditions. Please help preserve the few remaining sites. This is true for special sites like Bates Ridge.

I17-1

Thank you,
Wayne Michelsen
USHPA pilot #72939

Response to Comment Letter I17

Wayne Michelsen
April 23, 2021

I17-1 The comment expresses general opposition towards the proposed project. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I18

I am a paraglider pilot who lives in Los Angeles (Woodland Hills, to be exact). I have been coming up to Bates to fly for twenty years. I appreciate your hard work on improving this area for cyclists, as I am also a cyclist who rides here. I would absolutely prefer to use a bike path on the north side of Bates bluff (Alternate 4), as recommended by the Environmental Review Committee. I believe this will best serve everyone's needs. I18-1

Sincerely,
Randall McCormick

Response to Comment Letter I18

Randall McCormick
April 23, 2021

I18-1 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I19

The new bike trail will be great, but it needs to be alternative number 4 please. The completely inaccurate assessment of what will occur with airflow, and dismissal of our recreational flying use of that sight will forever negatively impact our flying future there. Please consider us, the flying community. We have a huge stake in this. And please reconsider which plan you move forward with, and choose an alternative which does not destroy our flight park.
Thank you for your consideration. I19-1

Mike Harrington
Activities Director
SBSA

Mike Harrington
mikestoneyard@gmail.com
Cell 805-452-6162
Store 805-962-9511
Fax 805-962-7290

Response to Comment Letter I19

Mike Harrington
April 23, 2021

I19-1 The commenter expresses support for Alternative 4 and also provides the opinion that the air flow analysis is completely inaccurate.

The City acknowledges the commenter's preference for Alternative 4; the City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided. With regard to the comment on accuracy of the air flow analysis, please refer to global response GR1.

Comment Letter I20

Hello thank you for taking the time to consider with care your impactful work plans. I signed a petition to preserve Bates Ridge that has over 2,000 signatures and 60 comments. I20-1

It's actually an important matter to get right for our future.
The communities can complement each other .

I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation. I20-2

I don't understand why the City is planning alienate the soaring community.
It seems like the EIR draft authors refuse to listen to the pilots who have been recreating at Bates for over 40 years.
Coastal soaring at Bates makes Carpinteria truly special and unique, don't diminish that. I20-3
Let's build a better path. I believe building a bike path on the North side of Bates bluff is best for all recreational users, it is a safer, more direct path for cyclists. I20-4
It also keeps picketing protests off your news cycle.
Please be reasonable.
Save Bates!

Adam Zerkel

(213)924-4693

Response to Comment Letter I20

Adam Zerkel
April 23, 2021

I20-1 The commenter thanks the City for consideration of the commenters' petitions.

The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I20-2 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I20-3 The commenter states that the City is alienating the soaring community by not giving consideration to statements about the history of soaring at the site.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The recreation section of the Draft EIR (3.11) describes existing soaring activities above the project alignment, including an indication that these soaring activities have occurred over a substantial time span. No further response is required or provided.

I20-4 The commenter expresses support for Alternative 4. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I21

Hello again Nick,

Just saw this on youtube. Hard to "imagine," that this route, with a Pacific Ocean View exists.

https://youtu.be/s_bm_VFaPfM

I21-1

Incredible!

Ottis Gillespie

Response to Comment Letter I21

Ottis Gillespie
April 23, 2021

I21-1 The commenter provides a link to a video. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I22

Hello Nick!

I am one of the people who is concerned about the development the city of Carpinteria is planning for the Bates Bluff area. I wanted to reiterate my support for preserving this area and moving the proposed bike path out closer to the highway. Below are some of my thoughts and concerns on this topic. I22-1

- I appreciate the work that has gone into planning this bike trail, but I want to see it improved.
- I am devastated that the Draft EIR considers the impact to my flying recreation to be 'insignificant'. I22-2
- I signed a petition to preserve Bates Ridge that now has 2,000 signatures and over 60 comments. I22-3
- I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation.
- I believe building a bike path on the North side of Bates Bluff is best for all recreational users, as it is a safer, more direct path for cyclists, giving them a path that avoids the crowded, steep, and dangerous Rincon parking lot. I22-4
- I am a cyclist and want a direct route on the North side, rather than an Ocean view. Seeing the Ocean shouldn't be a requirement for this project because I get plenty of views along the whole bike path to Ventura. I22-5
- You are concerned the current plan will require maintenance against rising seas as it is being built near an eroding seawall. Relocating to the other side of the ridge is financially responsible given this concern. I22-6
- I appreciate the wind study done by the engineers, however this study specifically states that it is based on theory and not intended for this purpose. Even if accurate, 20-30% loss of lift is very significant to me, especially on average wind days where lighter wind flow will be exponentially impacted by this project. I22-7
- I feel its inappropriate for the EIR to discuss free flight rules or launches, as this is outside the scope of the document and project. The focus of the EIR and CEQA is preserving recreation at the project site. I22-8
- I don't understand why the City continues to brush me aside and has failed to reach out to the soaring community. There are inaccurate statements in the Draft EIR because the authors refuse to listen to the pilots who have been recreating at Bates for over 40 years. Let's build a better path together. I22-9
- Coastal soaring at Bates makes Carpinteria truly special and unique. I can bike almost anywhere, but I travel to Carp for the flying at Bates and spend my money there. I have spent money in Carpinteria restaurants, coffee shops, grocery stores, and motels, due to the flying there. I22-10

Many thanks for your favorable consideration on this issue!

Regards,

Robin Cushman

Response to Comment Letter I22

Robin Cushman
April 24, 2021

I22-1 The City acknowledges the comment and notes that it expresses opposition to the proposed project and support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I22-2 The comment expresses concern that impacts to recreation associated with the proposed project were determined to be insignificant in the Draft EIR.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I22-3 The comment references the petition to preserve Bates Ridge.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided

I22-4 The City acknowledges the comment and notes that it expresses support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I22-5 The commenter states that an ocean view should not be a requirement for the project and provides support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I22-6 The commenter expresses concern regarding the impacts rising sea level and erosion would have on the proposed project and states that Alternative 4 is more financially responsible.

The sea level rise comment is acknowledged; the hydrology section of the Draft EIR (3.8) discusses impacts associated with potential sea level rise, while the Alternatives Section (6.0) addresses such impacts for each of the identified project alternatives. Regarding the commenter's economic concerns, the City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. No further response is required or provided.

I22-7 The commenter expresses concern regarding 20-30 percent loss of wind and states that this is significant.

See Global Response GR1.

I22-8 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and states the focus of the EIR should be to preserve recreation.

See Global Response GR1.

I22-9 The commenter states that the City has failed to reach out to the soaring community, resulting in inaccurate statements in the Draft EIR.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. Therefore, no further response is required or provided.

I22-10 The commenter explains the uniqueness of the project site with respect to existing soaring opportunities afforded above the project trail alignment.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I23

Dear Nick,

I appreciate the work that has gone into planning this bike trail, but want to see it improved and am in shock how the flying community is being ignored during this process. I travel from Fresno to fly this site and spend money in YOUR community.

If flying becomes interrupted or impeded, I will choose to fly somewhere else, thus taking my money I spend in your area elsewhere. I23-1

The wind study specifically states that it is based on theory and not intended for this purpose. Even if accurate, 20-30% loss of lift is very significant, especially on average wind days where lighter wind flow will be exponentially impacted by this project. I23-2

I don't understand why the City continues to brush me aside and has failed to reach out to the soaring community. There are inaccurate statements in the Draft EIR because the authors refuse to listen to the pilots who have been recreating at Bates for over 40 years. Let's build a better path together. I23-3

Coastal soaring at Bates makes Carpinteria truly special and unique, I can bike almost anywhere, but I travel to Carp for the flying at Bates and spend my money there. I23-4

Please consider this in your decision making process.

Ryan Soares
E.D.G.E. Challenge Course Director
Department of Recreation Administration
California State University, Fresno
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Web site and Video: http://www.fresnostate.edu/chhs/recreation/about/edge/index.html
Facebook: www.facebook.com/fresnostaterecadmin

Response to Comment Letter I23

Ryan Soares
April 24, 2021

I23-1 The commenter expresses appreciation to the City regarding planning a new bike path; states they would like to see improvements; expresses concerns regarding involvement of the soaring community; and states they will not spend their money in the City if the project were to be approved.

The City acknowledges the comment as an introduction to comments that follow. Regarding economic concerns, the City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. Regarding involvement of the soaring community, the City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. The comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I23-2 The commenter expresses concern regarding 20-30 percent loss of wind and states that this is significant.

See Global Response GR1.

I23-3 The commenter states that the City has failed to reach out to the soaring community, resulting in inaccurate statements in the Draft EIR. The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. Therefore, no further response is required or provided.

I23-4 The commenter explains the uniqueness of the project site with respect to existing soaring opportunities afforded above the project alignment.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I24

This email contains my overall comments regarding the Carpinteria Rincon Trail Project Draft EIR of March, 2021 and are provided subsequently to the Carpinteria Environmental Review Committee (ERC) meeting of April 13, 2021. I24-1

As a Carpinteria resident, bluffs user, active cyclist, and inactive paraglide pilot, I support the ERC's recommendation of Alternative Four as the preferred trail alternative. It has the least impact to recreational soaring, eliminates massive beachside earthworks, eliminates installation of beachside storm drainage and piping, and removes the resultant permanent visual impacts of such to views of the area from viewpoints near the Harbor Seal Sanctuary RR crossing and the Seal Sanctuary overlook, and eliminates potential bicycle/pedestrian/vehicle conflicts in the Rincon County Park parking lot by routing cyclists directly to Bates Rd. It also provides additional security to the park in terms of eliminating access and resulting potential vandalism from direct after-hours bike-to-park trail access. In terms of lifecycle costs, it is likely that the cost of maintaining the cycling trail within the 101 corridor would be much less than maintaining the trail along the southern beachside bluffs exposed to wind and rainstorm erosion. I24-2

I do understand that the primary purpose of the original Alternative 2 and the modified "less cut/fill" Alternative 2 was to provide "...a sweeping view of the ocean, beach, and Channel Islands", and that cycling within the Highway 101 Corridor would not be nearly as pleasant and not much of an "Instagram" photo op except from the bridge crossing. It is, however, a relatively short section of highway-adjacent trail on a longer trail that to the East/South runs almost entirely along the ocean to Ventura. Views are still available from the Rincon Bluffs, and of course from Rincon Beach Park for those cyclists who care to stop to seek them out. I24-3

While it is unfortunate that the Santa Barbara Soaring Association and local pilots were not initially contacted and consulted in the preparation of the EIR, I think that their concerns have been heard and the City now has a better understanding of the impacts of modification of the bluffs having the real potential to eliminate this recreational soaring site that is regarded as a jewel of flying along the California coast. I am personally aware of this site's reputation in the soaring community and have met many pilots at the launch site who have come specifically to Carpinteria and this site to practice their skills and learn from and enjoy the company of experienced local pilots who provide encouragement and support to the soaring community and openly answer questions from curious visitors. I24-4

One small concern that will have to be addressed with Alternative Four is that there will be a strong desire for people to develop an informal short-cut trail from either end of the bridge down I24-5

to the existing RR/ocean cutbank bluff trail. Both pedestrians and more fearless mountain bikers will likely want to use that short-cut to access the Rincon Beach parking lot and facilities. The trail near the bridge will need to be designed and built to dissuade that behavior. I24-5 Cont.

Alternative Four has some great potential for creative, inviting design that would mitigate the 101 corridor downsides. Even without the direct ocean and beach views on this particular trail segment, it is still a wonderful addition to the area and the coastal bike path. Kudos to the City of Carpinteria for bringing the vision of the trail to a reality while threading the needle in this complex multi-faceted project. I24-6

/s/ Jon Lewis, Carpinteria CA

Response to Comment Letter I24

Jon Lewis
April 24, 2021

I24-1 The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I24-2 The comment provides support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I24-3 The comment provides an overview of Alternative 2 and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I24-4 The commenter states that the soaring community was not initially contacted but states they believe the City has heard the soaring community's concerns. The comment also provides background on the project site, as it relates to soaring activities.

The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I24-5 The commenter states that, with implementation of Alternative 4, people will want to develop informal shortcuts and suggests the trail is designed to dissuade that behavior.

The City appreciates the commenter's recommendations. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I24-6 The commenter expresses support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I25

Dear Mr. Bobroff:

Is it true the City is working to override the decision of the Environmental Review Committee's decision regarding Bates? I25-1

I fully agree with the ERC's decision to recommend alternate 4, building on the north side of Bates Ridge, preserving the soaring recreation. I25-2

It's outside the scope of the EIR to discuss free flight rules or launches. Shouldn't the focus be preserving recreation at the project site? I25-3

Bates makes Carpinteria unique because of coastal soaring. I can bike anywhere. I25-4

Sincerely,
Betty Winholtz

Response to Comment Letter I25

Betty Winholtz
April 24, 2021

I25-1 The commenter asks if the City is working to override the decision of the Environmental Review Committee regarding Bates.

The commenter is seeking verification of whether the City Planning Department will follow the recommendation of the ERC to implement Alternative 4 for approval of the Rincon Trail project. The City acknowledges receipt of the comment; the City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I25-2 The commenter expresses support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I25-3 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and states the focus of the EIR should be to preserve recreation.

See global response GR1.

I25-4 The commenter explains the uniqueness of the project site with respect to the existing soaring opportunities it affords.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I26

Greetings,

Firstly; thank you for the fantastic work you've been doing to build infrastructure for our communities. We know it's never straightforward. I'm reaching out to suggest strong reconsideration by touching on a couple of points regarding the Bates bike path project.

My name is Riebeeck van Niekerk and I'm a relatively new paragliding pilot. I've spent time going through some of the public information and EIR briefly covered by DUDEK and the engineering teams overseeing the development work for the Bates bike path. I26-1

My ultimate input on the matter echoes much of what you are probably hearing from the rest of the Flying community. Please consider the following points below:

1. **Significance of Impact:** I am a mechanical engineer by trade and from the pure perspective being both a cyclist and a pilot; I see quite a few shortgivings with the primary design option/options presented over zoom a couple weeks ago. Alternative 4 should be given the priority OR another alternative should be engineered to ensure no impact is had on recreational flying in the area. A designation of **'no significant impact'** as far as recreational activities are concerned stems from the lack of engagement with the flying community and from either a lack of insufficient design, engineering, or worse, both. I26-2
2. **Lift Technicals -** From a technical standpoint I have serious reservations about the reported average "20-30% change in wind speed" as well as the reported loss of lift/wind speed/venturi effect based on changing slope gradient. **I would like to see the CFD models used to report those average changes in wind speed. I would like to request plan/side/front/geometric projections for vector distribution plots of wind speed for varying wind direction (60 deg to 290 deg would be sufficient if you don't have a full 360 CFD/EFA study) and wind velocity for all design alternatives.**
    - If a full **CFD/EFA** analysis of the terrain was not conducted, **I would strongly advise** this be done before any considerations are made.
    - Even if that reported average value is accurate; how was the determination made that this has 'no significant effect'?
    - Wind velocity has a squared (quadratic) relationship to drag force which ultimately holds a relationship to lift and therefore **a small change in wind velocity has a significant impact on lift.** The point here is that if; 20-30% reduction is being reported, this will have a massive/significant/noticeable impact on lift and our ability to practice our sport and draw in eco/adventure tourism dollars (discussed more in point 4 below). I26-3
3. **Cyclist Sentiment -** We have surveyed over 100 cyclists who travel through the area regularly somewhere around 2%-3% responded with a desire to have an ocean view on that stretch. The rest just want a direct route - there's plenty of ocean views on the majority of the other sections. I26-4

4. **Tourism and Economics -** from a pure travel and tourism perspective; there's a huge international community of pilots who specifically travel to this area each year to specifically paraglide at bates and other areas around the Ventura/Santa Barbara area. I26-5
5. **Flying Community -** I'm surprised that in a first world country we still have to point this out but; **the engineering/development teams should be working together with the flying community to come up with a workable solution.** We stand ready to lean in to provide SME input on the matter but have yet to hear a word from anyone involved with development of this project. I26-6
6. **Heritage -** We have few places to practice our sport and this is one that is world renowned for being a classic ridge soaring location. This project has the potential to seriously ruin this site for flying forever and it would be a national shame within our community and for our wider global community abroad. I26-7

Again we understand the challenges and my main expectation is that these very real implications are properly considered; and efforts are made to reach out and work with the flying community to converge on a workable solution that will benefit everyone. I26-8

Thank you for hearing me out and look forward to seeing where we can assist.

Kind Regards,
Riebeeck van Niekerk
+1.832.235.0531

Response to Comment Letter I26

Riebeeck van Niekerk
April 25, 2021

I26-1 The comment expresses appreciation to the City regarding planning a new bike path, provides an introduction for the comments to follow, and provides personal background on the commenter.

The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I26-2 The commenter expresses support for Alternative 4 and states that the significance determination for recreational impacts stems from lack of engagement with the flying community and the lack of sufficient design, engineering, or both.

Regarding Alternative 4, the City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. Regarding recreational impacts, the City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise any specific issue related to the adequacy of any particular section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I26-3 The commenter expresses concern regarding the 30 percent change in wind speed and requests computational fluid dynamics (CFD) models as well as plan/side/front/geometric projections for vector distribution plots of wind speed. Fluid dynamics is the study of the motion of fluids, usually in the presence of an object. Typical fluid flows of interest to engineers and scientist include flow in pipes, through engines, and around objects, such as buildings, automobiles, and airplanes. Computational fluid dynamics (CFD) is the study of these flows using a numerical approach. The commenter advises the preparation of a full CFD study. The commenter asks for clarification of why impacts to recreation were considered not significant and states that a small change in wind velocity would have a significant impact on lift.

See Global Response GR1. As described in the airflow analysis report, the analysis provided predictions based on existing data from field measurements of air flow over large-scale topographic features, from aerodynamic experiments conducted with scaled models in wind tunnels, from engineering standards for wind stress on buildings, and from published literature addressing wind flow over topography as related to soaring activities.

Through careful examination of this existing research, appropriate physically-based equations have been applied in order to predict the reduction in horizontal and vertical wind velocities from modification of the bluff face as proposed. The range in predicted wind velocity reduction represents the application of two modeling approaches, one using the mean slope angle across the entire slope face, and the other employing the mean slope angle for the upper portion of the slope. The EIR uses the greater predicted wind velocity reduction for the project and for Alternative 3, as the more conservative conclusion.

For context, Computational Fluid Dynamics (CFD) modeling is typically employed in engineering to address critical operational parameters during design development of equipment, systems and

structures. CFD provides results that are most reliable when examining flow over streamlined and smooth objects, such as an aircraft wing. CFD also requires numerous assumptions, including choices of computational grid size, boundary conditions, and turbulence modeling; to avoid erroneous conclusions, CFD requires careful validation against experimental measurement when applied to a new problem. Validation studies have shown that CFD of complex terrain can provide inaccurate predictions under some atmospheric conditions (see for example El Bahlouli et al. 2020). Relatively more reliable computational approaches (such as Large Eddy Simulation, LES) require vastly greater computational power, and are currently in the domain of research rather than commercial use (see Pirooz & Flay 2018). Due to the scale and complexity of the ocean bluffs along the project alignment, development of a CFD model to evaluate air flow conditions from project changes was not considered suitable or cost-effective.

In order to consider a worst-case scenario, the air flow analysis is based upon the grading plan cross-section of the bluff face with the greatest alteration from existing slope profile to project-resultant slope. The air flow analysis examines incoming horizontal wind that is perpendicular to the bluff crest. Although numerous effects are considered, it may be helpful to recap here the two main effects, namely: (1) amplification in wind magnitude as the flow is constrained to pass over the bluff (the "Venturi" mentioned by the question), and (2) the induction of a vertical wind component as the air must flow at an upward angle over the bluff.

Wind tunnel experiments and field measurements on bluffs have shown that, as long as the mean slope remains above approximately 30 degrees, the amplification in wind magnitude (combining both horizontal and vertical components) will not change significantly (see for example Bowen & Lindley 1977; Bowen 1980). However, the extent and location of the Venturi region, as well as the vertical component of the wind will of course change. The simplest estimate of the vertical velocity component is obtained by multiplying the wind magnitude by the sine of the bluff angle; this approach is used for example in the book on soaring by Pagen (1992), to compile his figure 139. More refined methods of estimation are described in the Air Flow Analysis report. (Luzzatto-Feliz, January 2021).

Reductions in the vertical wind speed associated with changes to the topography are expected to be maximal in the perpendicular wind scenario. This is due to the fact that, when the wind is at a yaw angle to the bluff crest, the bluff will deflect it further along the crosswind direction, implying that the flow that travels over the bluff will be reduced. This effect will decrease ridge lift, as shown by the wind tunnel experiments of Crawley & Schmanske (1994); for an illustration in the soaring literature, see p. 336 of Pagen (2001).

Gentler slopes induce a smaller crossflow deflection, and therefore produce a smaller decrease in ridge lift through this crossflow mechanism (this is also illustrated in fig. 142 of Pagen 1992). Percentage differences between the vertical wind velocities associated with the existing versus proposed bluff profiles would therefore also be smaller than for the analyzed condition with wind perpendicular to the bluff face. Finally, it should be noted that lift for aircraft results from the horizontal wind speed flowing over the wing (or the sail), and that horizontal wind speed over the bluff top is not anticipated to be altered by the proposed regrading. Consequently, horizontal wind conditions that support launching of hang-gliders and para-gliders adjacent to the project alignment would not be affected by the project.

The wind flow analysis and EIR discussion include no attempts to estimate future climatic conditions, including localized wind patterns that could influence the number of days on an annual basis when air flow conditions above the property would support soaring activities, for either the existing bluff profile or those resultant from the proposed project or Alternative 3.

I26-4 The commenter presents the results of a survey stating that cyclists don't mind not having an ocean view on a certain stretch.

It is assumed that this comment provides support for Alternative 4, which would not include an ocean view for a small stretch. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I26-5 The comment relates to travel and tourism associated with the existing project site.

The City acknowledges the comment and notes that it raises economic, social, or political issues that do not appear to relate to any physical effect on the environment. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I26-6 The commenter suggests that the engineering/development teams should be working together with the flying community and states that they have yet to hear from anyone involved in the project. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I26-7 The comment explains the importance of the site when it comes to soaring. The City acknowledges the comment and notes that it expresses opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I26-8 The commenter would like to see all implications properly considered and efforts made to reach out and work with the flying community.

The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. Regarding coordination with the soaring community, please refer to response I26-6. No further response is required or provided.

Comment Letter I27

Hi Nick,

Thanks for your hard work in overseeing the planning and designing of the Rincon Trail. I know it's difficult coordinating with all the stakeholders involved in this complex project. I'm hopeful we can find a solution for everyone. I27-1

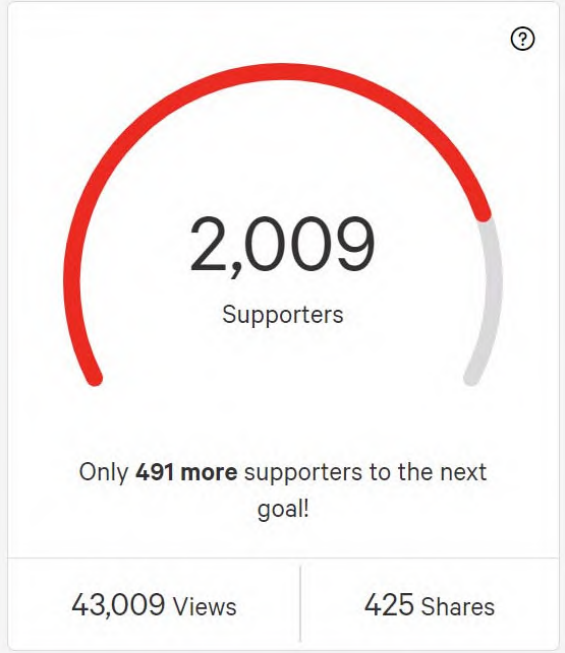
As a cyclist and a pilot, I believe we can build a better bike path together. The first step is considering flying recreation to be significant in the EIR, and addressing the outpouring of concern from the community about losing this recreation. On the day the Draft EIR was released for public comment, we started a petition to preserve the ridge at Bates which now has over 2,000 signatures and more than 60 comments. The metrics and comments are provided below for public record. This clearly demonstrates significant recreation under CEQA. I27-2

I was heartened to hear the Environmental Review Committee's decision to recommend Alternate 4. Building on the North side of Bates ridge will save soaring at Bates and create a safer, more direct path for cyclists that avoids the crowded and steep Rinon parking lot. Seeing the Ocean shouldn't be a requirement for this project because there are plenty of views along the way like the whole bike path to Ventura. I27-3

I appreciate the wind study, however, this document specifically states that it is based on theory and not intended for this purpose. Even if there is a correlation with reality, 20-30% loss of lift is very significant for pilots, especially on average wind days where the vertical lift component of lighter winds will be exponentially impacted by the benches and grades of this project. There are many days when the existence of this ridge is the sole reason pilots are able to maintain flight. It is the last natural remaining feature in this corridor and a truly unique recreational area that should be protected because it makes Carpinteria special. I27-4

I believe the goal of the EIR is to address the impacts of the project, including a review of how recreation will be changed. Under CEQA, all recreation is valued equally if it exists. It is inappropriate for the EIR to impose judgements on recreational users or analyze rules governing their sport or how they gain access. All of these things are outside of the scope of the document and the project itself. Why does the EIR discuss flying rules, launch locations, and wing practices? Not only are these comments frequently inaccurate, something the Santa Barbara Soaring Association attempted to correct with a detailed letter submitted 8 months ago, but they are not relevant to preserving recreation. It seems the City is more concerned with marginalizing our recreation, repeating these vague technicalities, than supporting us. As a tax paying citizen of Carpinteria who moved here from across the country to paraglide, I don't understand why the City is ignoring this opportunity to save a special place and its continued recreation. When will the City start listening to the pilots who have been recreating here for over 40 years? Let's build a better bike path together and explore the possibilities of Alternate 4 on the North side of the ridge. Thank you! I27-5 I27-6 I27-7

Petition metrics and comments:



DAVID RAYBOURN
3 days ago
I can ride my bike anywhere but there are only a few special and rare places to participate in foot-launched Aviation.
If the Historic Launch at Bates cannot be saved, then an alternative site should be created just for hang gliding and paragliding as mitigation.
The Wright Bros. were Hang Glider Pilots!
0

Jeffrey Gritsch
3 days ago
I like flying there!!!
0

Howard Tarpey
4 days ago
Ridge soaring and flying non powered aircraft like paragliders requires these beautiful and unique sites to be able to fly. Since these type of craft were designed people have been enjoying the purest for of flight without interfering with the land. There flying sites are a geographical creation of nature taking hundreds of not thousands of years in their making. A bike path can be laid almost anywhere and anytime. Let's preserve what nature has provided for us and build the bike path elsewhere. Thank you □□
0

I27-8

Bradley Whittemore
4 days ago
I support safe free flight and there are so few available today and don’t want to lose one.
0

Tanner McMullen
1 week ago
What a tremendous environmental insult to move over a quarter billion pounds of earth so bikers can agro-pass each other with a bit more ease. I learned how to fly at this site, I will be devastated if it's destroyed.
0

Robert Jacobs
2 weeks ago
Massively changing topography for allowing one recreational activity to occur in the area at the expense of the other doesn't make any sense, just let the land be as it is, preserve what is already beautiful and useful, we don't need to dig up this place!
0

James E. Stelzer
2 weeks ago
This isca greatly needed site
0

Aaron Sagin
2 weeks ago
Flying the CA coast is one of the greatest expressions of joy that exists
0

Jordan Zweig
2 weeks ago
Im signing this petition because I am a local who frequently recreates in the area and because I am passionate about conservation. This area and the recreation opportunities it represents are very important to me.
0

Jake Spoelstra
2 weeks ago
Paragliding is cool!
0

Charles Gieser
2 weeks ago
I am signing to protect this beautiful land

I27-8
Cont.

0

Scott Ball
2 weeks ago
Please dont destroy this world class recreational resource
0

Kiernan O Donovan
2 weeks ago
Preserve free flight.
0

Ronit Corry
3 weeks ago
Please save Bates!!!
0

Maximilienne Giannelli
3 weeks ago
This is an awesome paragliding site that should be preserved.
0

James Stubbs
Mar 21, 2021
because flying!
0

Robin Lang
Mar 21, 2021
Too much of Florida has been lost, destoryed and replaced by much worse than a bike trail. However, digging up hundreds of thousand pounds of soil that will ruin airflow? Playing with mother earth in this manner has got to stop. Heck, I won't even pick up a rock in a rivier because I worry about disrupting the flow of water. We must be more responsible, less greedy with an aware ego. Good luck TJ!
0

Jack Klim
Mar 21, 2021
#savethebates
0

Kevin Lamkin
Mar 20, 2021
As a resident of Carpinteria, an avid Hang Glider and cyclist, I urge the City Of Carpinteria to do the right thing

I27-8
Cont.

and preserve this priceless soaring site while still providing cyclists with a route through the bluffs.
0

Mary-Elizabeth Prosser
Mar 19, 2021
I want to protect natural watershed. This site is important to many people, too.
0

Andrzej Rusztowicz
Mar 18, 2021
I bike much more often than I paraglide, and we need more bike paths everywhere. But it's also very hard to find good paragliding sites and we should not have one at the cost of the other. Let's work together!
0

Steven Garman
Mar 16, 2021
This is important.
0

Carolyn LaDuke
Mar 16, 2021
For a friend
0

Lee Eisler
Mar 16, 2021
I love flying and I love bates beach. It's a very special place. Not only do the paragliders love it but people come to watch all the time. It's exciting and beautiful to everyone! It's one of the things that makes Carpinteria special!
0

Genese Izuno
Mar 16, 2021
There are tons of trails around Carpinteria. There is only one paragliding area. Please let them have the natural lift provided by Bates Ridge.
0

Adrien Spiegel
Mar 16, 2021
let's make our outdoors more accessible for all people participating in an assortment of different activities
0

Adam Zerkel

I27-8 Cont.

Mar 15, 2021
Haven’t we paved enough?

why not a lower impact plan to support the current use community?

If more development is important here for someone, who is that someone and what is the value of this project for them?
0

Alexander Hoffman
Mar 15, 2021
I grew up in this community and know how special it is to advocate for this. As an avid cyclist I see no need for more concrete to be poured ANYWHERE to make cycling paths, especially when they will damage the ecosystem so heavily. Animals depend on the shoreline for life, we depend on the living to live, the more you build the more you turn the living zones into dead zones. So Please Dont Build this!!
0

Patrick Blackburn
Mar 15, 2021
We need to do everything we can to preserve all existing foot launched flying sites in the U.S.!!!
0

Chien Dinh
Mar 15, 2021
Please keep Bates open.
0

Lawrence Chamblee
Mar 15, 2021
Development has gobbled up most of the historic hang gliding sites, leaving practically no place to enjoy our passion for flying. I love cycling too, but cycling opportunities are blossoming, while silent soaring sites disappear. Please reconsider this bike path plan so it doesn’t destroy a unique coastal flying site.
0

william hetzel
Mar 15, 2021
Bates is treasured flying site! Please keep it intact.
0

Josh Heater
Mar 15, 2021
Flying sites are very difficult to come by. I hope the bike route plans not negatively impact the flying site.
0

I27-8
Cont.

Randolph Ruffin
Mar 15, 2021
I love flying at Bates. There must be a way to make a bike path and not destroy the hill.
0

Keith Smith
Mar 15, 2021
I hate to see this awesome site lost when there are better optios.
0

Hugh Cartmill
Mar 15, 2021
There are better alternatives which will allow flying to continue.
0

topher mira
Mar 14, 2021
I'm a paragliding pilot and I support this
0

Scott Schoenfeld
Mar 14, 2021
I’m a Carp local and want to continue flying at one of the most beautiful coastal sites in CA.
0

John Fritsche
Mar 14, 2021
This is one of the few unique sites that make soaring hang gliders and paragliders possible in coastal California!
0

Colin Beach
Mar 14, 2021
Hang gliding as a sport is diminishing. We need to preserve the limited flying sites we still have
0

Judith Hutchinson
Mar 13, 2021
Please don't destroy this site.
0

Derek Mckee
Mar 13, 2021
Theres always another way and 40 years deserves respect

I27-8
Cont.

0

Zachary Majors
Mar 13, 2021
When the conditions are good for flying at Bates, there are usually no other good options for that day. Bates is a treasure of a flying site and I usually spend money 8n Carpenteria after flying there.
0

karim salsbury
Mar 13, 2021
Would be a shame to close this
0

michael holden
Mar 13, 2021
I have always enjoyed the location, for surf, paddling, and zero construction/obstruction for its natural location. My son and I have just now gotten into flying and had hoped to utilize this location.
0

Houser Ron
Mar 13, 2021
Ron Houser
0

Neal Michaelis
Mar 13, 2021
As a cyclist and pilot, it would be nice to have a solution that respects both pursuits. Please don’t destroy this amazing flying resource.
0

doria wosk
Mar 13, 2021
JUSTICE FOR WE THE PEOPLE. SAVE BATES-CARPINTERIA HISTORIC FLYING SITE
0

Warren Flatte
Mar 13, 2021
To help preserve free flight, especially when there are alternatives to explore
0

Bro Childs
Mar 13, 2021
As a Mtn biker and pilot I value both activists greatly. However, soaring sites in the air required a special

I27-8
Cont.

combination of geography and airflow which can be rare to find. Please preserve this rare treasure, and relocate and/or redesign the Mtn bike trail that both activities may be enjoyed.
0

Norma Ryan
Mar 12, 2021
Please allow this beautiful sport to continue. To those of us traveling north up the coast it is the most awesome sight to see the paragliders and the hang gliders flying like butterflies above the bluff and welcoming us to Carpinteria. The surfers, the sunbathers, the people who just come to watch this amazing show of athletic achievement, all appreciate the beauty. Keep this area multi-use and if a better bike path needs to be built I'm sure the cyclists would be in favor.
0

Sandy Minitello
Mar 12, 2021
Sandy Minitello
0

Cyndia Zumpft
Mar 12, 2021
I want to fly there someday! It is a beautiful spot!
0

Harvey Levine
Mar 12, 2021
Everyone needs a chance follow their passion. And though I would not volunteer to soar, I enjoy the beauty created by those who do!
0

Alexander Tchourbanov
Mar 12, 2021
This site is unique and deserves preservation. So many flying sites in CA have been forever ruined by development.
0

Lincoln Kroll
Mar 12, 2021
Hang Gliding sites are rapidly disappearing across California. We need to preserve all remaining sites that are safe and accessible, for today and future pilots..
0

Gordon Cayce
Mar 12, 2021
In the late seventies Seagull Aircraft moved their factory from Santa Monica to Carpinteria. Their shop was

I27-8 Cont.

located in the small industrial park literally minutes away fro Bates Road. We used Rincon Mt. for test flying new gliders, but Bates was one of our favorite sites. With the Seagull shop so close it felt like our personal site. I spent many long hours waiting for the wind to come in off the ocean and spent many hours soaring with Tom Peghiny, Glenn Hackett, Paul Hobson, Tom Haddon, Darrell Bibby and so many great Santa Barbara pilots. It would be a great disappointment to lose this classic small site that has been flown for so many years.
0

Rick Warner
Mar 12, 2021
I want the Bates flying site preserved. Please design a bike path that does not impact the topographical features of this area.
0

Shirley Docken
Mar 12, 2021
I want to support keeping this unique topography as is. Other bike paths can be used.
0

Calvin Grier
Mar 12, 2021
We need to preserve the area for all recreational use, not just hiking and biking.
0

Kim Browder
Mar 12, 2021
This is a truly unique and rare site for paragliding pilots. Pilots come from all over the world to fly Bates...do cyclist? Save Bates...it is a treasure!!
0

Дмитрий Хайруллин
Mar 11, 2021
All sports are important! I believe there are plenty bike paths there.
0

Jennifer Lauritzen
Mar 11, 2021
Paragliding is a beautiful sport for both spectators and pilots. Ruining a historical recreational site for a bike path, especially when alternate bike path options exist, is irresponsible land management.
0

robert sporrer
Mar 11, 2021
This project will disrupt the airflow that make it possible to fly paragliders and hang gliders. There are other options

I27-8
Cont.

0

David Hunt
Mar 11, 2021
I travel frequently to Santa Barbara solely to paraglide and support efforts to keep this flying site and tourist income viable.
0

Daniel Redding
Mar 11, 2021
Super important site! Please keep it open for all!
0

Daniel Vallieres
Mar 11, 2021
Don’t lose this valuable site. It is part of what makes me want to drive down south for vacations
0

Vinay Shah
Mar 11, 2021
I live in Boulder, CO but I spend significant time in this area during the winter specifically for the flying. Bates offers a type of flying (ridge soaring) that is difficult to find in CO, and being able to practice here has helped me and others become better, safer pilots flying in an environment where we can safely build up flight hours.
1

Daniel Garcken
Mar 11, 2021
I want to preserve the flying site at Bates but also wish to see the bike bath be reimagined in a way that doesn't impact the flying at the site.
0



I27-8
Cont.

Response to Comment Letter I27

Jeffrey A Longcor
April 25, 2021

I27-1 The comment expresses appreciation to the City regarding planning a new bike path, provides an introduction for the comments to follow, and provides personal background on the commenter.

The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I27-2 The comment expresses that, based on the petition to preserve the site that gained over 2,000 signatures and more than 60 comments, impacts to recreation should be considered significant under CEQA.

See Global Response GR1. The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I27-3 The commenter expresses support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I27-4 The commenter expresses concern regarding the wind study and believes that 20-30 percent loss of wind should be considered significant.

See Global Response GR1.

I27-5 The commenter states that it is inappropriate for the EIR to impose judgements on recreational uses or analyze rules governing the sport or how they gain access.

Please see Global Response GR1 regarding the inclusion of soaring fundamentals, existing launch practices, and FAA regulations in the Recreation Section of the EIR. The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I27-6 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and that this has been described incorrectly in the Draft EIR. The comment also provides general dissatisfaction with the City and the project.

Regarding the discussion of flight rules or launches, see Global Response GR1. In addition, the City acknowledges the comment and notes that it expresses the opinions of the commenter and general opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I27-7 The City acknowledges the comment and notes that it expresses general opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I27-8 The commenter provides a sample of the approximately 2,000 responses to a survey they circulated regarding "preservation of the ridge at Bates." The City acknowledges the survey responses submitted with the comment, and notes they expresses general opposition for the proposed project but do not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Hi Nick, I'm a Colorado native and have been spending my winters here in SB I for some time now mostly because of the variety, and quality of the paragliding it offers. It's a very special place with an amazing history of free flight. Bates is one of the top spots in the country for coastal soaring offering a very rare opportunity for the pilot to "climb out" in the lift where the wind sock is located and fly cross country south towards Ventura. I don't know of any coastal sites in the US where paragliders and hangliders are that blessed! Kind of similar to surfing Rincon, it's just that special. Thanks for reading Nick, I share the same feelings of many others that the history of free flight there should be saved and the bike path on the 101 side makes sense.

I28-1

Cheers,
Jason Lombard

Response to Comment Letter I28

Jason Lombard
April 26, 2021

I28-1 The comment provides general background on the opportunities for recreation the project site provides for paragliders and hang gliders.

See Global Response GR1. The City acknowledges the comment and notes that it expresses general opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I29

4-25-2021

Thank you for the opportunity to comment on the draft EIR for the path.

It should by now be quite obvious to all that the plan to have the path on the ocean side of the main bluff will never be permitted, as there simply **is no mitigation possible** for the very significant impact to existing recreation. I29-1

The focus from this point forward should **ONLY** go towards some version of **ALTERNATIVE 4** that does not remove any aspect of the south-west or west area of the main bluff**.** Not transitioning to a more acceptable design **NOW** will only delay the permitting process and cost taxpayers more unnecessary expense.

Instead of just using the current design on the north side of the RR tracks for the start of alt 4, please re-design/engineer the alternative 4 concept to have the north side of the bridge closer to the freeway and then rotate the bridge about 10 degrees counter-clockwise--moving the south end of the bridge to the east. Although the repositioning would likely require more substantial bridge supports to accommodate the slightly longer span on the cuts above the RR tracks if using the same length of pre-fab bridge, moving the south-side bridge terminus further to the east would result in a considerable reduction of the earthwork needed as compared to what is stated in the current EIR draft for alternative 4. I29-2

Please don't be misled by the conclusions within the draft that are primarily derived from statements from the preceding MMD that are most likely from the input of just **one** person, **the applicant**. Consider the reasons why public entities often save money and time when they contract with private planning/permitting services for projects that can be cumbersome. I29-3

Thank You,

John Greynald

805 886-6160

Response to Comment Letter I29

John Greynald
April 26, 2021

I29-1 The commenter states that the project cannot be permitted as there is no mitigation possible for the very significant impact to recreation.

See Global Response GR1. The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I29-2 The commenter expresses support for Alternative 4 over the proposed project but proposes certain revisions to the design of Alternative 4.

The City appreciates the commenter's recommendations. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I29-3 The commenter states that the Draft EIR conclusions are derived from the previous MND that were based only on the opinions of the applicant.

It is assumed that the commenter is referencing the 2015 MND and the 2019 Subsequent MND, prepared for the proposed trail. The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I30

Greetings,

My name is Ajay Rajamani and I am a local paraglider pilot and cyclist. Having biked the entire pacific coast from SF to LA, I really appreciate the effort to allow cyclists to keep off the highway between Carpinteria and Ventura. However, after attending the town hall meeting last week I strongly feel that Alternate 4 is the best plan to move forward with the project. That is, building the path on the north side of Bates Ridge to preserve freeflight and limit erosion damage to the cliff face.

I30-1

While seeing the ocean is nice, there are already miles of oceanside bike paths between SB and Ventura, in particular immediately after the proposed extension there is ~4 miles of prime oceanside bike path from the Rincon parking lot to Mussel Shoals. I don't think it's worth destroying a nationally renowned flying site that attracts pilots from all over the country for less than 400m of additional seaside views. In addition, I am highly concerned over the erosion and construction impact of building on the south side, which would likely wash tons of soil and chemicals into the ocean.

I30-2

Thank you for considering my comments. I hope we can arrive at a solution for this project that satisfies all user groups.

I30-3

-Ajay Rajamani

Response to Comment Letter I30

Ajay Rajamani
April 26, 2021

I30-1 The commenter expresses support for Alternative 4. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I30-2 The commenter expresses concern regarding erosion and construction impacts of building on the south side, which could wash soils and chemicals into the ocean.

The proposed project's impacts to erosion have been analyzed in Section 3.5.4. As discussed in this section, implementation of mitigation measure MM-GEO-3, which includes recommendations from the geotechnical report regarding slope construction, would reduce impacts to less than significant with mitigation. In addition, the project's impacts to water quality have been analyzed in Section 3.8.4. As discussed in this section, with implementation of mitigation measures MM-WAT-1 through MM-WAT-5, potential project impacts to surface water quality would be reduced to less than significant. In addition, per Section 3.8.4, release of project storm drainage along the beach would not result in substantial erosion, as the introduction of impervious surfaces would be minimal compared to the overall project drainage area and the trail drainage will be divided into 6 separate outlets to minimize the discharge volume from any of the outlets.

I30-3 The commenter provides appreciation to the City for considering their comments. The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I31

Hello Nick,

The current plans for the Carpinteria-Rincon Trail project will impact paragliding and hang gliding in the Carpinteria, Santa Barbara and greater SoCal areas. I am a representative of the paragliding and hang gliding community in Santa Barbara County, and myself and other members from this community were sad to find that the new plans for the trail will involve significantly cutting into Bates Ridge, which would effectively end paragliding and hang gliding in the area. I31-1

We are asking the city to consider putting the trail on the north side of Bates Ridge (between the highway and the ridge), rather than cut into the ocean-facing side where the lift for flying is generated. The planned grading profile on the ocean-facing side of the ridge will decrease the steepness of the ridge, reducing or eliminating the strong upward draft necessary to fly. The grading will also decrease the distance between pilots and pedestrians/obstacles/the ground, making for dangerous conditions. Additional grading shelves will likely disrupt airflow and/or make it too turbulent. I31-2

Ninety percent of the flying at Bates occurs on this ridge, which is one of only three ridges available for flying between San Diego and Big Sur. Hang gliders and paragliders have been flying here for 30-plus years—it is a historic site with hundreds of pilots flying here every year. Pilots have moved to Carpinteria specifically for the flying. Many paragliders and hang gliders are also cyclists, roller bladers or runners—we think the bike path is a great idea. We would like to work with the city to find an option that does not destroy this beautiful, historic site.

I appreciate the work that has gone into planning this bike trail, but want to see it improved. I31-3

I am devastated that the Draft EIR considers the impact to my flying recreation to be 'insignificant' I31-4

I signed a petition to preserve Bates Ridge that has 2,000 signatures and over 60 comments. I31-5

I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation.

I believe building a bike path on the North side of Bates bluff is best for all recreational users, it is a safer, more direct path for cyclists, giving them a path that avoids the crowded, steep, and dangerous Rincon parking lot. I31-6

I am a cyclist and want a direct route on the North side, rather than an Ocean view. Seeing the Ocean shouldn't be a requirement for this project because I get plenty of views along the way like the whole bike path to Ventura. I31-6 Cont.

I am concerned the current plan will require maintenance against rising seas as it is being built near an eroding seawall. Relocating to the other side of the ridge is financially responsible. I31-7

I appreciate the wind study done by the engineers, however, this study specifically states that it is based on theory and not intended for this purpose. Even if accurate, 20-30% loss of lift is very significant to me, especially on average wind days where lighter wind flow will be exponentially impacted by this project. I31-8

I feel it's inappropriate for the EIR to discuss free flight rules or launches, this is outside the scope of the document and project, the focus of the EIR and CEQA is preserving recreation at the project site. I31-9

I don't understand why the City continues to brush me aside and has failed to reach out to the soaring community. There are inaccurate statements in the Draft EIR because the authors refuse to listen to the pilots who have been recreating at Bates for over 40 years. Let's build a better path together. I31-10

Coastal soaring at Bates makes Carpinteria truly special and unique, I can bike almost anywhere, but I travel to Carp for the flying at Bates and spend my money there. I31-11

Thank you

Rob Sporrer
Santa Barbara Resident since 1995

Response to Comment Letter I31

Rob Sporrer

April 26, 2021

I31-1 The commenter expresses concern regarding the loss of paragliding and hang gliding associated with the project.

Please see Global Response GR1. The City acknowledges the comment and notes that it expresses opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I31-2 The commenter expresses support for Alternative 4, providing the opinion that the proposed recontouring of the ocean-facing side of the ridge would reduce or eliminate the strong upward draft necessary to fly.

Please see Global Response GR1 that discusses the air flow analysis and project impacts on existing soaring opportunities. The comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I31-3 The comment provides background on the project site, as it relates to soaring activities, and states the site is a historic site.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The project's impacts on historic resources were analyzed in Section 3.4.4. As discussed in this section, no historical built environment resources exist within or near the proposed project site. Therefore, no further response is required or provided.

I31-4 The comment expresses concern that impacts to recreation associated with the proposed project were determined to be insignificant in the Draft EIR.

See Global Response GR1. The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I31-5 The commenter states that they signed a petition that had 2,000 signatures and more than 60 comments to preserve the site.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I31-6 The commenter expresses support for Alternative 4 over the proposed project but proposes certain revisions to the design of Alternative 4.

The City appreciates the commenter's recommendations. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I31-7 The commenter expresses concern regarding eroding seawalls and rising sea levels, and states that Alternative 4 is more financially responsible.

See response I22-6, above.

I31-8 The commenter expresses concern regarding the accuracy of the wind study and believes that 20-30 percent loss of wind should be considered significant.

See Global Response GR1.

I31-9 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and states the focus of the EIR should be to preserve recreation.

See Global Response GR1.

I31-10 The commenter states that the City has failed to reach out to the soaring community, resulting in inaccurate statements in the Draft EIR.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. Therefore, no further response is required or provided.

I31-11 The commenter explains the uniqueness of the project site relative to soaring opportunities afforded by existing conditions within the project alignment.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I32

Nick Bobroff April 25, 2021

Principal Planner

Community Development Department

City of Carpinteria 5775 Carpinteria Ave. Carpinteria, CA 93013

Hello Mr. Bobroff and readers of this letter,

This is my third reply to the Zoom webinar meeting on April 13, 2021 of the Environmental Review Committee concerning the Multi Use Trail (M.U.T.). The M.U.T. has certain uses that will be banned. The presented proposal will not provide; improved public coastal access, recreational opportunities, or add to regional coastal resources. The "shared-use," trail will be limited to less than, "multiple," or "shared," uses. I32-1

The ever increasing, electric powered bicycles, already "illegal," (as mentioned, by Matt Roberts), on any bike path in the City of Carpinteria, are to be specifically banned. They are currently in use on all bike routes, within the City. What about skateboards? Electric powered skateboards? Roller blades/skates? Radio controlled cars? Street Luge? Sidewalk surfers? Scooters? Minibikes? Wagons? Horses (ten foot wide "path," with 3-foot-wide paved shoulder?)? Are the primary users, bicyclists, relegated to the shoulder? (see attachments 3.1, 3.2,3.3)? The proposed sixteen-foot width of the M.U.T. will attract these, and other users, and result in substantial conflicts with primary users and pedestrians. I32-2

The proposed removal of 92,526 cubic yards of the existing Little Diamondhead Bluff, will be an elimination of a regional coastal resource (see attachments 3.4, 3.5.). An average dump truck can haul 10 cubic yards of dirt. If there are 10 dump trucks, per day removing dirt and debris, seven days a week, it would take almost three years, to remove. The resulting traffic, inevitable debris removal complications, cultural resource discovery and preservation, aesthetics, biological and environmental issues, equipment exhaust and staging, noise, freeway lane, road, bike path, parking lot, and beach closures will expand the expected costs, and timeline to complete. More and larger dump trucks will be the City's most likely response to shorten the debris removal and construction timetable. Where will 14,860 cubic yards of dirt and debris, be staged, on the construction site? I32-3 I32-4 I32-5

A survey of road bicyclists (see attachment 3.6) agrees with the Committee. Alternative #4, should have an external width (except for two switchbacks, to reduce speed of bicyclists crossing Bates Road) of no more than eight feet. Final grade, and accessibility, will follow ADA requirements. This will substantially lessen the costs, and construction timeline, and environmental impact. It should continue to be constructed by the California Department of Transportation. No private contractors should be used. Preserve Little Diamondhead! I32-6

Respectfully,

Ottis Gillespie

3.1



I32-7



I32-7
Cont.

3.3



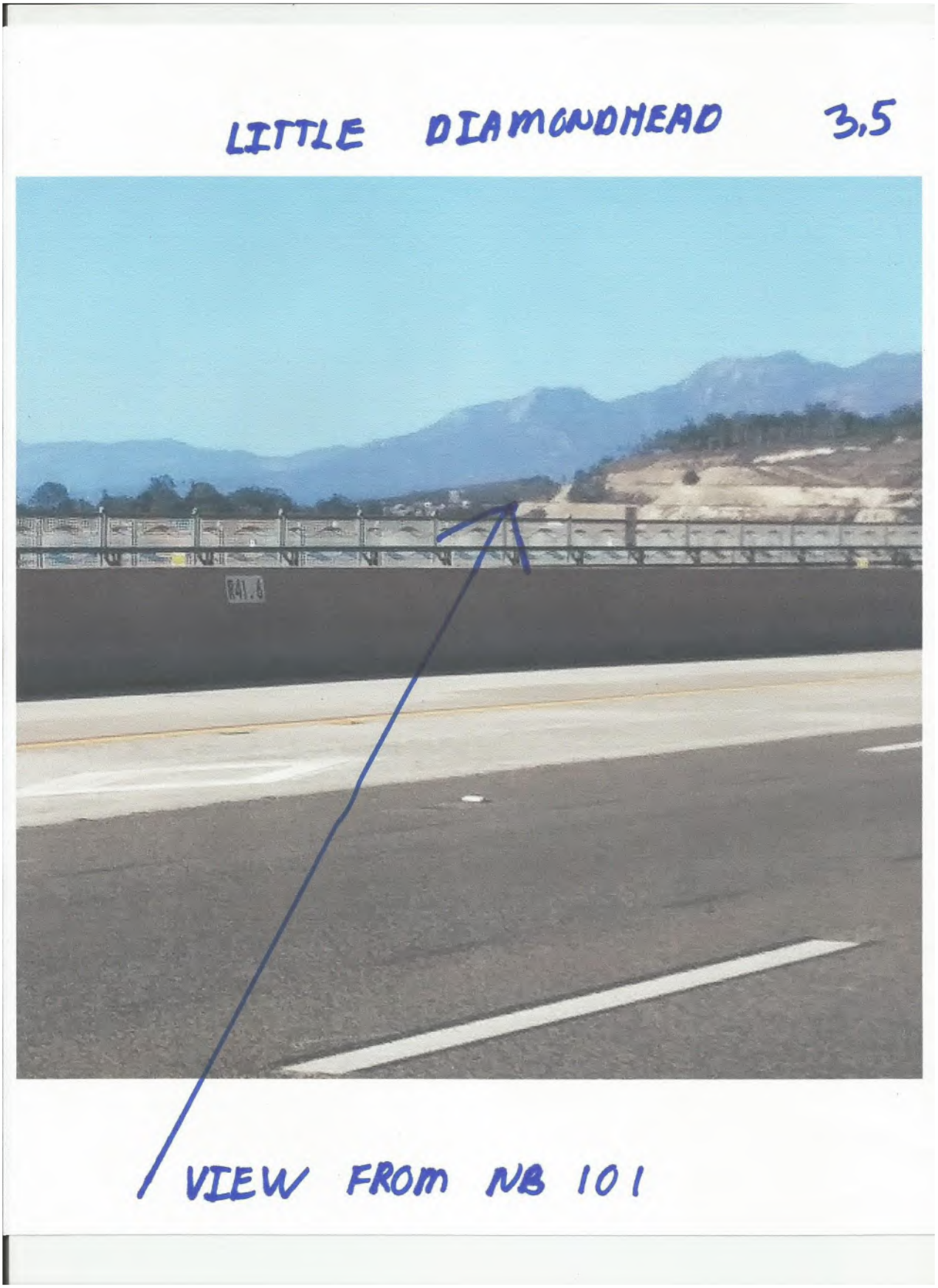
I32-7
Cont.

LITTLE DIAMONDHEAD 3.4



VIEW FROM ON RAMP
NB 101 AT DAVES ROAD

I32-8



I32-8
Cont.

3.6

MULTI USE TRAIL BICYCLISTS SURVEY 2020

A survey of 100 bicyclists, that stopped on the King property, to watch paragliders, and enjoy the view, was conducted by me. I introduced myself, stated I was a paraglider pilot, and asked them, if they would mind, taking a verbal, two question, survey, concerning the M.U.T. This survey was in July through September, 2020

1) Are you a local resident, or from out of town?
2) Considering the prevailing Southwest wind, would you prefer to have the bike path extended across the Pacific Ocean side of that Bluff (as I pointed to Little Diamondhead), or on the freeway side?

The bicyclists that responded verbally as" local,"		87
Respondents from "out of town,"		13
Total		100
Pacific Ocean side preference:		3
Local	2	
Out of town	1	
Freeway side preference:		96
Local	83	
Out of town	13	
Abstention from choosing :		1

I32-9

Response to Comment Letter I32

Ottis Gillespie
April 25, 2021

I32-1 The commenter notes his letter is in response to the April 13, 2021 presentation on the proposed project. The commenter believes that certain uses would be banned under the project and that the project would not provide adequate recreational uses.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I32-2 The commenter expresses concern that the proposed project would attract electric bikes, skateboards, roller blades/skates, horses, wagons, and other uses.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I32-3 The commenter states that the removal of the bluff would be a removal of a regional coastal resource and references attachments 3.4 and 3.5 (see response I32-8).

Please refer to Global Response GR1 for discussion regarding the air flow analysis and project impacts upon recreation (soaring opportunities). The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I32-4 The comment expresses concern regarding the environmental impacts associated with earth materials removal.

The environmental impacts associated with export of the soils on-site have been analyzed throughout Chapter 3 of the Draft EIR. The commenter does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I32-5 The commenter states that the City will likely require more and larger trucks to shorten debris removal and the construction schedule and asks where staging of debris would occur.

The City acknowledges the comment and notes that it expresses the opinions of the commenter. The project's construction schedule and number of haul trips associated with the project are outlined in Section 3.2.4 of the Draft EIR. Excavated soil materials would loaded into haul trucks simultaneous with the grading activity; a limited volume of soil stock-piling would occur in the vicinity of active grading (within the project site) between the loading operations for individual haul trucks.

I32-6 The commenter expresses general support for Alternative 4. The commenter suggests that the width of the proposed bike route should be no wider than 8 feet, with the exceptions of switchbacks. The comment provides additional recommendations for Alternative 4.

The City acknowledges the comment and appreciates the commenter's suggestions regarding the 8-foot path width. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I32-7 The commenter provides illustrations of sports activities referenced in comment I32-2. The comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I32-8 The commenter provides photographs of the ridge area commonly called "Little Diamond Head." See response I32-3. The comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I32-9 The comment provides the results of a survey. The comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I33

Hi Nick,

I am writing to comment about the bike path that could potentially destroy a natural resource for the flying community in SB county. I am very appreciative of the work that has been done thus far and am hopeful that you will look beyond the Draft EIR which stated that the impact would be "insignificant." I33-1

As a pilot for almost 20 years, I can attest that removing earth on the South Side of the bluff to build the bike path would ruin our ability to soar those bluffs. I agree with the Environmental Review Committee's decision to recommend "Alternate 4" in order to preserve our soaring ability on the South Side of the bluff.

As an avid bike rider, I also agree with building on the North side of the bluff. I can't imagine the craziness in the summer of trying to negotiate the busy parking lot. It makes sense for fluidity and speed to route the path on the North side of the bluff. I33-2

I hope that as we move forward in this plan, you reach out and listen to our community of pilots and professionals. We are fighting to save this place because it is special in the hearts of hundreds of pilots nationwide and a real treasure in our area. Please make the best choice for all involved. I33-3

Respectfully,

Tim Barker
--
Tim Barker
5th grade Hope School

“You cannot teach a man [woman] anything; you can only help him find it within himself.”
Galileo Galilei (1564-1642)

Response to Comment Letter I33

Ottis Gillespie
April 25, 2021

I33-1 The commenter expresses the opinion that the bike path could destroy a natural resource for the flying community.

Please see Global Response GR1. Further, the City acknowledges the comment and notes that it expresses general opposition to the project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I33-2 The commenter opines that removing earth on the south side of the bluff would ruin the ability to soar these bluffs and expresses general support for Alternative 4.

Please see Global Response GR1. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I33-3 The commenter makes general remarks about future coordination with the City and the soaring community. The comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I34

Im sending this email in protest of the Draft EIR statement that there is an insignificant impact to the flying at the Bates Launch.
30 % reduction in lift will ruin the flying on the hill as that small margin of lift is needed for soaring flight. I34-1

I have contacted Dennis Page, whose work and calculations were used in the Draft EIR and he pointed some flaws in the study. I have asked him to draw up some drawing to show why there is such a big impact. I have known Dennis for 35 years and so he is willing to draft them up for us. I34-2

I was happy to hear that the community is willing to look at the North side path that works to not affect the flying on the south side of the hill I34-3

There is a Petition to preserve Bates Ridge that 2000 people have now signed it will be presented to the city. . I believe this shows a strong desire to preserve flying while still being able to get a bike path down to the beach. We have spoken with many bike groups and they are in support of running the trail down to connect with the other trail. I34-4

Thanks Karl Cameron
--

Karl Cameron
Product Manager

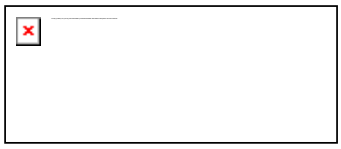
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Response to Comment Letter I34

Karl Cameron
April 26, 2021

I34-1 The commenter states the opinion that the proposed project would ruin the opportunity of flying over the bluffs area due to the 30 percent reduction in lift.

Please refer to Global Response GR1.

I34-2 The commenter indicates they will be contacting Dennis Page to create a drawing that illustrates how the air flow analysis is flawed. However, no specific critique of the air flow analysis is provided in the comment.

Please refer to Global Response GR1.

I34-3 The commenter expresses general support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I34-4 The commenter references the petition to preserve the site. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I35

William C. Prechter
Civil Engineer
PO Box 454 Nevada City, CA 95959
(530) 265-0733

March 3, 2020

RE: **Carpinteria Rincon Trail Project**

To Whom it may concern:

On a recent trip to the Ventura and Carpinteria area, specifically to the Bates Paragliding site I was told of the proposal to put in a new bike path. After hearing of the proposal and looking at the proposed alignment a letter seemed in order. I am a Professional Civil Engineer, avid bicycle rider, both road and mountain and a paraglider pilot.

I currently live in Nevada City, California and for the past eight years have made several trips each year to the area. If conditions are right each trip involves surfing, flying and bike riding. The Bates flying site represents a very special and unique feature that is found in only a handful of places along the coast of California especially in regards to the accessibility of the site. Not only are the views awe inspiring and incredible, the drive-up nature of the site makes it extremely appealing. As a bicycle rider I also appreciate the bike paths that have been made in an attempt to keep cyclists safe from traffic. I35-1

Looking at this proposed path alignment, the main goal of it seems to be maximizing ocean views, which it does well. Other significant factors appear to have been neglected and or overlooked. I'll list three here. First, this path creates a potential conflicting and hazardous interaction between two recreational activities, paragliding and bike riding. In low wind conditions paraglider pilots often find lift by flying close to hill or mountainsides. Picture a bicyclist descending the path with a paraglider pilot 6' off the ground in an oncoming direction. Second, this path puts bicyclists directly at the end of an already congested and narrow parking lot. As a road bike rider, myself and most others I know go will go to lengths to avoid riding through busy parking lots. The variability of drivers and non-predictability is high. Riding in a bike lane alongside traffic represents for the most part a more predictable outcome. Drivers are in a lane heading in a particular direction. A parking lot is far more prone to vehicle randomness and thus undesirable and dangerous, to the rider, interaction. Third, tax payer expense both short term and over the course of time. Pursuing this alignment is no small feat in regards to labor, earthwork quantities and the potential building of a bridge. I believe exact earthwork quantities have been presented in other letters. Longevity of the project is questionable as it would be built atop a slope with marginal stability. One need only walk down to the Bates beach and look at the hillside to see what time and environmental factors do the soil at hand.

I35-2
I35-3
I35-4
I35-5
I35-6

William C. Prechter
Civil Engineer
PO Box 454 Nevada City, CA 95959
(530) 265-0733

In my own consulting practice I strive to keep architectural design and aesthetics as a main priority. As such I can appreciate what this path is attempting to do. There are at times moments where overall functionality, practicality and macro perspective can be forgotten in one's attempt to hold too firm a grasp to a single idea. This appears to be the case here. I strongly encourage the thorough investigation of other options prior to the approval of this particular path. As it would appear all factors have not been considered.

I35-7

Sincerely,
William Prechter PE



Response to Comment Letter I35

William Prechter
March 3, 2021

I35-1 The commenter provides personal background and explains the uniqueness of the project site. The City acknowledges this comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I35-2 The commenter provides the opinion the trail design appears to maximize the objective of providing ocean views but neglects other important factors. The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I35-3 The comment expresses concern regarding conflicts between paragliding and bike riding, specifically pointing out the potential for collisions between cyclists and low altitude paragliders.

The City acknowledges the comment. As discussed in the Air Flow Analysis (Appendix I of the EIR), the zone of greatest vertical air velocity (i.e., "lift") occurs above the front edge (windward edge) of the ridge, not along the slope face. The proposed trail would be situated on a bench cut within the slope face, below the elevation of the ridge top. The only area where the trail would be the same elevation as the ridge would be at the bridge over-crossing of the UPRR corridor. The visibility between pedestrians/cyclists and paragliders would be unobstructed in this section of the trail, minimizing any potential for accidents involving conflicts between trail users and soaring activities.

I35-4 The comment expresses additional bicycle safety concerns involving conflicts between cyclists and vehicle maneuvers in the Rincon Beach County Park parking lot.

As discussed in Section 3.12 (Transportation) of the Draft EIR, the City's consulting traffic engineer determined there would not be a significant hazard associated with introducing additional cyclists traversing the Rincon Beach County Park parking lot. Vehicle maneuvers in the parking lot involve low speeds, and signage in the parking area would alert drivers to cyclists passing through the area. Signage at the terminus of the trail leading into the parking area would also alert cyclists to reduce speed and employ appropriate caution when riding through the parking lot.

I35-5 The comment expresses concerns regarding expenditure of tax-payer funds to construct and maintain the proposed trail.

The City acknowledges the comment and notes that it raises economic issues that do not appear to relate to any physical effect on the environment. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR.

I35-6 The comment expresses concern regarding landform alteration.

See Global Response GR2.

Comment Letter I36

Good afternoon Mr. Nick,

I appreciate the work that has gone into planning this bike trail, but want to see it improved. I36-1

I am devastated that the Draft EIR considers the impact to my flying recreation to be 'insignificant' I36-2

I signed a petition to preserve Bates Ridge that has 2,000 signatures and over 60 comments. I36-3

I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation.

I believe building a bike path on the North side of Bates bluff is best for all recreational users, it is a safer, more direct path for cyclists, giving them a path that avoids the crowded, steep, and dangerous Rincon parking lot.

I am a cyclist and want a direct route on the North side, rather than an Ocean view. Seeing the Ocean shouldn't be a requirement for this project because I get plenty of views along the way like the whole bike path to Ventura. I36-4

I am concerned the current plan will require maintenance against rising seas as it is being built near a eroding seawall. Relocating to the other side of the ridge is financially responsible. I36-5

I appreciate the wind study done by the engineers, however, this study specifically states that it is based on theory and not intended for this purpose. Even if accurate, 20-30% loss of lift is very significant to me, especially on average wind days where lighter wind flow will be exponentially impacted by this project. I36-6

I feel it's inappropriate for the EIR to discuss free flight rules or launches, this is outside the scope of the document and project, the focus of the EIR and CEQA is preserving recreation at the project site. I36-7

I don't understand why the City continues to brush me aside and has failed to reach out to the soaring community. There are inaccurate statements in the Draft EIR because the authors refuse to listen to the pilots who have been recreating at Bates for over 40 years. Let's build a better path together. I36-8

Coastal soaring at Bates makes Carpinteria truly special and unique, I can bike almost anywhere, but I travel to Carp for the flying at Bates and spend my money there. I36-9

Thank you very much.

Kindest regards,

JG

Response to Comment Letter I36

Jorge Granier
April 26, 2021

I36-1 The commenter expresses appreciation to the City regarding planning a new bike path but would like to see improvements.

The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I36-2 The comment expresses concern that impacts to recreation associated with the proposed project were determined to be insignificant in the Draft EIR.

Please refer to Global Response GR1.

I36-3 The commenter references the petition to preserve the site. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I36-4 The commenter expresses general support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I36-5 The commenter expresses concern regarding eroding seawalls and rising sea levels, and states that Alternative 4 is more financially responsible

See response I22-6, above.

I36-6 The commenter expresses concern regarding the accuracy of the wind study and believes that 20-30 percent loss of wind should be considered significant.

See Global Response GR1.

I36-7 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and states the focus of the EIR should be to preserve recreation.

See Global Response GR1.

I36-8 The commenter states that the City has failed to reach out to the soaring community, resulting in inaccurate statements in the Draft EIR.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. Therefore, no further response is required or provided.

I36-9 The commenter explains the uniqueness of the project site relative to the existing soaring opportunities afforded by the site.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I37

Dear Nick,

Please accept this letter in response to the comment period for the Rincon Trail Draft EIR.

The decision to build the Rincon Trail as currently proposed would have an irreversible impact on the paragliding and flying community. From my perspective, having paraglided from Bates County Park Bluff area for over 10 years, constructing the trail on our precious bluff would be akin to draining the ocean, stopping the wave pattern for surfers at Rincon and render this spot use less. I37-1

To us pilots who currently utilize the updraft of wind to fly, modifying this wind draft would render our site useless. How harsh and horrible would it be for surfers to lose their ocean? In essence, the currently proposed M.U.T. takes our wind away and obliterates all paragliders recreational activity. I37-2

These paragliding flying sites are very rare and to have one in our backyard is an esteemed treasure and a prize recreational attraction for pilots, locals and visitors from all over the world. Every time I fly, I meet someone who has arrived in Carpinteria to paraglide. I've met thousands of people, including individuals from Germany, France, Italy, South America and several European and US locations.

Paragliding is a vital part of the Queen of the Coast along with the Rincon surf spot it is a world-renowned destination which creates millions of dollars of tourist income for the City of Carpinteria and the County of Santa Barbara. I37-3

I am constantly asking local community members, cyclists, and visitors what they think of the proposed Rincon Trail Project which cuts into our flying site and takes thousand of tons of dirt from the bluffs. Nearly 100% of those I spoke with say the project shouldn't be built if paragliding is lost to gain a bike/pedestrian pathway. I37-4

Santa Barbara County is currently surveying local residents as to how they can provide more recreational activities for the community. There are supposedly grant funds available to increase recreational activities for our citizens. Why then is Carpinteria City proposing the Rincon Trail Project which would ultimately take away paraglider's recreational activity? I37-5

There is no logical reason for paragliders to lose their last remaining little gem for our recreation and leisure experience. Option number #4, constructing the bike/pedestrian path on the north side of the bluff along the 101-freeway corridor makes sense and preserves recreational activities for cyclists, surfers, paragliders and hikers. This can be a win-win situation. If we spend half the time developing a plan for Option # 4 rather than wasting time, money and efforts on the over complicated, over engineered, and ridiculously costly currently proposed Rincon Trail plan. Our community, including wildlife and fauna will thrive rather than run from the concrete jungle. We need to keep the coast and the bluffs of Carpinteria California open, undeveloped, and undisturbed to all the public for future generations to recreate and enjoy. I37-6

Thank-you for the opportunity to respond. Please include this letter in the Draft EIR Public Comments. I37-7

Respectfully Submitted,

George Jimenez

April 26, 2021

Response to Comment Letter I37

George Jimenez
April 26, 2021

I37-1 The City acknowledges the comment as general opposition to the project. No further response is required.

I37-2 The comment expresses concern regarding loss of paragliding opportunities above the site as a result of the project.

Please see Global Response GR1.

I37-3 The comment provides background on paragliding and identifies the uniqueness of the project site with respect to the soaring opportunities it currently affords.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

I37-4 The comment expresses concern regarding loss of paragliding activity as a result of the project.

Please see Global Response GR1. The City acknowledges the comment and notes that it expresses opposition for the proposed project but does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I37-5 The comment provides background on the County's efforts to increase recreational activities, referencing the existence of grant funding to increase recreational activities, and expressing the opinion the project would take away paragliding opportunities over the project alignment.

Please refer to Global Response GR1. The City acknowledges the comment and notes that it does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

I37-6 The commenter expresses general support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I37-7 The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I38

I am writing as a member of the Santa Barbara Soaring Association and part of the paragliding community. I am writing asking (pleading!) that you chose a bike path plan that will not destroy our flying site at Bates/Rincon. The change of the face to a 1:1 slope, the inclusion of a wide (18ft?) path, and the removal of vast amounts of dirt will permanently destroy our flying site. While "wind experts" have weighed in on thus there has been no contact made with pilots who actually fly there or the SBSA. I can tell you from experience that the changes proposed in the main plan will destroy our flying site. For that reason I urge you to build the path on the freeway side of the hill for that brief distance. We in the SBSA are in favor of the bike path and would love to see it put in. But please, do not do this at the cost of destroying one of the most amazing flying sites on the California Coast. This will be devastating loss, not only to our community but to the literally thousands of people who travel to Carpinteria to fly the site and the income they bring to the region. I38-1

Thank you. Please do not hesitate to contact me if you have any questions.
Mark

Mark Rayburn Patterson, PhD

Response to Comment Letter I38

Mark Rayburn Patterson, PhD
April 26, 2021

I38-1 The comment expresses general opposition to the project and support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

Comment Letter I39

Hello,
I just wanted to add my comments about the bike proposed bike path on Rincon bluffs.

We in the flying community have hopefully made it clear by now that the initial bike path proposal is anathema with free flight. It takes away opportunity for flight while at the same time giving cyclists and pedestrians a poorly designed path for their uses.

Nobody wants a bike path that routes directly through a busy parking lot. Not cyclists, not pedestrians, not pilots. I39-1

Nobody wants a bike path that is going to unnecessarily remove massive amounts of earth from the bluff face, all for a few more ocean views and way more engineering requirements.

Over 2,000 people, myself included, have signed a petition to save this cherished bluff face. Please see that this is an incredibly important issue that both locals and visitors alike care about.

Option #4 that has been proposed is by far our preference in the flying community, since it is routed on the north side of the slope and avoids the parking lot for cyclists while also preserving the southern bluff face. I39-2

The cursory wind study that was done is inaccurate and needs to be reassessed by real experts in the field. I39-3

This is just a special bluff face. It must be protected! Please help us protect it! I39-4
-Derek Musashe

Response to Comment Letter I39

Derek Musashe
April 26, 2021

I39-1 The comment expresses general opposition to the project, indicating it will impact free flight opportunities, that cyclists will need to traverse a parking lot to connect to the regional trail system to the south, and that massive volumes of earthwork would be required.

Please refer to Global Response GR1 for discussion of the air flow analysis and alterations to soaring opportunities from project implementation. Please refer to response to comment I35-4 (above) for discussion regarding the traverse of the Rincon Beach County Park parking lot by cyclists. Please refer to Global Response GR2 for discussion of earth form modification.

I39-2 The comment expresses general support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I39-3 The commenter expresses concern regarding the accuracy of the wind study.

See Global Response GR1.

I39-4 The commenter asserts the bluff face is special and must be preserved. The City acknowledges the comment and notes that it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the Draft EIR. No further response is required or provided.

Comment Letter I40

Good afternoon Mr. Nick,

First and foremost we appreciate the work that has gone into planning this bike trail, but want to see it improved. I40-1

I am devastated that the Draft EIR considers the impact to my flying recreation to be 'insignificant' I40-2

I signed a petition to preserve Bates Ridge that has 2,000 signatures and over 60 comments. I40-3

I fully agree with the Environmental Review Committee's decision to recommend Alternate 4, building on the North side of Bates ridge, preserving the soaring recreation.

I believe building a bike path on the North side of Bates bluff is best for all recreational users, it is a safer, more direct path for cyclists, giving them a path that avoids the crowded, steep, and dangerous Rincon parking lot. I40-4

I am a cyclist and want a direct route on the North side, rather than an Ocean view. Seeing the Ocean shouldn't be a requirement for this project because I get plenty of views along the way like the whole bike path to Ventura.

I am concerned the current plan will require maintenance against rising seas as it is being built near an eroding seawall. Relocating to the other side of the ridge is financially responsible. I40-5

I appreciate the wind study done by the engineers, however, this study specifically states that it is based on theory and not intended for this purpose. Even if accurate, 20-30% loss of lift is very significant to me, especially on average wind days where lighter wind flow will be exponentially impacted by this project. I40-6

I feel it's inappropriate for the EIR to discuss free flight rules or launches, this is outside the scope of the document and project, the focus of the EIR and CEQA is preserving recreation at the project site. I40-7

I don't understand why the City continues to brush me aside and has failed to reach out to the soaring community. There are inaccurate statements in the Draft EIR because the authors refuse to listen to the pilots who have been recreating at Bates for over 40 years. Let's build a better path together. I40-8

Coastal soaring at Bates makes Carpinteria truly special and unique, I can bike almost anywhere, but I travel to Carp for the flying at Bates and spend my money there. I40-9

Thank you very much.

Kindest regards,

Morgan Granier

Response to Comment Letter I40

Morgan Granier
April 26, 2021

I40-1 The commenter expresses appreciation to the City regarding planning a new bike path but would like to see improvements.

The City acknowledges the comment as an introduction to comments that follow. No further response is required.

I40-2 The comment expresses concern that impacts to recreation associated with the proposed project were determined to be insignificant in the Draft EIR.

See Global Response GR1.

I40-3 The commenter references a petition to preserve the site. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I40-4 The commenter expresses general support for Alternative 4. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. The City and County will be determining what approval action to take with the benefit of the environmental review contained in the EIR. No further response is required or provided.

I40-5 The commenter expresses concern regarding eroding seawalls and rising sea levels, and states that Alternative 4 is more financially responsible

See response I22-6, above.

I40-6 The commenter expresses concern regarding the accuracy of the wind study and believes that 20-30 percent loss of wind should be considered significant.

See Global Response GR1.

I40-7 The commenter feels that it is inappropriate for the EIR to discuss flight rules or launches, and states the focus of the EIR should be to preserve recreation.

See Global Response GR1.

I40-8 The commenter states that the City has failed to reach out to the soaring community, resulting in inaccurate statements in the Draft EIR.

The City acknowledges the comment and notes that it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. The City has received a number of comments from the soaring community on the project's Notice of Preparation and has accounted for these comments in the preparation of the Draft EIR. Therefore, no further response is required or provided.

I40-9 The commenter explains the uniqueness of the project site with respect to the soaring opportunities afforded by existing conditions within the project alignment.

The City acknowledges the comment and notes that it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. Therefore, no further response is required or provided.

Comment Letter I41

Dear Sirs,

Coastal soaring at Bates is unique and special for my family and i as we visit from out of town especially to enjoy the beach and the paragliding. We typically visit for a few days and stay in local hotel accommodations and also enjoy dining out at all the local restaurants. If it was not for the paragliding at Bates we would not visit. I41-1

Pls preserve this unique soaring site.

Yours sincerely,

Derek Arculli

Response to Comment Letter I41

Derek Arculli
April 26, 2021

I41-1 The comment expresses general opposition to the project. The City notes that the comment does not raise any issue concerning the adequacy of the Draft EIR. No further response is required or provided.

Verbal Comments Presented During

Environmental Review Committee Hearing on Draft EIR

April 13, 2021

The Carpinteria Environmental Review Committee (ERC) held a public meeting specifically to discuss the Draft Environmental Impact Report on April 13, 2021. The minutes from the ERC meeting are provided on the following pages.

The minutes reflect three different categories of verbal testimony at the meeting:

(1) Questions presented by ERC members regarding the project or environmental analysis
(2) Comments from members of the public on the project and on the adequacy of the environmental analysis
(3) Comments from the ERC members on the adequacy of the Draft EIR

For the first category (1), staff provided answers in real time at the meeting to ERC member questions that are considered adequate, and which are captured in the minutes. No further responses are necessary or have been provided in regard to answering ERC questions.

For the second category (2), verbal comments presented during the meeting reflect the same content as written comments on the Draft EIR submitted by these individuals. Detailed responses to written comments submitted by these individuals are provided in the immediately preceding sub-section of this chapter and are considered adequate to address both submitted written comments and the verbal comments delivered during the ERC meeting.

Responses to ERC member comments (3) are provided following the ERC meeting minutes.

Carpinteria Rincon Trail
Draft Environmental Impact Report

Environmental Review Committee Minutes
April 13, 2021
4:00 p.m. Virtual Meeting (Zoom Webinar)

The meeting was called to order at approximately 4:00 p.m. by Steve Goggia, Chair.

ROLL CALL

Members present: Steve Goggia, Chair
John Ilasin
Natasha Lohmus
Vince Semonsen
Erin Maker

OTHERS PRESENT: Nick Bobroff, Principal Planner
Matt Roberts, Project Applicant
Scott Onishuk, Project Engineer
Jonathan Leech, Environmental Consultant
Mack Carlson, City Attorney's Office

Approximately 40 members of the public were in attendance.

PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

None

PROJECT PRESENTATION

Nick Bobroff and Jonathan Leech described the public review process, provided an overview of the project description, and disclosed the findings of the Draft Environmental Impact Report (DEIR), including all of the identified potentially significant impacts and proposed mitigation measures. The project alternatives considered as part of the DEIR were also described and a brief analysis of their respective impacts compared to the proposed project was provided.

ERC MEMBER QUESTIONS

Erin Maker

- Who will be responsible for maintaining the various elements of the trail, including but not limited to storm drains and drain outlets?
    - Staff explained that the details of a City-County Maintenance Agreement are still being worked out, but the proposed arrangement is that the County would be responsible for the bridge structure and the City responsible for the bridge/trail surfacing. For the storm drains, Caltrans would continue to be responsible for maintaining their existing storm drain facilities; the County would take on responsibility for the new outlets on County Parks property.
- Where will the storm drain filters be installed? We don't want them to be located somewhere that would allow them to be clogged with sediments.
    - Staff clarified that the filters would be installed in inlets just off the shoulder of the trail.
- What is the status of the project proposed for the Bluffs III parcel where the soaring participants launch from?
    - Staff explained that a proposal for a private campground/resort was recently considered at a

conceptual level by the Architectural Review Board, Planning Commission, and City Council at a joint conceptual review meeting.

- Requested information about the project costs for the proposed project and the project alternatives; asked if any one of the alternatives was most cost-effective.
    - Staff explained that Alternative "2" was abandoned due to challenging construction conditions related to unstable geologic conditions, and a need for significant retaining walls. The costs of these challenges made this Alternative likely financially infeasible. The proposed project was anticipated to be far less expensive to build, on the order of $1-2 million less, despite requiring more earthwork than Alternative "2." Alternative "3", by further reducing earthwork, would save additional money as compared to the proposed project. Alternative "4" is expected to be more expensive due to its increased length, more grading, more concrete, and more retaining walls. Staff cautioned, however, that construction costs were not a significant factor in developing project alternatives; instead developing the best facility for the community was the main driver in designing the project alternatives.

Natasha Lohmus

- Will the exposed drainage outlets be placed at the beach elevation or will there be a vertical drop to the beach from the outlets, which could create erosion? She noted the existing drainages all have created erosional features. She asked if any energy dissipation features would be installed.
    - Staff answered that the new and replaced outlets are intended to have a 90° outlet at the beach elevation and would be protected with rock rip-rap or similar at the outlet.
- Where do the soaring participants launch from relative to the project site?
    - Staff explained that the pilots launch from an area on private property to the southwest of the trail alignment, and confirmed that the trail would have no impacts on the launch area.
- In Alternative "4," if the bridge were rotated toward the highway, could the earthwork be modified to bring the trail up to the bridge deck elevation rather than directing the bridge/trail out toward the ocean and then having to swing back in toward the highway, and impacting the use of the ocean-side ridge for soaring? She did not feel that preserving ocean views from the trail was critical, and expressed more concern for impacts to soaring activities and the negative economic effects of such impacts to use of the area by the soaring community.
    - Staff responded that there are a number of problems, including existing utility infrastructure, which make such an alternative alignment problematic. In addition, one of the primary project objectives as identified in the EIR was to preserve ocean views from the new trail.

Vince Semonsen

- What is the anticipated duration of the construction effort? Will construction extend through a rainy season? He is skeptical of any Best Management Practices (BMPs) that would be sufficient to protect exposed soils given the extensive amount of earthwork anticipated on a steep slope during heavy winter rain events. The restoration/revegetation effort will also be exposed to winter rains/erosion.
    - Staff answered that the project is expected to take approximately 24 months to complete.
    - Staff added that the project will be operated in 2 separate grading operations, one above the UPRR corridor and one below. The earthwork area above the UPRR corridor will be able to utilize the existing, established storm drain system for capturing and diverting runoff. On the ocean side of the UPRR corridor, careful and thorough erosion control will be more critical and will need to be timed to occur outside of winter, if possible. The Las Positas bike path project in Santa Barbara was cited as an example of how projects can be completed during winter with appropriate BMPs in place.
- He questioned the efficacy and reality of the woodrat and legless lizard relocation efforts given the challenging terrain. Relocating the woodrat middens seems unlikely; the woodrats are likely to run away

when their nests are disturbed.

- He questioned whether the finding of a 30% reduction in air currents relied upon by the soaring enthusiasts was accurately classified as "less than significant."
    - Staff clarified that the impact was identified as being up to a maximum of a 30% reduction, and that based upon the range of suitable wind conditions that allow for soaring opportunities, soaring opportunities within the suitable wind range would remain albeit at this reduced level. It was also clarified that the environmentally superior alternative (Alternative "3") was found to result in closer to a 20% reduction, and this in part, was why this Alternative was found to be environmentally superior.
- Why does Alternative 4 increase the amount of earthwork compared to the proposed project?
    - Staff confirmed this was correct and explained that the slope above the highway would need to be modified and re-worked for the entire length east of the UPRR crossing to create the new trail bench. Additionally, the Alternative 4 trail is considerably longer in length. It was also clarified that this Alternative requires retaining walls above and below the trail for a stretch towards the eastern end.
- Was there a previous Alternative that contemplated using the existing freeway bridge or attaching to the freeway bridge to cross the tracks and continuing the trail along the highway shoulder?
    - Staff responded that it was looked at early on but found to be infeasible due to the cost and constructability challenges with adding onto, or attaching a new bridge to the existing freeway overpass above the UPRR alignment. Matt Roberts clarified that Caltrans did not support such an option for further consideration and wanted to see a completely independent bridge structure for the trail to cross the railroad alignment. The proposed Alternative 4 is an attempt to retain some ocean vista views, and make use of a shorter bridge span. It also makes use of the work already completed with the California Public Utilities Commission (CPUC) with respect to gaining approvals and easements for the rail corridor crossing.
- He questioned the importance and emphasis given to providing or maintaining coastal views for this short trail segment given the availability of coastal views for the remainder of the trails to the north and south of the trail. He found it hard to justify in light of the amount of earthwork necessary to accommodate a trail with a continuous ocean view.
    - Matt Roberts clarified that Alternative 3, the environmentally superior alternative, requires less earthwork than the proposed project while still meeting the project objectives of providing an ocean vista trail.
- How much earth removal would occur in Alternative "4"?
    - Anticipating ~94,100 cubic yards of export (i.e., earth removal).
- In the Alternative "4" scenario, could the bridge be turned to be parallel, or closer to parallel, to the freeway to create a shorter bridge?
    - Staff replied that the current bridge design, which is nearly perpendicular to the railroad tracks, is the shortest crossing of the rail corridor (at ~160' in length). Staff clarified that various alternatives have been examined in an effort to minimize the bridge spans and needed earthwork. Alternative "4" as shown also fits other project constraints related to easements, rights-of-way, construction staging, etc. At 160' length, we are reaching the maximum length that can be accomplished with a clear span bridge. There were no significant constructability benefits observed from rotating the bridge.
- In the Alternative "4" scenario, none of the earthwork shown in the renderings on the ocean side of the bluff would occur, correct? Then where would the 94,000 cubic yards of net export come from in Alternative "4"? He asked to see a rendering or similar exhibit showing where the earthwork quantities would be coming from.
    - Staff explained that the numbers are accurate having been determined using highly detailed models of the project area, and that the earthwork is necessary to create a trail bench along the

entire length of the ridge.

John Ilasin

- He asked to hear from the project design team in response to some of the questions raised by the other ERC members.

Steve Goggia

- In Alternative "4", could the trail be placed on top of the ridge instead?
    - Staff explained that at the bridge crossing, the bridge is near the same elevation as the freeway. In order to run down the ridgeline towards Bate Rd, the bridge would have to be increased in height 40 feet which would in turn result in a much longer bridge (current 160' bridge expanded to 250'+ bridge length) with much more significant visual and construction impacts.
- In Alternative "4", does the trail need to still be 16 feet wide? Could it be narrower if it were higher up on the ridge if it didn't need to carry so much of the uphill slope?
- Any chance of using something like an ADA-compliant spiral ramp to gain the necessary elevation to reach the ridge?
    - Staff replied that such a feature would not meet the design criteria for a trail or bike path, nor would it seem to fit the physical setting.

PUBLIC COMMENT

John Greynald

- The study is flawed and it will be easy for the soaring community to demonstrate the failings of the study and the attempts to delegitimize the recreational impacts to the soaring community.
- Believes the analysis with respect to recreational impacts is illegal.
- Disagrees with the conclusion that a 30% reduction in wind velocities is less than significant.
- Nobody from the project team attempted to contact or consult with the soaring community.
- Believes the wind study is flawed and incomplete.
- Alternative 4 is the only viable option that could be permitted. Stop wasting the taxpayers' money on studying other project alternatives.

Karl Cameron

- There hasn't been much erosion on the ocean bluff face over the last 20 or 30 years based on personal observations, except in the areas near the failing retaining walls.
- Believes the wind study is incomplete and flawed. A 30% reduction in lift would have a drastic impact on the flying conditions.
- The soaring community has been exploring additional options for launch sites along the buffs, in addition to the existing launch site on the "King" property.
- The soaring community was not opposed to the original project alignment (now referred to as Alternative "2"), however they believe Alternative "4" is a better alternative because it delivers cyclists to the continuation of the bike path south of Bates Rd and doesn't have any impacts to the ocean-facing bluff face.
- Asserts that they soaring activities are fully legal and sanctioned to fly in the area.
- Requests that the design team consult with and engage the soaring community in the design of the trail.

Ottis Gillespie

- What is the difference between the described "earthwork" and "earth removal" in the DEIR?
    - Staff explained that "earthwork" is a general term for cut and fill, whereas "earth removal" refers specifically to excavation or cut. Projects balance onsite wherever possible.

- Please provide more details on the anticipated retaining walls in Alternative 4 (length, height, etc.). It doesn't seem this would be a major obstacle to pursuing this Alternative.
- The existing storm drains are not in good condition. The depiction of the existing and proposed storm drains is inaccurate since these "existing" storm drains need to be repaired/replaced.
- In addition to natural erosion, there has also been mechanical intrusion into the asphalt along the existing bench. Provide close-up photos/images of what this bluff would look like.
- Alternative 4 is the best option. It would not deliver cyclists at speed into the Rincon Beach County Park parking lot, which would be a significant safety issue. Cyclists won't slow down just because they're exiting the trail and entering a parking lot.
- Disagreed with the finding of no significant impact on soaring activities. The important element at this site is less about the wind velocity and more about the wind deflection from the bluff causing ridge lift. Alterations that affect that ridge lift will disrupt our ability to fly at this site. Refer to the video submitted by Aaron LaPlante during the public comment period on the previous Subsequent Mitigated Negative Declaration (SMND).
- Surveyed more than 100 cyclists asking whether they would prefer a path on the ocean side or inland side of the trail considering wind exposure.

Dr. Mark Patterson

- Appreciates the complexity of the project.
- Discounts the findings of the wind study, noting that even minor features or changes can affect the wind and uplift conditions dramatically. Comparatively, laying back the existing steep slow to a 1:1 slope will have a significant impact on flying conditions. Asked whether the wind expert has any flying experience?
- Recommended the project team consult with the experts from the Santa Barbara Soaring Association; they are the local experts of flying at this location. It doesn't matter what experts say about wind over hills; talk to the people who actually fly the hills.
- This project would not affect the launch area, however we rely on the ocean-facing bluff face where the trail is proposed to be located to catch lift and continue with our flights. The bluff orientation, slope angle, and smoothness all factor into this, and if you change any of these features, it will ruin our flying conditions.
- There is a safety consideration too. This is a great beginner site because it doesn't require much wind. The proposed changes would make it flyable only during periods of higher wind speeds which would make it less safe for less experienced pilots. It would increase the potential for injuries, crashes, and landings on the bike path.
- Prefer Alternative "4" to finish the bike path while preserving our ability to continue to fly here at this site.
- Alternative "4" also avoids delivering cyclists into a busy parking lot.

George Jimenez

- Agree with many of the comments from the others.
- The project is being promoted as improving safety, but no reports or statistics on bike crashes or incidents along the existing Caltrans shoulder have been provided to demonstrate a need for the trail. There have, however, been incidents with cyclists crashing into the non-compliant parking in the County Beach parking lot.
- Asked why is it okay for the public to cross the railroad tracks in other parts of town, but not here?
- The wind study incorrectly looks at wind velocity rather than uplift.
- Why hasn't the City explored any other routes or possibilities? Explore other options and do a better study of other possible options.

Barry Remis, COAST and SB Bicycle Coalition

- Appreciates the examination of project alternatives.
- We believe the primary objective is to create a multi-use trail to allow improved pedestrian access and bridge a gap in connectivity. Therefore, we believe Alternative "4" is best as it provides a direct connection to the continuation of the bike path south of Bates Rd.
- Pedestrian and cyclist safety concerns in passing through the County Beach parking lot are considerable.
- Avoidance of wind for cyclists through Alternative "4" could be preferable.
- Alternative "4" best meets the ultimate project objective with the least amount of exposure to risk to trail users.

Jeff Longcor

- Members of the soaring community are deeply concerned about this project. We're feeling marginalized by findings of "less than significant" impacts to our soaring activities. Nobody has taken a realistic approach to the wind, or taken the opportunity to consult with us.
- Santa Barbara Soaring Association (SBSA) previously refuted language in the SMND concerning our rights to use these areas and alleged violations of rules, and continue to disagree with this language being used in the DEIR.
- SBSA disputes raising issues over the long-term viability of the launch site. There have been allotments for the soaring community in the past and they can launch from elsewhere along the bluffs to arrive at the ridge, if needed.
- Pilots can only continue to enjoy our flying if the existing ridge is maintained and not altered.
- The soaring community submitted over 100 pages of comments in the appendices. The ERC should read the comments.
- The soaring community has a petition with over 2,000 signatures and 60 comments in support of protecting this ridge, including many visitors from outside of the community.
- This is an excessive amount of construction and earthwork for a 0.2-mile trail and would destroy the existing important soaring opportunities.
- If "recreation" exists under CEQA, then it needs to be considered. Based on the expert testimony provided by the soaring community on record, the described impacts should be found significant.
- The expert wind study is unrealistic. It only deals with a parallel wind path which doesn't reflect the site conditions, which hits at a tangent.
- If wind speed is reduced even just a little bit, there is an exponential decrease in lift. When wind is light, we can only fly along this ridge.

COMMITTEE MEMBER COMMENTS

Natasha Lohmus

- Concerning the proposed mitigation measures for the legless lizards and woodrats, perhaps consider some alternative options that would be easier and more realistic to accomplish.
- For bird nesting, the mitigation measure should require compliance with state and federal regulations (e.g., 300' buffer from an occupied nest; 500' for raptors) for noise-producing construction activity and heavy equipment use.
- Where would off-site mitigation occur? Can receiver sites be identified or proposed?
- For hydrology, concerns with impacts from concrete need to be addressed. Wet concrete is highly hazardous to wildlife. If concrete will be poured during the wet season, it should have a quick drying additive. Provide guidelines for when and how concrete will be poured for trail surfaces and v-ditches to avoid runoff-related impacts.
- Enhanced and more detailed explanations of proposed measures to address erosion during the rainy season are needed.

- Comments provided by the public have a lot of value. I support the idea of constructing a coastal trail, but it should not come at the expense of eliminating another group's recreational use of the area, especially a group that contributes to the local economy through tourism dollars. The financial benefit of preserving the soaring community's use of the area should be considered and addressed in the environmental document.
- Identified impacts to recreational use by the soaring community are significant. More analysis/work is needed on this section.
- If Alternative "4" is more expensive to build, perhaps additional grants can be pursued to help cover construction costs.

John Ilasin- No additional comments.

- Mr. Ilasin recused himself from further participation or voting on the Draft EIR, citing a potential for a conflict of interest due to his role in administering capital projects, including the subject project, on behalf of the City of Carpinteria.
    - Mack Carlson, legal counsel for the City of Carpinteria, agreed and recommended Mr. Ilasin abstain from any votes on the project.

Erin Maker- No additional comments.

Steve Goggia

- Acknowledged that ERC members would like to see additional information and details about Alternative "4". Asked the other ERC members if they would need additional information on Alternative "4" before making a recommendation on the EIR, or if sufficient information has been provided.
    - Vince Semonsen responded that he believes the current document provides sufficient information, although he would like to see a graphic depicting the earthwork for Alternative "4."
    - Mack Carlson, legal counsel for the City of Carpinteria, clarified the options that the Board could pick from concerning how to take action on the Draft EIR. The Board could direct staff to provide additional details on any of the project alternatives, and/or request a continuance to present that additional information back to the ERC at a subsequent meeting. The Board could also direct staff to reformulate one of the Alternatives, which would then need to be evaluated to determine whether it would trigger a need to recirculate the Draft EIR. Lastly, the Board could make a recommendation to the Planning Commission to accept the EIR based on one or more of the project alternatives presented.

Vince Semonsen

- He noted a preference for Alternative 4 due to its avoidance of the ocean-facing bluff and impacts to the soaring community. He stated he does not trust the wind study prepared for the EIR.
- He felt Alternative "4" would move less soil than the other options and avoided exposed steep slopes on the south-facing side of the ridge that would be prone to storm damage. He did not feel that any BMPs would be adequate to protect the slope from this type of damage.
- Agreed with public comments concerning the safety risks of depositing cyclists into the parking lot. He felt cyclists would prefer the ability to continue directly on to the continuation of the bike path at Bates Rd rather than having to pass through the parking lot. In particular, he felt that electric bikes pose a hazard due to their high travel speed if passing through the parking lot.
    - Natasha Lohmus expressed her agreement with this, noting that the lot is often busy during summer months and cyclists would be exposed to potential injury or accidents. She also asked how enforcement of the prohibition on motorized bikes would be enforced.
    - Matt Roberts explained that the design had been reviewed by a traffic engineer and found to not pose unreasonable safety hazards. He added that traffic calming improvements would be included

at the trail ends to warn cyclists of the changing traffic patterns. He also clarified that motorized bikes would not be legal on an un-motorized trail, and many agencies are beginning to establish speed limits on trails for these sorts of reasons. Mr. Roberts explained that enforcement would likely come through financial responsibility in the event of an accident along with periodic enforcement of regulations (e.g., citations).

ACTION:
Motion 1 by Committee member Lohmus, seconded by Committee member Semonsen, to recommend revisions to the Draft Environmental Impact Report to address the Committee's comments, recommendations, clarifications, additional mitigation measures and corrections, including providing additional project details for Alternative "4".

Motion 2 by Committee member Semonsen, seconded by Committee member Lohmus, to recommend approval of the Draft Environmental Impact Report to the Planning Commission with a preference for Alternative "4" and an understanding that the previous motion's comments would be incorporated into the EIR.

VOTE:
Motion 1: 4-0 (Ilasin abstain)
Motion 2: 4-0 (Ilasin abstain)

MEETING ADJOURNED: 6:40 p.m.

Response to Verbal Comments Presented During Environmental Review Committee Hearing on Draft EIR

Response to **Natasha Lohmus** Comments

- Legless Lizard/Woodrat relocation – the identified methods have been successfully used on other projects, CDFW did not recommend alternative methods.
- Nest construction activity setbacks - Refer to revisions in the Biology Section; the 300 foot and 500 foot radii for nests are included.
- Off-site mitigation – Rincon Bluffs (City) and Rincon Beach Park (County) are immediately adjacent to the project and would represent off-site mitigation opportunities, as necessary.
- Impacts from concrete construction on biology – the prevention of impacts from concrete construction are addressed in MM-WAT-2 in the Hydrology and Water Quality Section of the EIR
- Erosion control – MM-WAT-3 requires the preparation of a detailed Erosion and Sediment Control Plan, to be based upon the final earthwork design. Sample erosion control techniques, measures, and equipment are identified in MM-WAT-3, but the final erosion control plan will be designed to specifically address the earthwork design and erosion control needs.
- Financial benefits of preserving soaring opportunities – the CEQA guidelines do not require the evaluation of the financial impacts of a project.
- Recreation impacts – Please refer to Global Response GR1 with respect to project impacts on soaring opportunities.
- Alternative 4 Costs – this comment does not address the adequacy of the Draft EIR; no response is necessary.

Response to **John Ilasin** Comments

- This comment does not address the adequacy of the Draft EIR; no response is necessary.

Response to **Steve Goggia** Comments

- Sufficiency of information Regarding Alternative 4 – Vince Semonsen proffered the opinion that the existing Draft EIR provides adequate information addressing Alternative 4 to the Proposed Project. The EIR preparers agree with the opinion expressed by Mr. Semonsen.
- The legal direction provided by Mack Carlson clarified the actions available to the ERC with regard to requesting the inclusion of further analysis, or a recommendation to the Planning Commission pertaining to the acceptance of the Draft EIR.

Response to **Vince Semonsen** Comments

- Legless Lizard/Woodrat relocation – (from the ERC Questions section) the identified methods have been successfully used on other projects, CDFW did not recommend alternative methods.
- Alternative 4 Preference – the commenter is correct that Alternative 4 would avoid modification of the ocean-facing bluff south of the UPRR corridor. Please refer to Global Response GR1 for further discussion pertaining to the wind study prepared for the EIR.
- Alternative 4 Minimization of Earthwork – The commenter is not correct in identifying Alternative 4 as involving the least amount of earthwork of all the project options. Alternative 3 would have the least total earthwork volume of all the options explored (including the proposed project and Alternative 1-4). MM-WAT-3 requires the preparation of a detailed Erosion and Sediment Control Plan, to be based upon the final earthwork design. Sample erosion control techniques, measures, and equipment are identified in MM-WAT-3, but the final erosion control plan will be designed to specifically address the earthwork design and erosion control needs.

- Bike Safety Within Rincon Beach State Park Parking Lot – The City requested their professional consulting traffic engineer evaluate the potential for safety risks associated with the conflict between cyclists entering the Rincon Beach County Park from trail segments connecting to the parking lot from the east or west. The traffic engineer concluded that the proposed design configuration which would convey cyclists through the parking lot would not pose substantial safety risks from conflicts between cyclists and maneuvering vehicles. Parking maneuverers tend to be low speed, visibility is good in the parking lot, and signage warning cyclists and motor vehicle operators would be effective in eliminating potential safety risks.

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3 Changes to the Draft EIR

3.1 Introduction

The comments received by the City of Carpinteria (City) during the public review period for the Draft EIR included information that has resulted in minor revisions to the text of the Draft EIR. These revisions are shown below and are categorized by section number. Text from the Draft EIR that has been removed is shown in strikethrough (i.e., ~~strikethrough~~), and text that has been added as part of the Final EIR is shown as underlined (i.e., underline). Revisions are shown with surrounding sentences or paragraphs for context. These errata merely clarify and correct minor facts and do not constitute "substantial revisions" requiring recirculation of the Draft EIR, as set forth in CEQA Guidelines, Section 15073.5.

The engineering design of the Project has also been refined since the Draft EIR, resulting in two notable revisions to the overall Project. First, the previously proposed bench along the slope above the trail has been removed from the design for the trail segment south of the UPRR alignment. Second, the number of vertical storm drains serving the trail south segment of the UPRR alignment has been reduced from a total of 5 to 4. Revisions to the Draft EIR language to reflect these Project refinements are also included in the Errata section below.

3.2 Errata

2.7 Project Description

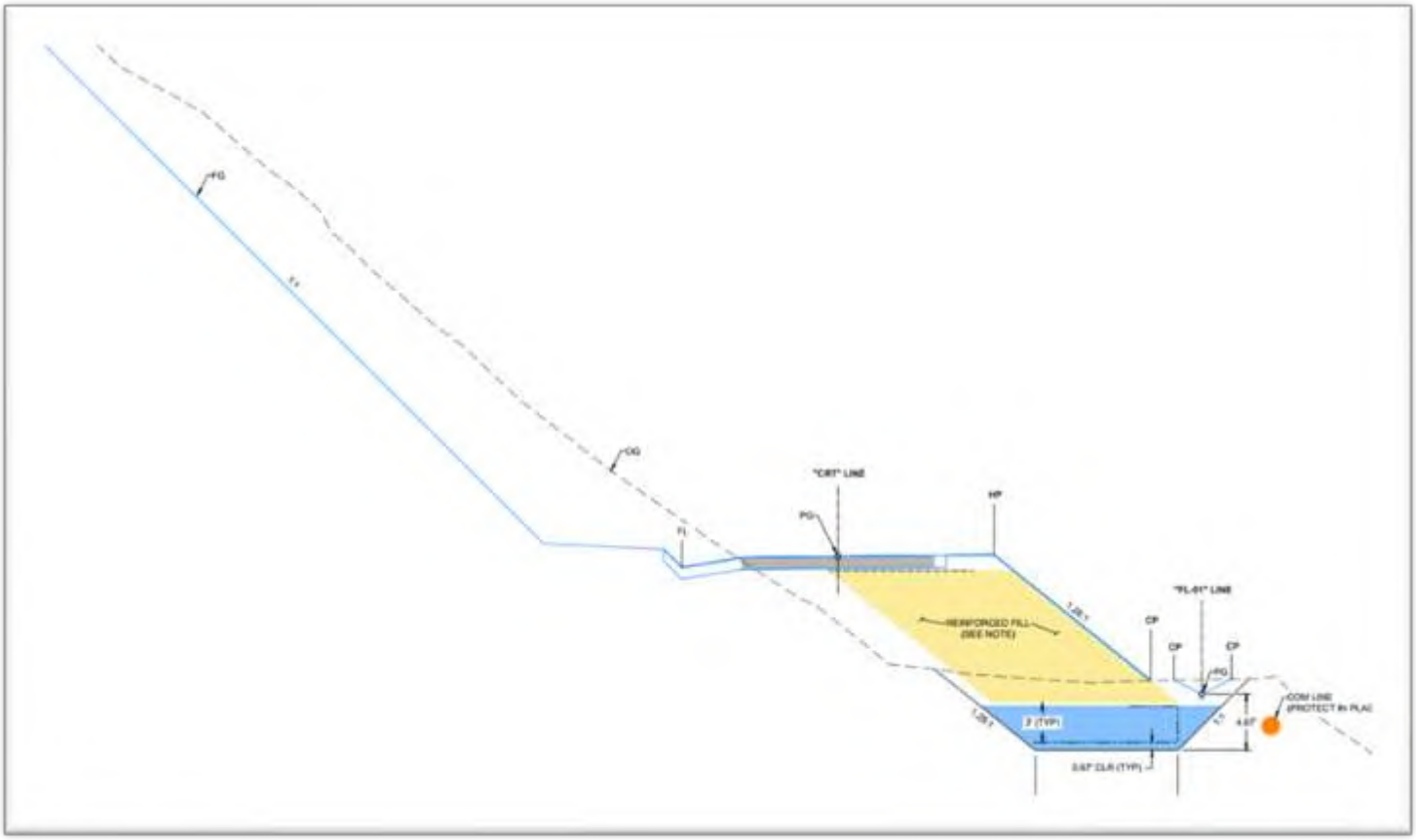
2.7.1 Earthwork

The trail design has been engineered to incorporate pathway travel slopes that are consistent with ADA standards. The design also avoids an area with deep landslides, south and west of the crossing point over the UPRR alignment, which were identified in geotechnical testing. The majority of project earthwork will occur on existing engineered slopes that were constructed as part of past road, highway and railroad projects; these manufactured slope faces in many instances are steeper than natural conditions, leading to increased erosion potential, which the project intends to correct though re-contouring to reduce slope angles. Construction of the proposed path design would involve a total of ~~107,386~~ 96,040 cubic yards of cut, a total of ~~14,860~~ 10,519 cubic yards of fill, and the export of a total of ~~92,526~~ 85,521 cubic yards of earth material. The re-contouring of existing engineered topography along the path alignment to achieve more stable conditions is described in more detail below

2.7.1.2 Pathway Slope Profiles South of UPRR Alignment

For the portion of the path on the ocean side of the UPRR alignment, the regraded slopes for the trail "bench" would employ cut slopes with a ratio of 1:1 above the trail, while a ratio of 1.25:1 would be employed for the "reinforced" fill slopes below the trail. The earthwork would alter the elevation of the bench on which the trail would be aligned, but would not alter the top elevation of the hill/ridge. Illustration 2-3 presents an example of the existing versus proposed slope profile for earthwork modifications above and below the trail.

Note in Illustration 2-3 that the proposed cut-slopes are less-steep than those constructed for the railroad alignment in this area (illustrated with a dashed profile labeled as "OG" ~~above~~) in order to provide an adequate margin of safety for the long-term stability of the slopes. ~~Note there is also a proposed bench above the trail that would intercept rainwater and also prevent rock fall on the path below. The bench would also provide maintenance access for the manufactured slopes and path.~~



SOURCE: Bengal Engineering

Illustration 2-3 Pathway Grading Profile South of UPRR Alignment

2.7.3 Drainage

The proposed trail project includes an integrated storm drainage system to ensure stormwater runoff from the recontoured bluff face and the trail surface is conveyed to the ocean efficiently, avoiding potential erosion of slopes along the trail alignment. Along the portion of the trail north of the UPRR alignment, a concrete swale (v-ditch) would convey water along the trail edge, where it would be released into an existing surface drainage swale now serving U.S. Highway 101. This swale connects to an existing storm drain that crosses underneath the UPRR alignment, and then descends to the beach level. This storm drain is labelled as "1" in Illustration 2-6. No improvements are proposed to storm drain 1, and the trail storm drain volumes contributed to this storm drain would be negligible compared to existing flows already contributed from portions of U.S. Highway 101.

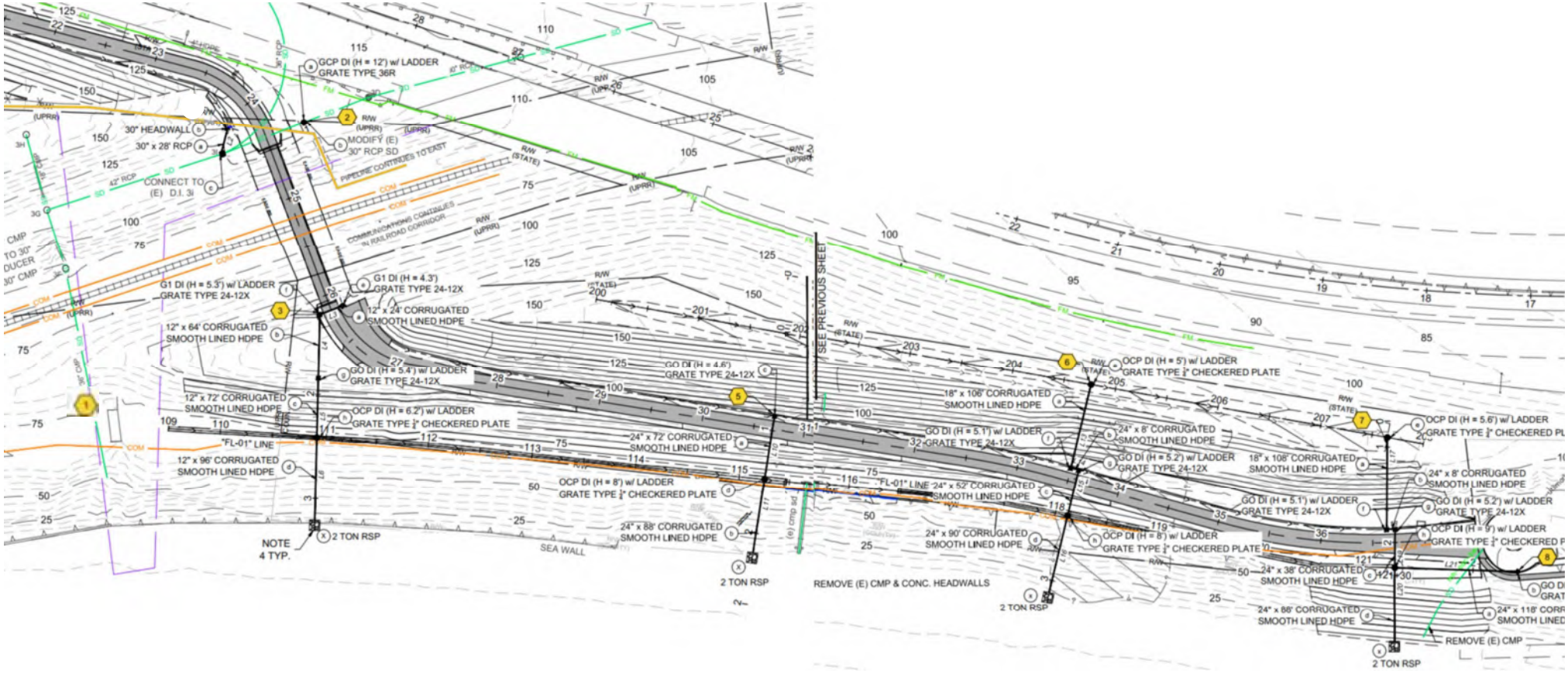


Illustration 2-6 Major Storm Drainage Components of the Project

(3) (5) (6) (7) – New Storm Drain With Beach Outlet

Existing Drain / Outlet to be Removed

On the south side of the UPRR alignment, a concrete drainage swale would also carry surface runoff from the recontoured bluff face and trail, conveying such drainage along the side of the trail until it reaches one of the storm drain inlets lower in elevation. A total of ~~5~~ 4 vertical storm drains would convey this stormwater from the trail to the beach elevation, for the trail segment south of the UPRR alignment (refer to Illustration 2-6). Drains ~~No. 3 and No. 6 (~~ shown in light blue in Illustration 2-6~~)~~ are existing, but are in seriously degraded condition and would be removed. ~~re-used, including rehabilitation of existing piping~~; Drains No. ~~2~~ 3, No. ~~4~~ 5, No. 6, and No. ~~5~~ 7 (~~shown~~ labelled in in Illustration 2-6) would be newly developed for the project.

Section 3.1, Aesthetics

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The eastern portion of the proposed trail would involve regrading of the slope above the former UPRR track alignment, to include a fill slope below the new trail bench, and a cut slope with ~~mid-elevation bench~~ a less steep angle above the trail bench (Refer to ~~Appendix G~~ Illustration 2-6 for earthwork cross-sections/profiles illustrating the slope re-working). Again, the top elevation of the ridge within this segment of the trail alignment would not be modified and the overall area would continue to have the same general appearance as the existing condition (i.e., a manufactured slope along the original cut made for the railroad alignment).

The project also involves the construction of new vertical storm drains. As discussed in Section 2.7.3, the proposed storm drains would be installed during earth work for the trail and adjacent slopes, and would be buried to cross beneath the trail and then descend on the slope face to outlet at the beach elevation. Buried portions of the storm drain would be constructed of high-density plastic, transitioning to galvanized steel for the aboveground portions.

Due to the size of the proposed above ground components, the visibility of the above ground storm drain system would be minimal and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Temporary adverse effects during construction due to the loss of mature vegetation would occur over a limited time period, given new landscaping and restoration of native plants are proposed as part of the project. The project would enhance area aesthetics via native landscape installations along the perimeter of the trail and ongoing landscape maintenance. Where feasible, the project would remove the invasive weeds along the proposed trail alignment that could suppress native plants. Native plants, once established, would live without need for supplemental water, helping to ensure their ongoing success. The reduction of slope angle (making the slope gentler) would slow water runoff, improve soil water retention, and support more extensive vegetation cover on the sloped areas, compared to existing conditions. Nonetheless, the project would have a potentially significant adverse impact on visual character or quality of the site and its surroundings because of the removal of mature vegetation and addition of new human-scale development. Therefore, impacts would be potentially significant. **MM-AES-1**, which requires County Board of Architectural Review, and **MM-BIO-5**, which requires restoration or enhancement of coastal sage scrub and coastal bluff scrub communities in areas temporarily impacted by construction of the trail or adjacent area, would be required. Impacts would be **less than significant with mitigation incorporated.**

Section 3.2, Air Quality

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

For the analysis, it was assumed that heavy construction equipment would be operating five days per week (22 days per month) during proposed project construction. Construction worker and vendor trips were based on CalEEMod default assumptions and rounded up to the nearest whole number to account for whole round trips.

Proposed project construction would include ~~107,386~~ 96,040 cubic yards of cut, a total of ~~14,860~~ 10,519 cubic yards of fill, and the export of a total of ~~92,526~~ 85,519 cubic yards of earth material during the grading phase. It is anticipated that earth movement would be primarily, if not completely, accomplished using off-road equipment (e.g., scrapers and excavators). Off-road travel was assumed to be 1,000 feet per trip for vendor and haul trucks.

A detailed depiction of the construction schedule—including information regarding phases and equipment used during each phase—is included in Appendix B of this Environmental Impact Report. The information contained in Appendix B was used as CalEEMod model inputs.

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emission can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. Based upon the initial earthwork volumes calculated for the project (i.e., 107,386 cubic yards cut, 14,860 cubic yards fill, with 92,526 cubic yards of export), construction-related emissions were calculated using CalEEMod; Table 3.2-5 presents the ~~estimated~~ results of the calculated annual construction emissions generated during construction of the project on the basis of the initial earthwork estimates. Details of the emission calculations are provided in Appendix B. Given the reduction in the estimated earthwork volumes for the proposed project, construction emissions are expected to be lower than the levels reported in Table 3.2-5.

Table 3.2-5. Estimated Annual Construction Emissions

Year	ROC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per Year					
2022	0.14	2.50	1.03	0.01	0.24	0.10
2023	0.07	0.85	0.53	0.00	0.17	0.05
Maximum Annual Emissions	**0.14**	**2.50**	**1.03**	**0.01**	**0.24**	**0.10**
SBCAPCD Threshold	*25*	*25*	*25*	*25*	*25*	*25*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Appendix B.
Notes: ROC = reactive organic compound; CO = carbon monoxide; NO_x = oxides of nitrogen; SO_x = sulfur oxides; PM_{10} = course particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.2-5, based on the initial earthwork estimates, annual construction emissions would not exceed the SBCAPCD significance thresholds for ROC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions during construction. Given the updated earthwork estimates for the proposed project are reduced as compared to the initial estimates, the construction emissions from the proposed project would also remain well below applicable significance thresholds of the SBCAPCD. Therefore, construction of the proposed project would result in a **less than significant** impact.

Section 3.3, Biological Resources

NOTE: The Biological Resources section below replaces the entire Section 3.3 of the Draft EIR, as minor revisions are distributed throughout the section and presentation of isolated paragraphs would hamper overall readability.

This section describes the existing biological resources conditions of the proposed Carpinteria Rincon Trail Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and proposes mitigation measures to reduce potential impacts to a less than significant level. The following discussion is based on review of existing databases; field surveys performed in 2011, 2018, 2019, ~~and~~ 2020, and 2021; knowledge of the project vicinity from previous biological surveys, consultations with local experts; and information from the Carpinteria Rincon Trail Proposed Final Mitigated Negative Declaration (MND) (City of Carpinteria 2015) and the Carpinteria Rincon Trail Final Subsequent MND (City of Carpinteria 2019) certified January 6, 2020.

3.3.1 Existing Conditions

The project is located on lands within the jurisdiction of the City of Carpinteria and the County of Santa Barbara (County) (Figure 2-1, Project Location). Carpinteria is a quaint seaside town located about 12 miles east of Santa Barbara near the intersection of Highway 150 and U.S. Highway 101, near the Ventura County line. The proposed trail alignment is located largely along an area of coastal bluff known as the Carpinteria Bluffs. As described in the City of Carpinteria General Plan/Local Coastal Land Use Plan & Environmental Impact Report (City of Carpinteria 2003), the Carpinteria Bluffs are among the last remaining coastal open space areas within the County and are a prime example of undisturbed California coastline. The Carpinteria Bluffs provide important public access to the coast for residents and visitors. The Carpinteria Bluffs are partially developed and further development or redevelopment of portions of the Carpinteria Bluffs are anticipated over time making the establishment of policies to protect the environment and character of the place of utmost importance.

The project site crosses several parcels of land owned by public agencies. The trail parking lot location on Carpinteria Avenue is owned by the City of Carpinteria. Heading east, the next portion of the proposed trail route is owned by the State of California as part of the U.S. Highway 101 right-of-way and from there the proposed trail route crosses two parcels of landed owned by Union Pacific Railroad (UPRR) (APN 001-010-032 and APN 001-220-092). The proposed trail route then connects to a parcel of land owned by the County as part of Rincon Beach County Park. A series of terraces interspersed with steep slopes along the proposed alignment route are evidence of extensive past grading for a former railroad bed and road cuts. Further evidence of extensive past grading is evident in the soils within the project site, as the vast majority of the site is composed of xerorthents, cut and fill areas, which are soils that are well drained, and are formed in material with a high content of gravel and cobbles derived from mixed rock sources (USDA 2020a). The remaining portion of the biological survey area contains a mapped section of beaches soils composed of sandy or stony alluvium along the coast, located along the bottom of the hill at the edge of the beach within Rincon Beach County Park (USDA 2020a).

The Union Pacific Railroad (UPRR) right-of-way provides an unvegetated corridor approximately 50 feet wide containing a single track that divides the project alignment near its center. The eastern terminus of the proposed trail alignment is within Rincon Beach County Park parking lot, consisting of both undeveloped terraces as well as a largely developed area where a paved parking lot and landscaping dominate. An existing unsanctioned trail extends between Rincon Beach County Park and the UPRR tracks extending west on the bluffs to the north of the UPRR tracks with spur trails providing beach access. The western portion of the alignment is situated west and south of U.S. Highway 101 and partly includes an unvegetated pull-out at the eastern terminus of Carpinteria Avenue as well as an area of disturbed ground adjacent to the pull-out and undeveloped open space south of U.S. Highway 101.

Despite past disturbances, long stretches of the proposed trail alignment are dominated by native scrub vegetation. In the eastern portion of the proposed trail alignment between the UPRR crossing and Rincon Beach County Park, the native shrub, quailbush (*Atriplex lentiformis*), is the dominant shrub throughout much of the area. Additional native vegetation borders the parking lot in Rincon Beach County Park and occupies portions of the proposed trail alignment. In the western portion of the proposed trail alignment between the eastern terminus of Carpinteria Avenue and the UPRR crossing, California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), and quailbush are the dominant plant species.

The project site region is identified by USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5-minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria).

3.3.1.1 Literature Review

Prior to the 2011 field visit conducted by Dudek, the California Natural Diversity Database (CNDDB) was queried for records of special-status plants and wildlife in the vicinity of the site. In addition, Carpinteria local botanist Larry Ballard was consulted for information on rare plants potentially occurring in the project vicinity, including those on the Rare Plants of Santa Barbara County list, issued by the Central Coast Center for Plant Conservation (CCCPC) (Wilken 2007) and those included on the Checklist of Ventura County Rare Plants (Magney 2020). Additional field surveys were performed in 2018, 2019, ~~and~~ 2020, and 2021. Prior to 2018, 2019, 2020, and 2021 field surveys, the location of documented special-status plant species near the project site and that have potential to occur on site were identified through a query of the CNDDB (CDFW 2018; CDFW 2020a) and the updated Rare Plants of Santa Barbara County (Wilken 2018). In summary the following were reviewed for this project:

- 2008-2009 Second Wet Season 90-Day Vernal Pool Branchiopod Survey Report, King Ventures Rincon Bluffs Carpinteria, California (Sage Institute Inc. 2009)
- Administrative Draft Environmental Impact Report Carpinteria Bluffs, Areas III Development Plan (INTERFACE Planning and Counseling Corporation 1981)
- Carpinteria Bluffs Areas 2 and 3 Biological Resource Analysis & Mapping (Firma 2008)
- Carpinteria Bluffs Biological Resources and Environmentally Sensitive Habitat (Condor Environmental Planning Services 1996)
- CDFW CNDDB (CDFW 2018; CDFW 2020a)
- Checklist of Ventura County Rare Plants (Magney 2020)
- CNPS Inventory of Rare and Endangered Plants (CNPS 2020)
- Draft Carpinteria Bluffs Area III Project Biological Resources Due Diligence Report (Dudek 2012a)

- Evaluation Report Carpinteria Bluffs Biological Resources and Environmentally Sensitive Habitat Areas (LSA Associates Inc. 1997)
- Initial Biological Assessment: Rincon Trail (VJS Biological Consulting 2008)
- List of potentially occurring listed species generated from a review of the USFWS's IPaC Trust Resources Report list of federal and threatened species (USFWS 2020a)
- Proposed Final Mitigated Negative Declaration Carpinteria Rincon Trail (City of Carpinteria 2015)
- Proposed Final Subsequent Mitigated Negative Declaration. Carpinteria Rincon Trail (City of Carpinteria 2019)
- Rare Plants of Santa Barbara County list (Wilken 2007, 2018)
- USGS National Hydrography Dataset (USGS 2020)
- USFWS Critical Habitat Mapper (USFWS 2020b)
- USFWS National Wetlands Inventory (USFWS 2020c)
- Wetland Delineation of Pool Features at Carpinteria Bluffs Areas III per the California Coastal Act, City of Carpinteria, California (Dudek 2012b)

The biological survey area includes the proposed trail alignment as well as the extent of ~~proposed temporary~~ potential impacts encompassing vegetated terraces and slopes above and below the proposed trail alignment as well as portions of the developed Rincon Beach County Park (see Figure 3.3-1).

3.3.1.2 Vegetation Communities and Wildlife Habitats

During 2018, Dudek biologists conducted vegetation community mapping within the biological survey area in the field using the List of Vegetation Alliances and Associations (Natural Communities List) (CDFW 2010), which is based on the *Manual of California Vegetation, Second Edition* (MCV2) (Sawyer et al. 2009), as shown in Table 3.3-1. The vegetation communities were updated to align with the California Natural Community List (CNCL) (CDFW 2020b), which incorporated changes based on taxonomic revisions related to dominant plants, reassignment of associations to new or different alliances, and revisions to the rarities rankings of some communities. If vegetation observed did not meet the membership rules of the vegetation communities in these sources, modifications were made to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land uses) using Oberbauer et al. (2008). Vegetation community mapping conducted in 2018 was confirmed and/or updated during the 2020 site visit. An additional site visit was conducted in May 2021 to perform vegetation mapping, special-status plant species survey, and a tree assessment within the expanded biological survey area to include the limits of Alternative 4.

The following minimum vegetation mapping units applied during vegetation mapping:

- 0.5–1.0 acre for inaccessible areas of the site due to steep terrain.
- acres for wetland (i.e., hydrophytic) vegetation in traditional wetland environments (i.e., OBL [obligate – plant species almost always in wetlands], FACW [facultative wetland – plant species usually occurring in wetlands but occasionally found in non-wetlands], but not all FAC [facultative – plant species equally likely to occur in wetlands and non-wetlands] species comprising a vegetation alliance will be mapped unless associated with a hydrologic unit – stream, depression, swale, etc.).
- all areas with sensitive vegetation communities were mapped (no minimum mapping unit identified for sensitive vegetation communities)

Table 3.3-1. Survey Dates, Times, Personnel, and Conditions for Biological Surveys

Survey Date	Time	Personnel	Survey Conditions	Survey Type
8/31/2011	0940-1253	Dave Compton	61°F–63°F, 70%–100% cloud cover, 1-8 mph winds	General Biological Survey
5/5/2018	0655-1040	Heather Moine	55°F–68°F, 50%–70% cloud cover, 1-2 mph winds	Special-Status Plant Species Survey
5/15/2018	0630-0755	Heather Moine	51°F–60°F, 0% cloud cover, 1-3 mph winds	Vegetation Mapping
7/21/2018	0700-0900	Heather Moine	63°F–64°F, 100% cloud cover, 1-2 mph winds	Special-Status Plant Species Survey
9/26/2018	1300-1510	Heather Moine	67°F–69°F, 50%–75% cloud cover, 2-3 mph winds	Special-Status Plant Species Survey, Vegetation Mapping
4/8/2019	1505-1825	Heather Moine	80°F–85°F, 10%–80% cloud cover, 2-3 mph winds	Special-Status Plant Species Survey
7/23/2019	1300-1605	Heather Moine	75°F–79°F, 0%–20% cloud cover, 4-5 mph winds	Special-Status Plant Species Survey
12/24/2020	1320-1505	Mackenzie Forgey	69°F–68°F, 90% cloud cover, 2-9 mph winds	General Biological Survey; Tree Assessment
5/17/2021	1330-1706	Heather Moine	60°F–61°F, 10%–100% cloud cover, 0-6 mph winds	Special-Status Plant Species Survey; Vegetation Mapping; Tree Assessment

Notes: °F = degrees Fahrenheit; mph = miles per hour.

The CNCL (CDFW 2020b) is a hierarchical classification system which classifies natural vegetation communities based on alliances, which contain associations, the most granular level of classification (CDFW 2020c). The CNCL includes a state rarity rank based on the NatureServe Standard Heritage Methodology (NatureServe 2020). The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). For the purpose of this report the focus is the S rarity rank. The numbers have the following meaning (NatureServe 2020):

1 = critically imperiled
2 = imperiled
3 = vulnerable to extirpation or extinction
4 = apparently secure
5 = demonstrably widespread, abundant, and secure

For example, S1 would indicate that a vegetation community is critically imperiled within a particular state or province. A rank of S3 would indicate the vegetation community is vulnerable and at moderate risk within a particular state or province, although it may be more secure elsewhere (NatureServe 2020). The CNCL (CDFW 2020b) includes state-level rarity rankings (i.e., the subnational [S] rank) for vegetation communities. The CNCL is considered the authority for ranking the conservation status of vegetation communities in California. As described by CDFW 2020c, ranking is an ongoing process and some associations are considered sensitive, denoted by a "Y" in the "Sensitive" column of the list, while others lack association-specific global and state ranks. This "Y" in the sensitive column indicates rarity, although that alliance may not be rated S3 or below as well (CDFW 2020c). CDFW

expects to provide association level ranks for all S3 or rarer entities in the future, including those associations that are considered sensitive despite lacking an S3 or rarer alliance ranking.

The overall condition and quality of habitat provided by each vegetation community including supporting wildlife species was assessed. Discussions include degrees of disturbance, biological productivity of supporting plant and/or wildlife populations, and the relative viability of the habitat resource are included for each vegetation community and land cover type.

County environmentally sensitive habitat (ESH) and City environmentally sensitive habitat areas (ESHA) were evaluated based on definitions in the County *Coastal Land Use Plan* (CLUP) (County of Santa Barbara 2019) and the *City of Carpinteria General Plan and Local Coastal Plan* (City of Carpinteria 2003). Although most undeveloped areas of the coastal zone, as well as many isolated pockets of open space within urban areas, provide a "habitat" for many species of animals and plants, the intent of the Coastal Act is preservation of significant habitat resources. Coastal Act environmentally sensitive habitat areas are defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Coastal Act, Section 30107.5). The County CLUP (County of Santa Barbara 2019) identifies ESH based on such factors as intrinsic, scientific, and educational value and includes the following biological resource categories:

- Dunes
- Wetlands
- Native Grasslands
- Vernal Pools
- Butterfly Trees
- Marine Mammal Rookeries and Hauling Grounds
- White-tailed Kite Habitat
- Rocky Points and Intertidal Areas
- Subtidal Reefs
- Kelp Beds
- Seabird Nesting and Roosting Areas
- Native Plant Communities – examples: coastal sage scrub, chaparral, coastal bluff, closed cone pine forest, California native oak woodland (also individual oak trees), endangered and rare plant species as designated by CNPS, and other plants of special interest such as endemics
- Streams

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) ESHA includes a diversity and number of habitats and species not commonly found in urban areas and that warrant unique measures to ensure adequate protection. As such, the Carpinteria Bluffs have specifically been identified as an ESHA. The following list includes ESHA that have been identified as existing in Carpinteria:

- Wetlands
- Butterfly Habitat
- Marine Mammal Rookeries and Hauling Grounds
- Rocky Points and Intertidal Areas

- Subtidal Reef
- Kelp Beds
- Creeks and Riparian Habitat
- Significant Native Plant Communities such as coastal sage scrub, riparian scrub, coastal bluff scrub, and native oak woodlands
- Sensitive, rare, threatened or endangered species habitat

A total of ~~12~~ 14 vegetation communities and land cover types were recorded within the biological survey area, including ~~five~~ six native scrub communities and ~~seven~~ eight non-native communities and land cover types (Figure 3.3-1 and Table 3.3-2). All ~~five~~ six of the native vegetation communities found are protected under the County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), identified as coastal sage scrub, coastal bluff scrub, and/or habitat for sensitive species, and are thus considered County ESH and City ESHA. ~~Two~~ Three of these ~~five~~ six communities, California brittle bush scrub – ashy buckwheat scrub alliance, *Encelia californica* association, California brittle bush scrub – ashy buckwheat scrub alliance, *Encelia californica – Artemisia californica* association, and lemonade berry scrub alliance, are also sensitive by virtue of their state rank. These communities are described in CNCL and MCV2. Eucalyptus, ice plant mats, and myoporum are non-native and do not have a state rank (state not applicable [SNA]). The other ~~four~~ five communities and land cover types are not listed in CNCL or MCV2.

While two individual Monterey cypress (*Hesperocyparis macrocarpa*) trees were identified in separate locations within the project site, one within the potential ~~temporary grading~~ impact area along the western portion of the site and the other within the proposed alignment footprint in the eastern portion of the site (Figure 3.3-1), they were not mapped as separate vegetation communities because one tree is not considered a stand or woodland. The first Monterey cypress tree is located near the western terminus of the proposed trail alignment, between the alignment and the pull-out off Carpinteria Avenue, and has a diameter of approximately 10 inches measured 4 feet above the ground. The second Monterey cypress is located within the proposed trail alignment within an unsanctioned trail within Rincon Beach County Park and has a diameter of approximately 12 inches measured 4 feet from the ground. One additional Monterey cypress tree was identified in the northern portion of the project above the railroad right-of-way, which is located along the edge of the ~~temporary~~ grading impact area adjacent to disturbed habitat and was measured with an approximate 8-inch diameter measured from 4 feet above the ground. Two Monterey cypress trees are located within the developed portion of the Rincon Beach County Park, one of which is a very young sapling with a diameter under an inch and the other is a mature tree with a combined diameter measured 4 feet from the ground of 49 inches due to multiple stems. There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the ~~temporary~~ project impact area and include Monterey cypress trees.

Monterey cypress trees are not naturally occurring within the Carpinteria area and instead are documented as native in populations located in Monterey and Carmel, California (CNPS 2021); therefore, Monterey cypress trees are not considered sensitive vegetation communities or individual trees. However, Monterey cypress trees could be considered County ESH and/or City ESHA if used by sensitive wildlife species as further discussed in Section 3.3.1.4.

Two pine saplings that appeared to be newly planted with mulch placed around the trunks and stakes installed for tree stabilization, are located along the edge of the ~~temporary~~ grading impact area in the portion of the project above the railroad right-of-way, each under 4 inches diameter measured 4 feet from the ground. One of these newly

installed pine saplings is a Norfolk Island pine (*Araucaria heterophylla*), and the other could not be identified to species due to the lack of cones present at the time of the survey but appears to be a native pine tree (*Pinus* sp.).

There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the biological survey area, and include a few non-riparian California sycamore (*Platanus racemosa*) trees and other ornamental tree species located approximately 50-feet from Rincon Creek.

The County CLUP (County of Santa Barbara 2019) does not include mapped ESH within the project site. The City of Carpinteria General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) includes mapped ESHA within the limits of the City north to but not including Carpinteria Avenue.

Table 3.3-2. Summary of Existing Vegetation Communities and Land Cover Types

Habitat Group	General Habitat	Vegetation Community (Alliance, Association)	Alliance-Association (State Sensitive)/County ESH/City ESHA	Acreage
Native Scrub Communities	Coastal Bluff Scrub	California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica* Association	S3-Yes (Yes)/Yes/Yes	0.96
		California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica – Artemisia californica* Association	S3-Yes (Yes)/Yes/Yes	0.48
		Quailbush Scrub Alliance, *Atriplex lentiformis* Association	S4-No (No)/Yes/Yes	~~6.18~~ 6.93
			Coastal Bluff Scrub Subtotal	~~7.13~~ 8.38
	Coastal Scrub	California Sagebrush – (Purple Sage) Scrub Alliance, *Artemisia californica* Association	S5-S4 (No)/Yes/Yes	~~2.08~~ 2.13
		Coyote Brush Scrub Alliance, *Baccharis pilularis* Association	S5-No (No)/Yes/Yes	1.18
		Lemonade Berry Scrub Alliance, *Rhus integrifolia* Association	S3-S3 (Yes)/Yes/Yes	~~0.31~~ 0.64
			Coastal Scrub Subtotal	~~3.57~~ 3.94
Non-native Communities and Land Cover Types	Non-native Communities	Eucalyptus – Tree of Heaven – Black Locust Groves Alliance, *Eucalyptus (globulus, camaldulensis)* Association	SNA-SNA (No)/No/No	~~0.21~~ 0.23
		Ice Plant Mats Alliance, *Carpobrotus (edulis*) Association	SNA-SNA (No)/No/No	0.14
		Pepper Tree or Myoporum Groves Alliance, *Myoporum laetum/ Arundo donax* Association	SNR-SNA (No)/No/No	~~0.07~~ 0.13
		Parks and Ornamental Plantings	NA (No)/No/No	0.10
		Ruderal	NA (No)/No/No	0.17
	Land Cover Types	Developed	NA (No)/No/No	~~1.08~~ 1.10
		Disturbed Habitat	NA (No)/No/No	1.45

Table 3.3-2. Summary of Existing Vegetation Communities and Land Cover Types

		Unvegetated Siltstone/Shale Bedrock	NA (No)/No/No	0.18
Non-native Communities and Land Cover Types Subtotal				~~3.22~~ 3.50
Combined Total				~~13.92~~ ***15.82***

Notes:
SNA – state not applicable. State status rank not applicable because the species or ecosystem is not a suitable target for conservation activities (NatureServe 2020).
SNR – state no rank (NatureServe 2020).
NA – not applicable. Not included in California Natural Communities List (CDFW 2020b).

Native Scrub Communities

California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica* Association (S3-Sensitive [Sensitive], County ESH, City ESHA). This community includes California brittle bush and/or ashy buckwheat (*Eriogonum cinereum*) as the dominant or co-dominant shrub in the canopy. California brittle bush – ashy buckwheat scrub has an intermittent to continuous shrub canopy less than two meters (seven feet) in height with a variable herbaceous ground layer. The California brittle bush – ashy buckwheat scrub alliance occurs on sunny, steep south-facing slopes often rocky or eroded, with soils derived from sandstone, volcanic or shale substrates (Sawyer et al. 2009). Species associated with California brittle bush scrub on site include quailbush *(Atriplex lentiformis)*, California sagebrush, coyote brush, western prickly pear (*Opuntia littoralis*), and black mustard.

California brittle brush scrub occurs in limited patches within the project site, wildlife using this community is partly dictated by adjacent communities, which are generally other scrub communities. Brush rabbits (*Sylvilagus bachmani*) may occur within these areas, and some species of small mammals may occur here as well. The Coast Range western fence lizard (*Sceloporus occidentalis bocourti*) likely occur within this community and within adjacent communities. Songbirds with the potential to nest within this community include the mourning dove (*Zenaida macroura*), bushtit (*Psaltriparus minimus*), northern mockingbird (*Mimus polyglottos*), and song sparrow (*Melospiza melodia*).

California brittle brush scrub has a S3-Sensitive designation and is thus considered a sensitive vegetation community per CDFW (2020b). California brittle bush scrub is a state sensitive vegetation community, considered coastal bluff scrub per the County CLUP (County of Santa Barbara 2019), and supports sensitive plant species. Additionally, California brittle bush scrub is mapped as ESHA, considered coastal bluff scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and supports sensitive plant species. Therefore, California brittle bush scrub is considered County ESH and City ESHA.

The *Encelia californica* association within the California brittle bush – ashy buckwheat scrub alliance was mapped in the project site. This association occurs in the proposed trail alignment in and near the County's Rincon Beach County Park (see Figure 3.3-1). Approximately 0.96 acres of this community, or ~~6.9~~ 6.1% of the total biological survey area was identified.

California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica – Artemisia californica* Association (S3-Sensitive [Sensitive], County ESH, City ESHA). This community includes California brittle bush and/or ashy

buckwheat (*Eriogonum cinereum*) as the dominant or co-dominant shrub in the canopy. California brittle bush – ashy buckwheat scrub has an intermittent to continuous shrub canopy less than two meters (seven feet) in height with a variable herbaceous ground layer. The California brittle bush – ashy buckwheat scrub alliance occurs on sunny, steep south-facing slopes often rocky or eroded, with soils derived from sandstone, volcanic or shale substrates (Sawyer et al. 2009). Species associated with *Encelia californica – Artemisia californica* association on site include coyote brush, lemonade berry (*Rhus integrifolia*), seacliff buckwheat (*Eriogonum parvifolium*), and ladies' tobacco (*Pseudognaphalium californicum*).

Encelia californica – Artemisia californica association occurs in limited patches within the project site, and wildlife using this community is partly dictated by adjacent communities, which are generally other scrub communities. Similar to the *Encelia californica* association within the California brittle bush – ashy buckwheat scrub alliance, this community supports the following wildlife species, brush rabbits, Coast Range western fence lizard, mourning dove, bushtit, northern mockingbird, and song sparrow.

California brittle brush scrub has a S3-Sensitive designation and is thus considered a sensitive vegetation community per CDFW (2020b). California brittle bush scrub is a state sensitive vegetation community, considered coastal bluff scrub per the County CLUP (County of Santa Barbara 2019), and supports sensitive plant species. Additionally, California brittle bush scrub is mapped as ESHA, considered coastal bluff scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and supports sensitive plant species. Therefore, California brittle bush scrub is considered County ESH and City ESHA.

The *Encelia californica – Artemisia californica* association within the California brittle bush – ashy buckwheat scrub alliance was mapped in the project site. This association occurs within the southern portion of the project site along U.S. Highway 101 (see Figure 3.3-1). Approximately 0.48 acres of this community, or 3.0% of the total biological survey area was identified.

Quailbush Scrub Alliance*, Atriplex lentiformis* Association (S4-Not Sensitive [Not Sensitive], County ESH, City ESHA). This vegetation community includes quailbush as a dominant species. Quailbush scrub has an open to intermittent scrub canopy less than five meters (16 feet) in height with a variable herbaceous layer (Sawyer et al. 2009). In the proposed trail alignment, species associated with this community include California brittle bush, lemonade berry and Australian saltbush (*Atriplex semibaccata*).

Quailbush scrub provides shelter for brush rabbits and probably for other medium-sized mammal species such as the raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*). California voles (*Microtus californicus*) may occur in this vegetation community. Common reptile species that occur here include the Coast Range western fence lizard and San Diego gophersnake (*Pituophis catenifer annectens*). Nesting songbirds occurring here include the mourning dove, bushtit, northern mockingbird, and song sparrow. Songbirds that may perch on shrubs within this community include the black phoebe (*Sayornis nigricans*).

Quailbush scrub has a S4-Not Sensitive designation and thus is not considered a sensitive vegetation community per CDFW (2020b). Quailbush scrub, however, is considered coastal bluff scrub per the County CLUP (County of Santa Barbara 2019) and mapped as ESHA and considered coastal bluff scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and therefore considered County ESH and City ESHA. Additionally, this vegetation community supports sensitive plant species and has the potential to support the state species of special concern (SSC) California legless lizard and further warrants County ESH and City ESHA designations.

The *Atriplex lentiformis* association within the quailbush scrub alliance was mapped in the project site. It occurs extensively in the proposed trail alignment east of the UPRR and in patches west of the UPRR (see Figure 3.3-1). Approximately ~~6.18~~ 6.93 acres of this community, or ~~44.3~~ 43.8% of the total biological survey area was identified.

California Sagebrush – (Purple Sage) Scrub Alliance*, Artemisia californica* Association (S5-S4 [Not Sensitive], County ESH, City ESHA). This community includes California sagebrush (*Artemisia californica*) and/or purple sage (*Salvia leucophylla*) as the dominant or co-dominant shrub in the canopy. California sagebrush scrub has an intermittent to continuous shrub canopy less than two meters (seven feet) in height with a variable herbaceous ground layer (Sawyer et al. 2009). Species associated with this community include California brittle bush (*Encelia californica*), coast goldenbush (*Isocoma menziesii*) and coyote brush (*Baccharis pilularis*). Black mustard (*Brassica nigra*) and other non-native species are found in this community on site.

Wildlife occupying California sagebrush scrub includes many species common to other scrub communities within the project site. Brush rabbits seek cover in these areas, and small mammals such as California voles likely occur here. Coast Range western fence lizards and San Diego gophersnakes are reptiles that occur in scrub habitats. Songbirds nesting here include the mourning dove, northern mockingbird, California towhee (*Melozone crissalis*), and song sparrow. White-crowned sparrows (*Zonotrichia leucophrys*) occur here in winter.

California sagebrush scrub has a S5-S4 designation thus is not considered a sensitive vegetation community per CDFW (2020b). California sagebrush scrub is considered coastal sage scrub per the County CLUP (County of Santa Barbara 2019) and mapped as ESHA and considered coastal sage scrub in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and therefore considered County ESH and City ESHA. Additionally, this vegetation community supports sensitive plant species and further warrants County ESH and City ESHA designations.

The *Artemisia californica* association within the California sagebrush – (purple sage) scrub alliance was mapped in the project site. This association occurs in the western portion of the project site, near Carpinteria Avenue and U.S. Highway 101, in a heavily engineered portion of the proposed trail alignment graded during highway construction (see Figure 3.3-1). Smaller patches occur adjacent to the parking lot for Rincon Beach County Park and east of UPRR. Approximately ~~2.08~~ 2.13 acres of this community, or ~~14.9~~ 13.4% of the total biological survey area was identified.

Coyote Brush Scrub Alliance*, Baccharis pilularis* Association (S5-Not Sensitive [Not Sensitive], County ESH, City ESHA). Coyote brush scrub communities include greater than 50% relative cover of coyote brush and coyote brush as the dominant or co-dominant shrub in the canopy. Coyote brush scrub has a variable shrub canopy less than three meters (10 feet) in height with a variable herbaceous ground layer (Sawyer et al. 2009). Species associated with this community in the proposed trail alignment include scattered California sagebrush, California brittle bush, myoporum (*Myoporum laetum*) and black mustard.

Wildlife occurring in coyote brush scrub is very similar to that occurring in quailbush scrub and includes brush rabbits, raccoon, striped skunk, California voles, Coast Range western fence lizard, San Diego gophersnake, mourning dove, bushtit, northern mockingbird, song sparrow and black phoebe.

Coyote brush scrub has a S5-Not Sensitive designation thus is not considered a sensitive vegetation community per CDFW (2020b). Coyote brush scrub is not considered coastal sage scrub or associated with other ESH habitats by definition per the County CLUP (County of Santa Barbara 2019); however, coyote brush scrub does support sensitive plant species and as such is designated County ESH. Additionally, coyote brush scrub is mapped as ESHA

in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and also supports sensitive plant species and therefore considered City ESHA.

The *Baccharis pilularis* association within the coyote brush scrub alliance was mapped in the project site. It occurs in the proposed trail alignment mostly near the western terminus, but also in small patches in the vicinity of Rincon Beach County Park. The coyote brush scrub between UPRR and U.S. Highway 101 occurs in old road cuts (see Figure 3.3-1). Approximately 1.18 acres of this community, or ~~8.5~~ 7.4% of the total biological survey area was identified.

Lemonade Berry Scrub Alliance*, Rhus integrifolia* Association (S3-S3 [Sensitive], County Not Sensitive, City Not Sensitive). This vegetation community includes lemonade berry (*Rhus integrifolia*) as either a dominant or co-dominant species. Lemonade berry scrub has a two-tiered, open to continuous shrub canopy less than five meters (16 feet) in height with an open herbaceous ground layer and sparse cover of emergent trees (Sawyer et al. 2009). Species associated with this community on site include coyote brush and myoporum.

Wildlife occurring in lemonade berry scrub is similar to that occurring in Coyote brush scrub and includes brush rabbits, raccoon, striped skunk, California voles, Coast Range western fence lizard, San Diego gophersnake, mourning dove, bushtit, northern mockingbird, song sparrow and black phoebe.

Lemonade berry scrub has a S3-S3 designation and thus is considered a sensitive vegetation community per CDFW (2020b). Lemonade berry scrub is not considered coastal sage scrub or associated with other ESH habitats by definition per the County CLUP (County of Santa Barbara 2019); however, it does support sensitive plant species and is a state sensitive vegetation community and thus is considered County ESH. Additionally, lemonade berry scrub is not considered coastal sage scrub or associated with other ESHA habitats by definition per the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003); however, it does support sensitive plant species and is a state sensitive vegetation community and thus is considered City ESHA.

The *Rhus integrifolia* association within the lemonade berry scrub alliance was mapped in the project site. This association occurs in two small patches west of the Rincon Beach County Park and along U.S. Highway 101 east of UPRR (see Figure 3.3-1). Approximately ~~0.31~~ 0.64 acres of this community, or ~~2.2~~ 4.0% of the total biological survey area was identified.

Non-Native Communities

Eucalyptus – Tree of Heaven – Black Locust Groves Semi-Natural Alliance, *Eucalyptus (globulus, camaldulensis)* Provisional Association (SNA-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). This alliance contains eucalyptus trees (*Eucalyptus* sp.), tree of heaven (*Ailanthus altissima),* or black locust (*Robinia pseudoacacia*) as the dominant species in the tree canopy. These groves have an open to continuous tree canopy less than 60 meters (197 feet) in height. Understory shrubs and herbaceous layers are sparse to intermittent, and the herbaceous layer is sparse to intermittent. Throughout California, this semi-natural groves alliance occurs as planted trees, groves, and windbreaks, naturalized on uplands or bottomlands and adjacent to stream courses, lakes, or levees (Sawyer et al. 2009).

The Eucalyptus – tree of heaven – black locust groves semi-natural alliance and specific *Eucalyptus* (*globulus, camaldulensis*) association is listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA-SNA as it is composed of non-native species; it is not considered sensitive. Additionally, per the County CLUP (County of Santa Barbara 2019) eucalyptus trees are considered ESH if they are butterfly trees or provide habitat to sensitive

species. Per the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) eucalyptus trees are considered ESHA if they provide habitat for butterfly habitat or sensitive, rare, threatened or endangered species habitat. Included below is a discussion of potential wildlife use of the eucalyptus trees.

Because of shade and possibly the allelopathic (toxic) properties of eucalyptus leaf litter, little other vegetation is present in this community, and relatively little wildlife is found here. But the relatively open ground under the canopy permits medium-sized mammals such as common raccoons and striped skunks to move easily through this community to access adjacent areas. Some bird species are adapted to this community. Yellow-rumped warblers (*Setophaga coronata*) feed on insects attracted to eucalyptus blossoms in the winter. Some birds of prey favor eucalyptus trees for nesting. Red-tailed hawks (*Buteo jamaicensis*), Cooper's hawks (*Accipiter cooperii*), and great horned owls (*Bubo virginianus*) also have the potential to nest in this community.

Monarch butterflies (*Danaus plexippus*) use eucalyptus trees for roosting in the region, but they are not known to use eucalyptus within the project site. The majority of eucalyptus trees within the project site are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. Several eucalyptus trees are located within the proposed trail alignment near its western terminus and U.S. Highway 101, and range in diameter from approximately 18 to 28 inches measured 4 feet from the ground. Additionally, a small stand of eucalyptus trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot; however, there is low potential for monarchs to overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. There are also three eucalyptus trees present near the western terminus of the biological survey area, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There are also trees associated with the Rincon Point housing development that abut Rincon Beach County Park and are located south and east of the eastern portion of the biological survey area and include some eucalyptus trees. Monarch butterflies and monarch butterfly habitat are further discussed in Section 3.3.1.4.

The white-tailed kite is known to occur in the area (City of Carpinteria 2003). The City specifically cites the Carpinteria Bluffs as a location where this species occurs and is protected. However, no white-tailed kites were detected in the biological survey area, and the eucalyptus trees in and around the western portion of biological survey area are relatively small, and located in areas with high levels of human disturbance where kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).

The *Eucalyptus (globulus, camaldulensis)* provisional association within the eucalyptus - tree of heaven - black locust semi-natural alliance was mapped in the project site. Within the biological survey area this community is dominated by eucalyptus trees, which are sparse and do not create a windrow and do not provide habitat for sensitive species; and thus are not included as ESH per County of Santa Barbara (2009) or ESHA per City of Carpinteria (2003). Approximately ~~0.21~~ 0.23 acres of this community, or 1.5% of the biological survey area was identified.

Ice Plant Mats Semi-Natural Alliance, *Carpobrotus (edulis)* Association (SNA-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). Ice plant mats contains hottentot fig (*Carpobrotus edulis*), sea fig (*Carpobrotus chilensis*), or other ice plant taxa as the dominant or co-dominant species in the herbaceous layer. These species

invade coastal bluff scrub, dune mat, dune scrub, and coastal prairies and compete with native plants (Sawyer et al. 2009). Ice plant semi-natural alliance areas have an intermittent to continuous canopy within the herbaceous layer less than 0.5 meters (1.6 feet) in height.

Very few wildlife species occur in ice plant mats. California ground squirrels (*Spermophilus* [*Otospermophilus*] *beecheyi*) often inhabit this community. This community provides poor nesting habitat for birds. Common reptiles such as the western fence lizard likely occur here. This community is not generally valuable to special-status wildlife species.

The ice plant mats semi-natural alliance and specific *Carpobrotus (edulis)* association is listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA-SNA as it is composed of non-native species; therefore, it is not considered sensitive. Additionally, ice plant mats vegetation community is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Ice plant mats are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The *Carpobrotus (edulis)* association within the ice plant mats semi-natural alliance was mapped in the project site. Approximately 0.14 acres of this community, or ~~1.0~~ 0.9% of the biological survey area was identified.

Pepper Tree or Myoporum Groves Semi-Natural Alliance*, Myoporum laetum/Arundo donax* Association (SNR-SNA [Not Sensitive], County Not Sensitive, City Not Sensitive). Pepper tree or myoporum groves consist of myoporum or pepper trees (*Schinus* spp.) as the dominant species in the tree canopy. Within the biological survey area, this community is dominated by myoporum. These groves have an open to continuous tree canopy less than 18 meters (59 feet) in height. Understory shrubs are infrequent or common and the herbaceous layer is simple to diverse lacking trees and shrubs. Throughout Central and Southern California, the pepper trees or myoporum groves semi-natural alliance occurs in coastal canyons, washes, slopes, riparian areas, and roadsides (Sawyer et al. 2009).

Several myoporum trees are located within the proposed trail alignment west of Rincon Beach County Park, and are largely multistemmed. Myoporum groves provide shelter for medium-sized mammal species such as the brush rabbit, common raccoon, and striped skunk. California voles may occur in this vegetation community. Common reptile species such as the western fence lizard likely occur. Nesting songbirds occurring here likely include the mourning dove, bushtit, and northern mockingbird. Wintering black phoebes are among birds that likely perch on myoporum. Some birds of prey, such the white-tailed kite and other raptors, may also perch in this community where it is adjacent to foraging habitat.

This semi-natural alliance and specific *Myoporum laetum/Arundo donax* association mapped on site are listed in MCV2 (Sawyer et al. 2009) and CNCL (CDFW 2020b), but is ranked SNA as it is composed of non-native species; thus, it is not considered sensitive. Additionally, myoporum is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Myoporum are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The *Myoporum laetum/Arundo donax* association within the pepper tree or myoporum groves semi-natural alliance was mapped in the project site. Approximately ~~0.7~~ 0.13 acres of this community, or ~~0.5~~ 0.8% of the biological survey area was identified.

Parks and Ornamental Plantings (NA [Not sensitive], County Not Sensitive, City Not Sensitive). This community is not described in CNCL or MCV2 because it is not a naturally occurring community in California; thus, it is not considered sensitive. It includes landscaping plants as dominants. Additionally, parks and ornamental plantings is not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Parks and ornamental plantings are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

The ornamental vegetation community in the proposed trail alignment is characterized by the dominance of landscaped plant species. Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel are among common mammals found in this community. Western fence lizards are a common reptile found in parks and ornamental plantings. Common nesting birds such as Eurasian collared-dove (*Streptopelia decaocto*), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), bushtit, and house finch (*Haemorhous mexicanus*) may be found here.

Parks and ornamental plantings occur within the eastern part of Rincon Beach County Park (see Figure 3.3-1). Approximately 0.10 acres of this community, or ~~0.7~~ 0.6% of the biological survey area was identified.

Ruderal (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). Ruderal is not described in CNCL or MCV2 because it is not a naturally occurring community in California; thus, it is not considered sensitive. Additionally, ruderal habitats are not included on the list of ESH per the County CLUP (County of Santa Barbara 2019) or provide habitat for sensitive species. Ruderal habitats are not mapped as ESHA, included as other ESHA habitats in the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003), and do not provide habitat for sensitive species, and therefore not considered locally sensitive.

Ruderal areas are characterized by limited native vegetation resulting in low function ecological processes. Plants in these areas are dominated by non-native species and there is not a dominant plant species or overall structure to the habitat. Ruderal areas provide little habitat or foraging potential for wildlife, due to the lack of significant cover by vegetation; however, there are often patchy areas of non-native plant species. Mammals may include common species, such as the California ground squirrel, but medium-sized mammals such as raccoons may use ruderal habitats as movement corridors. Among common reptiles that may use these areas is the western fence lizard. Seed-eating birds found here include the California towhee and white-crowned sparrow. Ruderal does not provide habitat for special-status wildlife species.

Mapped ruderal includes roadside areas and areas with disturbed non-native vegetation (see Figure 3.3-1). Approximately 0.17 acres of this community, or ~~1.3~~ 1.1% of the biological survey area was identified.

Land Cover Types

Developed (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). Within the biological survey area, developed areas are unvegetated areas such as pavement and development with impervious materials, it is not described in CNCL or MCV2, and does not provide habitat for sensitive species. Developed areas include the parking lot at Rincon Beach County Park and the wide turnout at the eastern terminus of Carpinteria Avenue (see Figure 3.3-1). Approximately ~~1.08~~ 1.10 acres of developed area, or ~~7.7~~ 7.0% of the biological survey area was identified.

Disturbed Habitat (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). This land cover type, which is not described in CNCL or MCV2, includes invasive non-native and other disturbance-tolerant species as dominants, and does not support sensitive species. Species occurring within this community, including some natives, are those that are tolerant to disturbances such as grading or vegetation clearing. On-site, species appearing in disturbed areas include poison hemlock (*Conium maculatum*), black mustard, Hottentot fig, and horseweed (*Erigeron canadensis*). Approximately 1.45 acres of this land cover type, or ~~10.45~~ 9.1% of the biological survey area was identified.

Unvegetated Siltstone/Shale Bedrock (NA [Not Sensitive], County Not Sensitive, City Not Sensitive). Within the biological survey area, unvegetated siltstone/shale bedrock areas are unvegetated areas with exposed siltstone/shale bedrock, it is not described in CNCL or MCV2, and does not provide habitat for sensitive species. Unvegetated siltstone/shale bedrock areas include the southern slope along UPRR and southern portion of the biological survey area along U.S. Highway 101 (see Figure 3.3-1). Approximately 0.18 acre of unvegetated siltstone/shale bedrock, or 1.1% of the biological survey area was identified.

3.3.1.3 Special-Status Plant Species

During 2018, ~~and~~ 2019, and 2021, Dudek biologists performed floristic surveys for special-status plant species, as shown in Table 3.3-1. All plant species encountered during the field surveys were identified to subspecies or variety, if possible. Species that could not be identified in the field were brought into the laboratory for further investigation. Scientific and common names for plant species with a California Rare Plant Rank (CRPR) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2020). For plant species without a California Rare Plant Rank, scientific names follow the Jepson Interchange for California Floristics; Index to California Plant Names (Jepson Flora Project 2020) and common names follow the California Natural Community List (CDFW 2020b) or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2020b).

For the purpose of CEQA analysis, federal, state, CNPS CRPR 1A, 1B, 2A, and 2B plants, and locally rare plants (Wilken 2018) are considered special-status. CRPR 3 and 4 plants are CNPS designated rare, but not considered special-status as plant species but do add to the vegetation community value designated as County ESH and or City ESHA as CNPS CRPR 3 and 4 species.

In considering rarity beyond federal or state designations, the CNPS Inventory of Rare and Endangered Vascular Plants of California was the primary reference (CNPS 2020). Use of the CNPS inventory is helpful because it clearly defines levels of endangerment and rarity for all of the species addressed. The CNPS inventory divides its subject taxa into four ranks: CRPR 1 (which is further divided into 1A and 1B), CRPR 2 (which is further divided into 2A and 2B), CRPR 3, and CRPR 4. Plants with a CRPR of 1A are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. Plants with a CRPR of 1B are rare throughout their range, with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. Plants with a CRPR of 2A are presumed extirpated because they have not been observed or documented in California for many years. Except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. Plants with a CRPR of 3 have not had sufficient information collected to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. Plants with a CRPR of 3 are plants about which more information is needed and 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. CRPR 3 plants lack necessary information to assign them to one of the other ranks or to reject them. Should the degree of endangerment or rarity of a CRPR 4 plant change, it would be transferred to a more appropriate rank.

CRPR plants are further defined as follows:

- .1 = seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- .2 = moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
- .3 = not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

A total of ~~133~~ 138 plant species were observed and identified during surveys. Of these, ~~57~~ 61 (~~43~~ 44%) are considered native and ~~76~~ 77 (~~57~~56%) are considered non-native to California, included as Appendix C1, Plant and Wildlife Species Compendium. The CNDDB (CDFW 2018; CDFW 2020a) and CNPS (CNPS 2020) queries returned 34 special-status plant species that have been documented within the USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5 minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria), hereafter referred to as the region. Only the four coastally influenced adjacent USGS 7.5-minute quadrangles were queried for sensitive biological resources instead of all adjacent quadrangle maps, since the habitats north of the foothills vary greatly from the project site and would not be representative of what species are likely to occur in coastal habitats. Dudek analyzed the resulting special-status plant species potential to occur based on known elevation or geographic range, suitable habitat, or the species has been extirpated from the region. Appendix C2, Plant and Wildlife Species Not Expected to Occur within the Biological Survey Area provides a list of the 20 special-status plant species that are not expected to occur based on site surveys, lack of suitable habitat, and the site being out of the species range. The special-status plant species in Appendix C2 are not analyzed in this report as no direct, indirect, or cumulative impacts are expected.

Based on Dudek's habitat suitability analysis including elevation and habitats, 11 of the special-status plant species had the potential to occur within the project site, and 3 special-status plant species were observed during 2018, ~~and~~ 2019, and 2021 rare plant surveys. These 14 special-status plant species include aphanisma (*Aphanisma blitoides*), Miles' milk-vetch (*Astragalus didymocarpus* var. *milesianus*), Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), Coulter's saltbush (*Atriplex coulteri*), South Coast saltscale (*Atriplex pacifica*), southern tarplant (*Centromadia parryi* ssp. *australis*), Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), mesa horkelia (*Horkelia cuneata* var. *puberula*), California satintail (*Imperata brevifolia*), Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*), aparejo grass (*Muhlenbergia utilis*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), Nuttall's scrub oak (*Quercus dumosa*), salt spring checkerbloom (*Sidalcea neomexicana*), and woolly seablite (*Suaeda taxifolia*) (Table 3.3-3).

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Aphanisma blitoides	aphanisma	None/None/1 B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/3–1,000 feet amsl	Low potential to occur. Suitable coastal scrub and coastal bluff scrub habitat is present, however the only CNDDB occurrence in the region was last confirmed in 1963 and located 1.5 miles west of the Ventura River (CDFW 2020a). This species was not

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
				detected during 2018, 2019, or 2021 special-status plant species surveys.
Astragalus didymocarpus var. *milesianus*	Miles' milk-vetch	None/None/1 B.2	Coastal scrub (clay)/annual herb/Mar–June/66–295 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although clay soils are absent (USDA 2020a). There are only two CNDDB occurrences in the region the most recent of which was recorded in the 1970s in the Ojai area (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Atriplex coulteri	Coulter's saltbush	None/None/1 B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/10–1,505 feet amsl	Low potential to occur. Suitable coastal bluff scrub and coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. This species is known to occur along Carpinteria coastal bluffs, however this is from an occurrence last confirmed in 1927 (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Atriplex pacifica	South Coast saltscale	None/None/1 B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460 feet amsl	Low potential to occur. Suitable coastal bluff scrub and coastal scrub habitat is present and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, there is only one occurrence in the region which was last confirmed in 1972 about 1.5 miles west of the Ventura River (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1 B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/0–1,570 feet amsl	Low potential to occur. Suitable habitat is present in the disturbed habitat and ruderal areas on site, as this species can occur in disturbed sites (CDFW 2020a). However, the only occurrence in the region was last confirmed in 1997 and is considered possibly extirpated (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/None/1 B.1	Coastal bluff scrub (sandy), Coastal dunes/annual herb/Jan–Aug/0–330 feet amsl	Low potential to occur. Suitable coastal bluff scrub habitat is present. However, the only occurrence in the region was last confirmed in 1961 and is considered possibly extirpated (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Horkelia cuneata var. *puberula*	mesa horkelia	None/None/1 B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/230–2,655 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although the most recently confirmed occurrence in the region is from 1935 (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Imperata brevifolia	California satintail	None/None/2 B.1	Chaparral, Coastal scrub, Mojavean desert scrub, Meadows and seeps (often alkali), Riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3,985 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, there are only two occurrences in the region, both of which are located behind the transverse ranges north the site, approximately 11 miles northeast of the project site (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Lonicera subspicata var. *subspicata*	Santa Barbara honeysuckle	None/None/1 B.2	Chaparral, Cismontane woodland, Coastal scrub/perennial evergreen shrub/May–	Low potential to occur. Suitable coastal scrub habitat is present. However, all the occurrences in the region are located within the

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
			Aug(Dec–Feb)/33–3,280 feet amsl	foothills and not directly along the coast (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.
Malacothrix saxatilis var. *saxatilis*	cliff malacothrix	None/None/4.2[b]	Coastal bluff scrub, Coastal scrub/perennial rhizomatous herb/Mar–Sep/10–655 feet amsl	Present. Detected during 2018, 2019, and 2021 special-status plant species surveys.
Muhlenbergia utilis	aparejo grass	None/None/2B.2	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland; sometimes alkaline, sometimes serpentinite/perennial rhizomatous herb/Mar–Oct/82–7,625 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, and the large quantities of quailbush on site indicate that suitable alkaline soils may be present. However, the only occurrence in the region was last confirmed in 1964 and was located west of Matilija Lake (CDFW 2020a).
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	None/None/3.2[b]	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt); sandy, sometimes rocky/perennial herb/Mar–Aug/16–985 feet amsl	Present. Detected during 2018 or 2019 special-status plant species surveys.
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr (May–Aug)/49–1,310 feet amsl	Low potential to occur. Suitable coastal scrub habitat is present, although clay soils are absent (USDA 2020a). The closest occurrence in the region was last confirmed in 1929 and was described as occurring in Carpinteria, and the remaining occurrences in the region are located within the foothills and not directly along the coast (CDFW 2020a). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.

Table 3.3-3. Special-Status Plant Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[a]	Habitat Requirements	Potential to Occur within the BSA
Suaeda taxifolia	woolly seablite	None/None/4.2[b]	Coastal bluff scrub, Coastal dunes, Marshes and swamps (margins of coastal salt)/perennial evergreen shrub/Jan–Dec/0–165 feet amsl	Present. Detected during 2018 and 2019 special-status plant species surveys.

Notes: amsl = above mean sea level.

[a] **Status Legend:**
FE: Federally listed as endangered
SE: State listed as endangered
CRPR 1A: Plants presumed extinct in California
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants rare, threatened, or endangered in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Plants about which more information is needed – a review list
CRPR 4: Plants of limited distribution – a watch list
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

[b] For the purpose of CEQA analysis, federal, state, and CNPS CRPR 1A, 1B, 2A, and 2B plants are considered special-status. CRPR 3 and 4 plants are not considered special-status as plant species but do add to the vegetation community value designated as County environmentally sensitive habitat and or City environmentally sensitive habitat areas as CNPS CRPR 3 and 4 species.

No federal, state, or CNPS CRPR 1 or 2 plant species were observed. Two CNPS CRPR 4.2 plant species, cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*) and woolly seablite (*Suaeda taxifolia*), and one CNPS CRPR 3.2 plant species, south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*) were detected within the biological survey area (see Figure 3.3-1). Cliff malacothrix, south coast branching phacelia, and woolly seablite are not included on the Rare Plants of Santa Barbara County list (Wilken 2018); therefore, these are not considered special-status plant species.

Cliff malacothrix (*Malacothrix saxatilis* var. *saxatilis*). This CNPS CRPR 4.2 species is a perennial herb that occurs in coastal bluff scrub and coastal scrub at 10 to 220 feet in elevation. It occurs along the coast from Orange County north to Santa Barbara County, and inland in Kern and San Bernardino Counties and blooms March through September. A total of ~~68,385~~ 70,252 square feet and ~~834~~ 902 individuals were documented (Figure 3.3-1) in the biological survey area.

South coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*). This species is a perennial herb that is native to California and included as CNPS CRPR 3.2. It occurs in chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt) in sandy sometimes rocky soils and blooms March through August. A total of 14 square feet and 2 individuals were documented (Figure 3.3-1) in the biological survey area.

Woolly seablite (*Suaeda taxifolia*). This CNPS CRPR 4.2 species is found in coastal bluff scrub, coastal dunes, and marshes and swamps at 0 to 165 feet elevation. It occurs along the coast from Orange County north to San Luis Obispo County, as well as on the Channel Islands and blooms January through December, year-round. In the project vicinity, this species is distributed in monotypic patches along the bluffs just west of Rincon Beach County Park, adjacent to the trail alignment (Figure 3.3-1). A total of 75,161 square feet and 617 individuals were documented in the biological survey area.

3.3.1.4 Special-Status Wildlife Species

Wildlife species were documented during the 2011 general biological survey and subsequent vegetation mapping, and special-status plant species surveys during 2018, 2019, and 2021. Additionally, a Dudek biologist documented wildlife observed during the general biological survey conducted in December 2020.

A total of 32 special-status wildlife species (25 birds, two invertebrates, three mammals, and two reptiles) were either directly observed or detected based on vocal cues or observation of sign, included as Appendix C1. The CNDDB (CDFW 2018, 2020a) and USFWS (USFWS 2020a) queries returned 41 special-status wildlife species that have been documented within the USGS White Ledge Peak 7.5 quadrangle as well as the four coastally influenced adjacent USGS 7.5 minute quadrangles (Ventura, Matilija, Pitas Point, Carpinteria), herein after referred to as the region. Only the four coastally influenced adjacent USGS 7.5-minute quadrangles were queried for sensitive biological resources instead all adjacent quadrangle maps, since the habitats north of the foothills vary greatly from the project site and would not be representative of what species are likely to occur in coastal habitats.

A variety of special-status wildlife have recorded occurrences in the region (i.e., the five 7.5-minute quadrangles queried) and were evaluated for their potential to occur on the project site, including but not limited to the Monarch butterfly (*Danaus plexippus*; Special Animal), tidewater goby (*Eucyclogobius newberryi*; federally endangered [FE]), southern steelhead (*Oncorhynchus mykiss irideus*; FE), California red-legged frog (*Rana draytonii*); federally threatened [FT]), California legless lizard (*Anniella sp.*; California Species of Special Concern [SSC]), two-striped garter snake (*Thamnophis hammondii*; SSC), white-tailed kite (*Elanus leucurus*; state fully protected [FP]); light-footed clapper rail (*Rallus longirostris levipes*; FE, state endangered [SE], FP), snowy plover (*Charadrius nivosus*; FT) and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*; SE). Appendix C2 provides a list of the 31 special-status wildlife species that are not expected to occur based on site surveys, lack of suitable habitat, and the site being out of the species range. The special-status wildlife species in Appendix C2 are not analyzed in this report as no direct, indirect, or cumulative impacts are expected.

Based on Dudek's knowledge of regional biological resources, distribution of local species, and species-specific habitat preferences, 8 of the special-status wildlife species queried had the potential to occur within the project site. These 8 special-status wildlife species include California legless lizard, Blainville's horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), white-tailed kite, western mastiff bat (*Eumops perotis californicus*), Townsend's big-eared bat (*Corynorhinus townsendii*), San Diego desert woodrat (*Neotoma lepida intermedia*), and the monarch butterfly and their overwintering population (Table 3.3-4).

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Reptiles				
Anniella sp.	California legless lizard	None/SSC/None/None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian	Moderate potential to occur. Note that the species of legless lizard occurring in the region is not known (Papenfuss and Parham 2013). Suitable scrub habitat is present,

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
			woodlands; associated with sparse vegetation and sandy or loose, loamy soils	although loose, loamy soils are less abundant within the site due to extensive past grading to form the slopes adjacent to U.S. Highway 101. A 1952 CNDDB occurrence was within the western portion of the project site (CDFW 2020a). The next closest occurrence is located approximately 2 miles northwest of the site at Carpinteria State Beach (CDFW 2020a).
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC/None/None	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. Suitable coastal scrub habitat is present, although there is only one CNDDB occurrence in the region, located approximately 10.5 miles northeast of the site near the Los Robles Diversion Canal (CDFW 2020a).
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC/None/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Low potential to occur. Suitable coastal scrub shrubby habitat is present, although all three CNDDB occurrences in the region are located in the montane areas behind the site and not in coastal areas, the closest of which is located approximately 10.5. miles north of the site along E Camino Cielo (CDFW 2020a).
Birds				
Elanus leucurus (nesting)	white-tailed kite	None/FP/ESH/ESHA	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Mammals				
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/None/None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels	Low potential to occur, not expected to roost. Marginally suitable coastal scrub foraging habitat is present, while suitable roosting habitat is absent on site. There is only one CNDDB occurrence in the region, last confirmed in 1941 at the Carpinteria Salt Marsh (CDFW 2020a).
Eumops perotis californicus	western mastiff bat	None/SSC/None/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Low potential to occur, not expected to roost. Suitable coastal scrub foraging habitat is present, while the slopes present on site are not large and far enough away from human disturbance to be suitable roosting habitat. There is only one CNDDB occurrence in the region, which is located approximately 10 miles east of the site near Weldon (CDFW 2020a).
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Moderate potential to occur. Suitable coastal scrub habitat is present, and this species is known to occur along the coast in the region, the closet occurrence of which was last confirmed in 1992 located approximately 2.75 miles southeast of the site just east of Punta Gorda (CDFW 2020a). Additionally, woodrat middens have been observed within the project site during various surveys.
Puma concolor (southern and central coast California evolutionary significant units)	mountain lion	None/SC/None/None	Dense undergrowth and cover in deserts, humid coast forests, arid hillsides, and scrub and oak woodlands.	Low potential to occur. Suitable habitat north and east of the project site across U.S. Highway 101 in the vicinity of State Route 150. This species is known to occur in more rural areas and may access areas east of the project site via Rincon Creek; however, project site access is constricted by U.S. Highway 101 and adjacent chain link fencing along the southbound lanes of the highway, the narrow and frequently used State Route 150, and the beach.

Table 3.3-4. Special-Status Wildlife Species Observed or with Potential to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1] Fed/State/ County/City	Habitat Requirements	Potential to Occur within the BSA
Invertebrates				
Danaus plexippus	monarch	FC/None/ESH [2]/ESHA[2]	Follows a pattern of seasonal migration and the Rocky Mountain population migrates southwest to wintering grounds along the California coast from Mendocino to the Mexico border extending into Baja, California, Mexico. Overwintering populations utilize wind-protected tree groves (typically eucalyptus [*Eucalyptus* sp.], Monterey cypress [*Hesperocyparis macrocarpa*], sycamore [*Platanus racemosa*], and coast live oak [*Quercus agrifolia*]) with nectar sources and nearby water sources.	Low potential to roost. While there are a few trees located on the project site including Monterey cypress and eucalyptus trees, most are isolated individuals, and none assemble into a woodland large enough to provide protection and other elements required by overwintering monarch butterflies. There is low potential for monarch butterflies to overwinter adjacent to the project site, including the stand of eucalyptus and trees associated with residential development at Rincon Point near Rincon Creek; however, monarch individuals were not observed during surveys and winter roost sites have not been documented in these areas (Xerces Society 2020). There are numerous occurrences in the region, including a stand of eucalyptus trees north of the project site along Rincon Creek and Bates Road north of Highway 101, last confirmed in 2002 (CDFW 2020a).

[1] **Federal Designations:**
FC Candidate for federal listing as threatened or endangered
(FD) Federally delisted; monitored for five years
FE Federally listed Endangered
FT Federally listed as Threatened
FDL Federally delisted
BCC Bird of Conservation Concern
State Designations:
SC Candidate for state listing as endangered
SSC Species of Special Concern
FP California Department of Fish and Game Protected and Fully Protected Species
SE State listed as Endangered
ST State listed as Threatened
SDL State delisted
WL Watch List

[2] Monarch overwintering sites are protected under County CLUP (County of Santa Barbara 2019) and the City General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) as County environmentally sensitive habitat and City environmentally sensitive habitat areas.

Two special-status wildlife species were determined to have a moderate potential to occur within the project site, including Northern California legless lizard (SSC) and San Diego desert woodrat (SSC).

California legless lizard. The California legless lizard is a state SSC and is a fossorial lizard that occupies suitable habitats such as coastal dune, valley and foothill grassland, chaparral, and coastal scrub from Contra Costa County south to the Mexico border. This species requires loose, friable soils for burrowing, and often requires moist substrates and environments (CDFW 2020a). This species has been recorded within the project site from a 1952 occurrence along the coastal bluffs near Rincon Road and Rincon Beach County Park (CDFW 2020a). Suitable habitat for this species occurs on site in the coastal scrub and coastal bluff scrub vegetation communities mapped over a large portion of the site

San Diego desert woodrat. The San Diego desert woodrat is a state SSC known to inhabit scrub habitats, such as coastal sage scrub. Its distribution tends to be on the west side of Coast Ranges from San Diego County north to at least San Luis Obispo County. The San Diego desert woodrat prefers moderate to dense canopies, and are particularly abundant in rock outcrops, rocky cliffs, and slopes (CDFW 2020a). Unlike dusky-footed woodrats, San Diego desert woodrats do not construct large stick nests. This species normally occupies openings in rocks, vegetation (such as openings among patches of cactus), and even debris, and sometimes small stick nests are built within an opening or crevice. Suitable habitat for this species occurs on site in the coastal scrub and coastal bluff scrub vegetation communities mapped over a large portion of the site. Woodrat middens have been observed during surveys on site.

White-tailed kite. The white-tailed kite, a state fully protected species, is known to occur in the area (City of Carpinteria 2003), and in addition to protections by the state, the white-tailed kite receives protection under the Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003). The City specifically cites the Carpinteria Bluffs as a location where this species occurs and is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. Trees in and around the site are relatively small, and located in areas with high levels of human disturbance where kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park, within the Rincon Point housing development. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. This species is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020).

Monarch butterflies and overwintering sites. Monarch butterflies are currently a federal candidate species, while their overwintering sites are also protected under Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. The monarch butterfly follows a pattern of seasonal migration. The summer grounds of the species are found in New England, the Great Lakes region, the northern Rocky Mountains, and some portions of the Arid West (Pelton et al. 2016). The New England and Great Lakes populations generally migrate southwest to wintering grounds in the Sierra Madre mountain range of Mexico, while the Rocky Mountains population generally migrates southwest to wintering grounds along the California coast.

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast (Pelton et al. 2016). The majority of trees within the biological survey area are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies

require for overwintering sites. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however there is low potential for monarchs for overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. There are also three eucalyptus trees present at near the western terminus of the biological survey area, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. Additionally, the eucalyptus trees present along the hills behind the biological survey on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the biological survey area along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020).

3.3.1.5 Critical Habitat

There is no USFWS designated critical habitat for any plant species or wildlife species within or adjacent to the project site (USFWS 2020b).

3.3.1.6 Wildlife Movement Corridors

The project site is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small wildlife species. In addition, U.S. Highway 101 and adjacent chain link fencing along the southbound lanes of the highway provide impediments to wildlife movement between the bluffs and more inland areas. Additionally, development and restricted access from more open space areas to the north impede wildlife movement in accessing the project site. Large-sized mammal species such as mountain lion and California black bears (*Ursus americanus californiensis*) may utilize areas to the east of the biological survey area including Rincon Creek and the channelized portion under U.S. Highway 101 to access beach areas; however, the surrounding areas where Rincon Creek daylights is developed with residential homes and parking lot improvements, resulting in a high urban wildlife interface. Medium-sized mammal species such as the striped skunk (*Mephitis mephitis*) or northern raccoon (*Procyon lotor*) may move locally along the coast. The UPRR and associated right-of-way provides an unvegetated corridor approximately 50 feet wide containing a single track that divides the project alignment near its center. The UPRR tracks are at a much lower elevation than the adjacent bluffs creating an anthropogenic valley and break in continuous topography along the bluffs. The project includes a span bridge which connects the two bluffs and ultimately will not change the overall topography for wildlife to approach or cross the tracks. Additionally, minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since the overall height of the slope should remain at the same elevation.

To evaluate the change in wind uplift patterns above the bluff face from the proposed regrading for the project, Dudek commissioned an Airflow Analysis for the Proposed Regrading of the Rincon Bluffs study (Airflow Analysis Report ~~Study~~) by an expert in fluid dynamics; the Airflow Analysis Report ~~Study~~ is included as Appendix I of this Environmental Impact Report. Several different approaches were used, based upon published literature including wind tunnel experiments and direct field measurements of the amplification effects of a slope or vertical face on horizontal wind vectors perpendicular to the slope face. In the published literature reviewed for this Airflow Analysis Report ~~Study~~, certain investigators compared the average slope angle of the entire slope or bluff face to determine

the wind amplification effect, while others compared the angle of just the upper portion of the slope. The analysis of the effects of the proposed regrading of the bluff face for the project concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to paragliding and soaring activities, the reduction may be closer to the maximum reduction of 30% (Appendix I). ~~Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (of the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet (Appendix I).~~ Migratory avian species travel hundreds to thousands of miles at various elevations during which they can be exposed to a variety of weather systems within days or weeks of each other and have behavioral plasticity in response to microscale through mesoscale conditions including extremely adverse weather (Sahmoun-Baranes 2017). The anticipated changes in ~~wind~~ velocity ~~and turbulence~~ would occur within a short linear distance relative to the distance traveled for a migrating avian species, and avian species regularly adjust to changing weather conditions. Additionally, the velocity ~~and turbulence~~ changes would be focused at altitudes near the bluff top and would not extend the whole altitude range for migrating birds.

3.3.1.7 Aquatic Resources

While a delineation of jurisdictional aquatic resources was not performed; no evidence of aquatic features was observed within the biological survey area during field surveys. Additionally, there are no USGS National Hydrography Dataset (USGS 2020) or USFWS National Wetlands Inventory (USFWS 2020b) mapped aquatic resources within the project site. On the adjacent Carpinteria Bluffs III site, to the south and west of the western most portion of the project site, multiple seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. No documented coastal wetlands occur within the project site; however, coastal wetlands (Dudek 2012b) are approximately 123 feet from project ~~temporary~~ impacts ~~and 125 feet from project permanent impacts~~. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area.

3.3.2 Relevant Plans, Policies, and Ordinances

3.3.2.1 Federal

Clean Water Act, Section 404

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the United States, and regulating quality standards for surface waters. Under the CWA, the U.S. Environmental Protection Agency (USEPA) has implemented pollution control programs such as setting wastewater standards for industry and developing national water quality criteria recommendations for pollutants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. USEPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or human-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Federal Endangered Species Act

Under the federal Endangered Species Act of 1973 (ESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the planning area, and determine whether the project would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3][4]). The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service are responsible for implementation of the ESA.

USFWS also publishes a list of candidate species. Species on this list receive special attention from federal agencies during environmental review, although they are not protected otherwise under the ESA. The candidate species are those for which USFWS has sufficient biological information to support a proposal to list them as endangered or threatened.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as "pursue, hunt, shoot, wound, kill trap, capture, or collect, or any attempt to carry out these activities" (16 USC 703 et seq.). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species. Currently, birds are considered to be nesting under the Migratory Bird Treaty Act only when there are eggs or chicks that are dependent on the nest.

3.3.2.2 State

California Endangered Species Act

The California ESA establishes state policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Under the California ESA, CDFW is responsible for maintaining a list of threatened species and endangered species (California Fish and Game Code, Section 2070). CDFW also maintains a list of

candidate species, which are species that CDFW has formally noticed as under review for addition to the threatened or endangered species list. CDFW also maintains lists of California species of special concern, which serve as watch lists. Pursuant to the requirements of the California ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the area, and determine whether the proposed project would have a potentially significant impact on such species. CDFW encourages informal consultation on any proposed project that may impact a candidate species.

California Fish and Game Code

Under the California Fish and Game Code, CDFW provides protection from take for a variety of species, including fully protected species. "Fully protected" is a legal protective designation administered by CDFW and intended to conserve wildlife species that risk extinction within California. Lists have been created for birds, mammals, fish, amphibians, and reptiles.

Birds of prey are protected in California under California Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW. Section 3511 prohibits take or possession of a fully protected species. In addition, Section 3513 states "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory [Bird] Treaty Act." Any loss of fertile eggs or nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Non-raptor native birds receive similar protection under California Fish and Game Code Section 3503. Project impacts to these species would not be considered significant unless the species are known to, or have a high potential to, nest in the area or rely on it for primary foraging.

The Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.) gives CDFW authority to designate state endangered, threatened, and rare plants, and provides specific protection measures for identified populations.

CDFW also protects streams, water bodies, and riparian corridors through the Streambed Alteration Agreement process under Sections 1601–1606 of the California Fish and Game Code. The California Fish and Game Code stipulates that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. Through policy, CDFW asserts jurisdiction to the top of banks of all streams, including intermittent and ephemeral streams, extending laterally to the upland edge of adjacent riparian vegetation. CDFW uses the Cowardin system for wetland identification and classification, which typically results in a larger jurisdictional area than federal jurisdiction under the Clean Water Act. Under this system, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

3.3.2.3 Local

City of Carpinteria General Plan/Local Coastal Land Use Plan

The City's General Plan/Local Coastal Land Use Plan includes the following objectives and policies relevant to the proposed project and biological resources:

- OSC-1 Protect, Preserve and Enhance Local Natural Resources and Habitats
  - Policy OSC-1a. Protect ESHAs from development and maintain them as natural open space or passive recreational areas.
  - Policy OSC-1b. Prohibit activities, including development, that could damage or destroy ESHA.
  - Policy OSC-1c. Establish and support preservation and restoration programs for ESHA, including but not limited to Carpinteria Creek, Carpinteria Bluffs, Carpinteria Salt Marsh, seal rookery, Carpinteria reef, Pismo clam beds and the intertidal zones along the shoreline.
  - Policy OSC-1d. Property including ESHA should be designated with a zoning category that allows for the protection of, and access to, the resource area, such as Open Space/Recreation or Public Facility zoning. Any development on property including ESHA should be designed and conducted to protect the resources. Within environmentally sensitive habitat only uses dependent upon those resources shall be allowed and the resources shall be protected against any disruption.
  - Policy OSC-1f. Protect and restore degraded wetlands, butterfly habitat, native plant communities, and sensitive, rare, threatened or endangered species habitat on City-owned land to the maximum extent feasible.
- OSC-3 Preserve and Restore Wetlands Such as the Carpinteria Salt Marsh
  - Policy OSC-3a. Wetland delineations shall be based on the definitions contained in Section 13577 (b) of Title 14 of the California Code of Regulations
  - Policy OSC-3b. The upland limit of a wetland is defined as
    - the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;
    - the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric;
    - in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not.
    - If questions exist, the limit shall be determined by a habitat survey made by a qualified biologist in consultation with the California Department of Fish and Game.
  - Policy OSC-3c. Development adjacent to the required buffer around wetlands should not result in adverse impacts including but not limited to sediment runoff, chemical and fertilizer contamination, noise, light pollution and other disturbances.
- OSC-7 Conserve Native Plant Communities.
  - Policy OSC-7b. When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. Structures shall be sited and designed to minimize the impact of grading, paving construction of roads, runoff and erosion on native vegetation. Sensitive resources that exhibit any level of disturbance shall be maintained, and if feasible, restored. New development shall include measures to restore any disturbed or degraded habitat on the project site. Cut and fill slopes and all areas disturbed by construction activities shall be landscaped or revegetated at the completion of

grading. Plantings shall be of native, drought-tolerant plant species consistent with the existing native vegetation on the site. Invasive plant species that tend to supplant native species shall be prohibited.

Santa Barbara County Article II Coastal Zoning Ordinance

Pursuant to PRC Section 30500 of the California Coastal Act of 1976, Santa Barbara County was required to prepare an LCP for portions of the unincorporated areas of Santa Barbara County within the coastal zone. Sections of the Santa Barbara County Article II Zoning Ordinance that may be relevant to the proposed project include Section 35-140, Tree Removal. Section 35-140 regulates the removal of qualifying trees within the coastal zone, and requires Coastal Development Permit (CDP) approval prior to removal of any qualifying tree. A qualifying tree is defined as a tree which is six inches or more in diameter measured four feet above the ground and six feet or more in height and which is 1) located in a County street right-of-way; or 2) located within 50 feet of any major or minor stream except when such trees are removed for agricultural purposes; or 3) oak trees; or 4) used as a habitat by the monarch butterflies. However, a CDP to remove trees in the coastal zone shall only be issued for reasons such as: the trees are dead; the trees prevent the construction of a project for which a CDP has been issued and project redesign is not feasible; the trees are diseased and pose a danger to healthy trees in the immediate vicinity; or the trees are so weakened by age, disease, storm, fire, excavation, removal of adjacent trees, or any injury so as to cause imminent danger to persons or property.

Santa Barbara County Coastal Land Use Plan

The Santa Barbara County Coastal Land Use Plan was partially certified by the Coastal Commission on March 17, 1981, adopted in 1982, and republished June 2019, as the Local Coastal Program for unincorporated Santa Barbara County. It details the rules and regulations of land use within Santa Barbara County's coastal areas. The following policies would apply to the proposed project. Policy 9-37 consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance Section 35-97.19, Development Standards for Stream Habitats. Policy 9-38 consists of the same guidelines discussed above in the Santa Barbara County Article II Zoning Ordinance Section 35-97.19.

- Policy 9-36: When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.
- Policy 9-37: The minimum buffer strip for major streams in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams in urban areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis. The buffer shall be established based on an investigation of the following factors and after consultation with the Department of Fish and Game and Regional Water Quality Control Board in order to protect the biological productivity and water quality of streams:

  1) Soil type and stability of stream corridors;
  2) How surface water filters into the ground;
  3) Slope of the land on either side of the stream; and
  4) Location of the 100-year flood plain boundary.

  Riparian vegetation shall be protected and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible. Riparian vegetation shall be protected

and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible.

- Policy 9-38: No structures shall be located within the stream corridor except: public trails, dams for necessary water supply projects, flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and other development where the primary function is for the improvement of fish and wildlife habitat. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible.

3.3.3 Thresholds of Significance

The County provides types of impacts to biological resources that may be considered significant if the project substantially alters biological resources in the following ways (County of Santa Barbara 2008):

1. Substantially reduce or eliminate species diversity or abundance
2. Substantially reduce or eliminate quantity or quality of nesting areas
3. Substantially limit reproductive capacity through losses of individuals or habitat
4. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
5. Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)
6. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Furthermore, the size, type, and timing of impacts should be considered in assessing the significance of project impacts on biological resources (County of Santa Barbara 2008).

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to biological resources would occur if the project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

g) Result in cumulatively considerable impacts to biological resources.

3.3.4 Impact Analysis

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

For the purpose of CEQA analysis, federal, state, CNPS CRPR 1A, 1B, 2A, and 2B plants, and locally rare plants (Wilken 2018) are considered special-status plant species. CRPR 3 and 4 plants, which are CNPS "rare", but not considered special-status plant species under CEQA. Yet these plant species do add to the vegetation community value designated as County ESH and or City ESHA as CNPS CRPR 3 and 4 species. No federal, state, or CNPS CRPR 1 or 2 species, or locally rare (Wilken 2018) species were observed. Two CNPS CRPR 4.2 plant species, cliff malacothrix and woolly seablite, and one CNPS CRPR 3.2 plant species, south coast branching phacelia, were detected within the biological survey area. ~~Cliff malacothrix, south coast branching phacelia, and woolly seablite are not included on the Rare Plants of Santa Barbara County list (Wilken 2018) and therefore, are not considered special status plant species.~~

~~No special status plant species were observed; thus, impacts to special status plant species would be less than significant.~~CNPS' CRPR 4 plant species are of limited distribution or are infrequent throughout a broader area in California, so that their vulnerability or susceptibility to threat appears low at this time, from a statewide perspective as described by the CNPS. Per CNPS, these species warrant regular monitoring for evidence of decline and subsequent transfer to a more sensitive rank.

Cliff malacothrix, CRPR 4.2, is known to occur in coastal bluff scrub and coastal scrub habitats from northern Santa Barbara County south through southern Orange County. It is not considered locally rare in Santa Barbara County (Wilken 2018), but is considered locally rare in Ventura County (Magney 2020). From 1980 to present, there have been 27 recorded observations of this species in Santa Barbara County and Ventura County (Calflora 2021). The recorded observations were along coastal bluffs that have likely not been developed or disturbed since recorded. Although there are an abundance of recorded cliff malacothrix observations in Santa Barbara County, this species is likely under documented and is known to occur in large areas adjacent to the project site and multiple locations along the Santa Barbara County and nearby Ventura County coast. Cliff malacothrix documented within the biological survey area is in habitats similar throughout the range of the species, coastal bluff scrub and coastal scrub habitats on siltstone/shale bedrock. The proposed project lies generally within an elevated marine terrace, which has been subject to extensive grading associated with current and former transportation facilities. The project site is located within Santa Barbara County immediately adjacent to Ventura County, which is well within the known geographic range of this species, northern Santa Barbara County south through southern Orange County. Cliff malacothrix is not included on the BLM Special Status Plants under the jurisdiction of the California State Office as of May 28, 2015 list (USDOI, BLM 2015), USFWS listed plants (USFWS 2021), are not listed or proposed under the ESA (USFS 2005). A total of approximately 418 cliff malacothrix individuals would be impacted by the project, approximately 46% of the individuals within the biological survey area. The project is within the geographic range of the species, cliff malacothrix is not considered locally rare in Santa Barbara County (Wilken 2018), the cliff malacothrix individuals were observed

on areas that were subjected to extensive grading associated with current and former transportation facilities, and the species occurs in coastal bluff scrub and coastal scrub on siltstone/shale bedrock which are common habitats and substrates for this species. Project impacts would not result in declines in cliff malacothrix to transfer to a more sensitive rank; therefore, impacts to cliff malacothrix would be **less than significant**.

Woolly seablite, CRPR 4.2, is known to occur in coastal bluff scrub, coastal dunes, and marshes and swamps (coastal margins) habitats from San Luis Obispo County south through southern San Diego County including the Channel Islands. It is not considered locally rare in Santa Barbara County (Wilken 2018), but is considered locally rare in Ventura County (Magney 2020). From 1980 to present, there have been 47 recorded observations of this species in Santa Barbara County and Ventura County (Calflora 2021). The recorded observations were along coastal bluffs and beach terraces that have likely not been developed or disturbed since recorded. Although there are an abundance of recorded woolly seablite observations in Santa Barbara County and Ventura County, this species is likely under documented and is known to occur in large areas adjacent to the project site and multiple locations along the Santa Barbara County and nearby Ventura County coast. Woolly seablite documented within the biological survey area is in habitats similar throughout the range of the species, coastal bluff scrub and coastal scrub habitats on siltstone/shale bedrock. The proposed project lies generally within an elevated marine terrace, which has been subject to extensive grading associated with current and former transportation facilities. The project site is located within Santa Barbara County immediately adjacent to Ventura County which is well within the known geographic range of this species, San Luis Obispo County south through southern San Diego County. Woolly seablite is not included on the BLM Special Status Plants under the jurisdiction of the California State Office as of May 28, 2015 list (USDOI, BLM 2015), USFWS listed plants (USFWS 2021) that are not listed or proposed under the ESA (USFS 2005). A total of approximately 256 woolly seablite individuals would be impacted by the project, approximately 41% of the individuals within the biological survey area. The project is within the geographic range of the species, woolly seablite is not considered locally rare in Santa Barbara County (Wilken 2018), the woolly seablite individuals were observed on areas that were subjected to extensive grading associated with current and former transportation facilities, and the species occurs in coastal bluff scrub and coastal scrub on siltstone/shale bedrock which are common habitats and substrates for this species. Project impacts would not result in declines in woolly seablite to transfer to a more sensitive rank; therefore, impacts to woolly seablite would be **less than significant**.

CRPR 3 plant species are those species about which more information is needed. Necessary information is lacking to assign these species to one of the other ranks or to reject them.

South coast branching phacelia, CRPR 3.2, is known to occur in chaparral, coastal dunes, coastal scrub, and marshes and swamps (coastal salt) habitats within sandy, sometimes rocky habitats from southern San Luis Obispo County south through central coastal San Diego County. It is not considered locally rare in Santa Barbara County (Wilken 2018), but is considered locally rare in Ventura County (Magney 2020). From 1980 to present, there have been 44 recorded observations of this species in Santa Barbara County and Ventura County (Calflora 2021). The recorded observations were along rivers, within La Purisima Mission State Historic Park, within Burton Mesa Ecological Reserve, and abandoned roads and trails that have likely not been developed or disturbed since recorded. Although there are an abundance of recorded south coast branching phacelia observations in Santa Barbara County and Ventura County, this species is likely under documented and is known to occur in multiple locations along the Santa Barbara County and nearby Ventura County coast. South coast branching phacelia documented within the biological survey area is in habitats similar throughout the range of the species, coastal scrub. The proposed project lies generally within an elevated marine terrace, which has been subject to extensive grading associated with current and former transportation facilities. The project

site is located within Santa Barbara County immediately adjacent to Ventura County which is well within the known geographic range of this species, southern San Luis Obispo County south through central coastal San Diego County. South coast branching phacelia is not included on the BLM Special Status Plants under the jurisdiction of the California State Office as of May 28, 2015 list (USDOI, BLM 2015), USFWS listed plants (USFWS 2021 that are not listed or proposed under the ESA (USFS 2005). The one individual of south coast branching phacelia documented within the biological survey area would be impacted by the project. The project is within the geographic range of the species, south coast branching phacelia is not considered locally rare in Santa Barbara County (Wilken 2018), the south coast branching phacelia individual was observed in an area that was subjected to extensive grading associated with current and former transportation facilities, and the species occurs in coastal scrub on siltstone/shale bedrock which are common habitats and substrates for this species. Project impacts would not result in declines in south coast branching phacelia to transfer to a more sensitive rank; therefore, impacts to south coast branching phacelia would be **less than significant**.

Habitat was documented for two special-status wildlife species, either within or adjacent to the trail alignment: California legless lizard and San Diego desert woodrat. Habitat for the California legless lizard was found in the proposed trail alignment immediately south of the UPRR crossing. California legless lizard individuals could suffer injury or mortality because of grading and other construction activities associated with the project. Therefore, impacts to California legless lizard would be potentially significant absent mitigation. Habitat for the woodrat is located throughout the scrub dominated portions of the site. Woodrat individuals could suffer injury or mortality because of grading and other construction activities. Therefore, impacts to woodrat would be potentially significant absent mitigation. Impacts to these species' habitats would be reduced to **less than significant with implementation of Mitigation Measure (MM) BIO-1 through MM-BIO-4**.

White-tailed kite is known to occur along the south coast, however most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020). The City specifically cites the Carpinteria Bluffs as a location where white-tailed kites occur and their habitat is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. Trees in and around the project site are relatively small, and located in areas with high levels of human disturbance where white-tailed kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park and within the Rincon Point housing development; however, proposed project impacts are greater than 500 feet from these habitats. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, impacts to white-tailed kites would be **less than significant.**

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast (Pelton et al. 2016). The majority of trees within the project site are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. There are three eucalyptus trees present near the western terminus of the project site, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however there is low potential for monarchs to overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. The easternmost proposed project impacts are over 1,000 feet from

these eucalyptus trees. Additionally, the eucalyptus trees present along the hills behind the project site on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the project site along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020). While this population is not within 100 feet of the project site, it conceivably could be affected by project implementation due to changed weather patterns. However, no impacts to this monarch overwintering site are anticipated since the overall height of the slope within Rincon Beach County Park south of Highway 101 will not be reduced, as work includes proposed terraces to stabilize the hill but will not decrease its overall height, and therefore no changes to the wind conditions at the overwintering site are expected. Additionally, this overwintering site is largely protected by the hill below the single residential development at 637 Bates Road, and any possible changes to weather and wind patterns due to project implementation would not affect the protective contour this hill independently provides. Therefore, monarch butterflies are not anticipated to be affected since there is low potential for the project site to support overwintering populations, and because known overwintering populations in the vicinity would not be adversely affected due to project implementation. Therefore, impacts to monarch butterfly individuals and monarch butterfly overwintering sites would be **less than significant.**

Several trees, including eucalyptus, Monterey cypress, pine, are located within the proposed trail alignment near its western terminus and U.S. Highway 101. These trees are relatively small and located in areas with high levels of human disturbance including U.S. Highway 101 vehicular traffic and pedestrian use of Carpinteria Avenue and adjacent areas. These isolated and singular trees lack dense foliage and are located in areas vulnerable to strong winds and weather. Several myoporum trees are located within the proposed trail alignment and are largely multistemmed. The myoporum located directly adjacent to the unsanctioned trail experiences high levels of human disturbance. Due to the locations of these trees in areas with high levels of human disturbance, relatively small size of these trees, isolated nature of the trees, and vulnerability to strong winds and weather, raptors are unlikely to nest in these trees. Therefore, removal of these trees would not substantially reduce or eliminate the quantity or quality of raptor nesting areas and impacts would be **less than significant.**

Additionally, a stand of trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot. The eastern most proposed project impacts are over 1,000 feet from this stand of trees. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, project impacts to raptor nesting trees would not substantially reduce or eliminate the quantity or quality of nesting areas and impacts to nesting trees would be **less than significant.**

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As discussed in Section 3.1.1.2, five native scrub communities ([California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association], [quailbush scrub alliance, *Atriplex lentiformis* association], [coastal sage scrub: California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association], [coyote brush scrub alliance, *Baccharis pilularis* association], and [lemonade berry scrub alliance, *Rhus integrifolia* association]) are

found in the proposed trail alignment and adjacent areas. These five native scrub communities are designated sensitive by CDFW, County ESH by definition (coastal bluff scrub or coastal sage scrub habitat) or supporting sensitive species, and/or City ESHA by definition (coastal bluff scrub or coastal sage scrub habitat), mapped as ESHA by the City, or supporting sensitive species, as described in Table 3.3-5.

Communities impacted by the proposed project are shown in Table 3.3-5, below, and include California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association (0.42 acres permanent impacts) and quailbush scrub alliance, *Atriplex lentiformis* association (1.73 acres permanent impacts) as well as coastal sage scrub: California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association (1.29 acres permanent impacts), coyote brush scrub alliance, *Baccharis pilularis* association (0.71 acres permanent impacts), and lemonade berry scrub alliance, *Rhus integrifolia* association (0.17 acres permanent impacts).

Table 3.3-5. Permanent Impacts to Sensitive Native Vegetation Communities

Vegetation Community Alliance, Association	Alliance-Association (State Sensitive)/ County ESH/ City ESHA	Permanent Impacts (acres)
Coastal Bluff Scrub		
California Brittle Bush – Ashy Buckwheat Scrub Alliance, *Encelia californica* Association	S3-Yes (Yes)/Yes/Yes	0.42
Quailbush Scrub Alliance, *Atriplex lentiformis* Association	S4-No (No)/Yes/Yes	1.73
	Coastal Bluff Scrub Subtotal	*2.15*
Coastal Scrub		
California Sagebrush – (Purple Sage) Scrub Alliance, *Artemisia californica* Association	S5-S4 (No)/Yes/Yes	1.29
Coyote Brush Scrub Alliance, *Baccharis pilularis* Association	S5-No (No)/Yes/Yes	0.71
Lemonade Berry Scrub Alliance, *Rhus integrifolia* Association	S3-S3 (Yes)/Yes/Yes	0.17
	Coastal Scrub Subtotal	*2.17*
	Total	**4.32**

As shown in Table 3.3-5, approximately ~~3.55 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be temporarily impacted due to construction. An additional 0.76~~ 4.32 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be permanently impacted due to construction. These native plant communities are considered CDFW sensitive, County ESH, and/or City ESHA and protected under County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. Therefore, the proposed project would result in a substantial adverse effect on a sensitive natural community, and impacts would be potentially significant.

County CLUP (County of Santa Barbara 2019) and the City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) policies require County ESH and City ESHA avoidance. With implementation of **MM-BIO-1**, **MM-BIO-2**, **MM-BIO-5**, and **MM-BIO-6** impacts would be reduced to **less than significant with mitigation.**

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in Section 3.1.1.8, above, no jurisdictional aquatic resources were detected at the biological survey area during the field survey. Therefore, no direct impacts to jurisdictional aquatic resources would occur. On the adjacent Carpinteria Bluffs III site, to the south and west of the westernmost portion of the project site, multiple seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. These coastal wetlands (Dudek 2012b) are approximately 123 feet from project ~~temporary~~ impacts~~ and 125 feet from project permanent impacts~~. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area and over 1,000 feet from the eastern terminus of proposed impacts. The existing developed areas near this portion of Rincon Creek included the Rincon Beach County Park asphalt parking lot and associated developments of a standard curb, vegetation, paved Rincon Point Lane, and additional vegetation.

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) includes implementation policies associated with wetlands which state, "*Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts. The minimum setback may be adjusted upward to account for site-specific conditions affecting avoidance of adverse impacts.*"

Project impacts~~, both temporary and permanent,~~ are greater than 100 feet from known coastal wetlands near the western terminus of the project and greater than 1,000 feet from Rincon Creek near the eastern terminus of the project. Therefore, the project would not have a substantial adverse effect on coastal wetlands including creeks and **no impact** would occur.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As discussed in Section 3.1.1.7, the proposed trail alignment is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small terrestrial wildlife species. In addition, U.S. Highway 101 and the chain link fence adjacent to the southbound lanes of the highway provide impediments to movement of larger and medium-sized wildlife. Additionally, development and restricted access from more open space areas to the north impede wildlife movement in accessing the project site. Large-sized mammal species such as mountain lion and California black bears (*Ursus americanus californiensis*) may utilize areas to the east of the biological survey area including Rincon Creek and the channelized portion under U.S. Highway 101 to access beach areas; however, the surrounding areas where Rincon Creek daylights is developed with residential homes and parking lot improvements, resulting in a high urban wildlife interface. Medium-sized mammal species such as the striped skunk (*Mephitis mephitis*) or northern raccoon *(Procyon lotor)* may occasionally use the opening provided by the trail to move locally along the coast. The trail may provide some hazard to common, smaller terrestrial species such as the western fence lizard *(Sceloporus occidentalis)*, common side-blotched lizard *(Uta*

stansburiana) and California pocket mouse *(Chaetodipus californicus),* but the trail and associated fencing will not present a physical barrier to their movement.

Concerning avian species, minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since the overall height of the slope should remain at the same elevation. As identified in the Airflow Study (Appendix I), the analysis of the effects of the proposed regrading of the bluff face for the project concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to paragliding and soaring activities, the reduction is expected to be closer to 30%. ~~Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (of the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet.~~ Migrating avian species may experience reduced airflow velocity by approximately 30% ~~and an increase in turbulence (of the order of 5%)~~ at an altitude of 30 feet above the front of the bluffs. Migratory avian species travel hundreds to thousands of miles at various elevations during which they can be exposed to a variety of weather systems within days or weeks of each other and have behavioral plasticity in response to microscale through mesoscale conditions including extremely adverse weather (Sahmoun-Baranes 2017). The anticipated changes in velocity and turbulence would occur within a short linear distance relative to the distance traveled for a migrating avian species, and avian species regularly adjust to changing weather conditions. Additionally, the velocity and turbulence changes would be focused at altitudes near the bluff top and would not extend the whole altitude range for migrating birds. Therefore, changes in topography associated with regrading would not substantially impact migratory avian species and impacts would be **less than significant.**

In addition, as discussed under Threshold a, above, 22 species of native birds were detected on site, including several with the potential to nest there. Nests, eggs and nestlings of all native bird species are protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Vegetation clearing and grading, if occurring during the nesting season (typically mid-February to August), have the potential to destroy nests, eggs and nestlings, which could violate these regulations. Therefore, the project impacts to nesting birds from project disturbances would be potentially significant. With implementation of **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-7**, project impacts would be reduced to **less than significant with mitigation**.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Section 3.1.1.4, three Monterey cypress trees (*Hesperocyparis macrocarpa*), a species native to California but not to the project region, exist on or near the proposed alignment, or within the ~~temporary~~ grading impact area. This includes a single tree near the western terminus of the project site near the pull-out off Carpinteria Ave., a single tree at the edge of the ~~temporary disturbance~~ grading impact area near disturbed habitat in the western half of the project, and a single tree adjacent to the myoporum grove along an unsanctioned trail within Rincon Beach County Park. Additionally, two newly planted pine saplings (*Pinus* sp.) exist near the edge of the ~~temporary disturbance~~ grading impact area in the western portion of the project, both of which were under 3 inches diameter measured 4 feet from the ground and were installed with supportive stakes and mulch. Several eucalyptus (*Eucalyptus* sp.) are adjacent to the western portions of the proposed trail, located within the City, as well as exist near the eastern terminus of the biological survey area overhanging the Rincon Beach County Park parking lot. All of the trees described above are not native or naturally occurring in the region, therefore they should not be considered native trees under Policy 9.36 of the Santa Barbara County Coastal Land Use Plan (County of Santa Barbara 2019).

Furthermore, the only trees on site that meet the definition for qualifying trees under the Santa Barbara County Article II Coastal Zoning Ordinance, are the few eucalyptus trees located at the eastern terminus of the biological survey area, the canopies of which spread across the Rincon Beach County Park parking lot. These few trees are large enough and are located within 50 feet of Rincon Creek satisfying the definition for a qualifying tree. Note that Rincon Creek is outside the biological survey area and greater than 1,000 feet from proposed project impacts. The trees associated with Rincon Creek and trees south of the Rincon Beach County Park parking lot are not proposed to be impacted or altered in any way, and thus the project would not conflict with the Coastal Zoning Ordinance. None of the other trees on site meet the definition of a qualifying trees under the Santa Barbara County Article II Coastal Zoning Ordinance as they are not located in a County street right-of-way, located within 50 feet of any major or minor stream, oak trees or used as a habitat by the monarch butterflies. In addition, none of the trees identified on site are not a part of any windbreak on the Carpinteria Bluffs, which are protected under the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003). Therefore, the project does not conflict with any local tree preservation policy and impacts to trees would be **less than significant.**

White-tailed kite is known to occur along the south coast, however, most foraging and nesting activity in the County is restricted to more rural areas and in particular, the Goleta and Santa Maria Valleys (Lehman 2020). The City specifically cites the Carpinteria Bluffs as a location where white-tailed kites occur and their habitat is protected. However, no white-tailed kites were detected in the biological survey area, and the scrub vegetation that predominates there is unsuitable for foraging by this species, which hunts in habitats dominated by grasses and forbs. This species prefers open grassland or marshland habitats which are not present on site, and is found less commonly in agricultural areas or rights-of-way. Trees in and around the project site are relatively small, and located in areas with high levels of human disturbance where white-tailed kites are unlikely to nest. Marginally suitable woodland nesting habitat is present in the trees adjacent to the project site near Rincon Beach County Park and within the Rincon Point housing development; however, proposed project impacts are greater than 500 feet from these habitats. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, impacts to white-tailed kites would be **less than significant.**

Monarchs require specific conditions for suitable wintering sites, and wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, dappled sunlight, high humidity, and an absence of freezing temperatures or high wind, generally near the coast (Pelton et al. 2016). The majority of trees within the project site are either singular and isolated, or do not form a large enough grove to provide adequate microclimate conditions and wind protection monarch butterflies require for overwintering sites. There are three eucalyptus trees present near the western terminus of the project site, however they each grow individually and do not form a grove capable of supporting overwintering monarchs. There is a small portion of eucalyptus trees within the eastern portion of the biological survey area, however, there is low potential for monarchs to overwinter here as well due to the small relative size of this eucalyptus stand and vulnerability to strong winds and weather. The easternmost proposed project impacts are over 1,000 feet from these eucalyptus trees. Additionally, the eucalyptus trees present along the hills behind the project sit on private property, specifically the eucalyptus trees around the residential development off Bates Ranch Road as well as the eucalyptus trees that extend beyond the terminus of Camino Carreta, appear to be planted windrows and do not form large protected groves that have the microclimate characteristics monarchs require for overwintering.

Monarch butterflies are known to occur near the project site along Bates Road just north of U.S. Highway 101 in a eucalyptus stand associated with Rincon Creek (CNDDB Occurrence No. 268; Xerces Site No. 2803) (CDFW 2020a). Additionally, this site was known to have been surveyed for overwintering monarch populations in 2017 during the Xerces Society New Year's Count, of which none were detected (Xerces Society 2020). While this

population is not within 100 feet of the project site, it could be affected by project implementation due to changed weather patterns. However, no impacts to this monarch overwintering site is anticipated since the overall height of the slope within Rincon Beach County Park south of U.S. Highway 101 will not be reduced, as work includes proposed terraces to stabilize the hill but will not decrease its overall height, and therefore no changes to the wind conditions at the overwintering site are expected. Additionally, this overwintering site is largely protected by the hill below the single residential development at 637 Bates Road, and any possible changes to weather and wind patterns due to project implementation would not affect the protective contour this hill independently provides. Therefore, monarch butterflies are not anticipated to be affected since there is low potential for the project site to support overwintering populations, and because known overwintering populations in the vicinity would not be adversely affected due to project implementation. Therefore, impacts to monarch butterfly individuals and monarch butterfly overwintering sites would be **less than significant.**

Several trees, including eucalyptus, Monterey cypress, and pine, are located within the proposed trail alignment near its western terminus and U.S. Highway 101. These trees are relatively small and located in areas with high levels of human disturbance including U.S. Highway 101 vehicular traffic and pedestrian use of Carpinteria Avenue and adjacent areas. These isolated and singular trees lack dense foliage and are located in areas vulnerable to strong winds and weather. Several myoporum trees are located within the proposed trail alignment and are largely multistemmed. The myoporum located directly adjacent to the unsanctioned trail experiences high levels of human disturbance. Due to the locations of these trees in areas with high levels of human disturbance, relatively small size of these trees, isolated nature of the trees, and vulnerability to strong winds and weather, raptors are unlikely to nest in these trees. Therefore, removal of these trees would not substantially reduce or eliminate quantity or quality of raptor nesting areas and impacts would be **less than significant.**

Additionally, a stand of trees is present at the eastern terminus of the biological survey area, which are rooted next to the Rincon Beach County Park parking lot. The easternmost proposed project impacts are over 1,000 feet from this stand of trees. The trees within the vicinity of Rincon Beach County Park are not planned to be directly impacted. Therefore, project impacts to raptor nesting trees would not substantially reduce or eliminate quantity or quality of nesting areas and impacts to nesting trees would be **less than significant.**

County environmentally sensitive habitat (ESH) and City environmentally sensitive habitat areas (ESHA) were evaluated based on definitions in the County *Coastal Land Use Plan* (CLUP) (County of Santa Barbara 2019) and the *City of Carpinteria General Plan and Local Coastal Plan* (City of Carpinteria 2003). As shown in Table 3.3-5, approximately ~~3.55 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be temporarily impacted due to construction. An additional 0.76~~ 4.32 acres of CDFW sensitive, County ESH, and/or City ESHA habitats would be permanently impacted due to construction. These native plant communities are considered CDFW sensitive, County ESH, and/or City ESHA and protected under County CLUP (County of Santa Barbara 2019) and the City's General Plan/Local Coastal Land Use Plan (City of Carpinteria 2003) policies. Therefore, the proposed project would result in a substantial adverse effect on a sensitive natural community, and impacts would be potentially significant. County CLUP (County of Santa Barbara 2019) and the City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) policies require County ESH and City ESHA avoidance. With implementation of **MM-BIO-1**, **MM-BIO-2**, **MM-BIO-5**, and **MM-BIO-6** impacts would be reduced to **less than significant with mitigation.**

As discussed in Section 3.1.1.8, above, no jurisdictional aquatic resources were detected in the biological survey area during the field survey. Therefore, no direct impacts to jurisdictional aquatic resources would occur. On the adjacent Carpinteria Bluffs III site, to the south and west of the western most portion of the project site, multiple

seasonal pools and ephemeral pools have been documented (Sage Institute Inc. 2009; Dudek 2012a, 2012b). As part of the Wetland Determination of Pool Features at Carpinteria Bluffs Area II per the California Coastal Act (Dudek 2012b), jurisdictional determinations for coastal wetlands were made for documented seasonal pools and ephemeral features. These coastal wetlands (Dudek 2012b) are approximately 123 feet from project ~~temporary~~ impacts ~~and 125 feet from project permanent impacts~~. The closest mapped riverine or stream/river feature is associated with the Rincon Creek outlet located approximately 50 feet from the eastern portion of the biological survey area and over 1,000 feet from the eastern terminus of proposed impacts. The existing developed areas near this portion of Rincon Creek included the Rincon Beach County Park asphalt parking lot and associated developments of a standard curb, vegetation, paved Rincon Point Lane, and additional vegetation.

The City of Carpinteria General Plan and Local Coastal Plan (City of Carpinteria 2003) includes implementation policies associated with wetlands which state, *Maintain a minimum 100-foot setback/buffer strip in a natural condition along the upland limits of all wetlands. No structures other than those required to support light recreational, scientific and educational uses shall be permitted within the setback, where such structures are consistent with all other wetland development policies and where all feasible measures have been taken to prevent adverse impacts. The minimum setback may be adjusted upward to account for site-specific conditions affecting avoidance of adverse impacts.*

Project impacts~~, both temporary and permanent,~~ are greater than 100 feet from known coastal wetlands near the western terminus of the project and greater than 1,000 feet from Rincon Creek near the eastern terminus of the project. Therefore, the project would not have a substantial adverse effect on coastal wetlands including creeks and **no impact** would occur.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No habitat conservation plans apply to the project area (CDFW 2019). **No impact** would occur.

g) Would the project result in cumulatively considerable impacts to biological resources?

The surrounding land uses of the project site include transportation, open space, residential development, and recreational facilities. While the project site is primarily composed of undeveloped lands, they have been previously subject to extensive grading to form the terraces and slopes that abut U.S. Highway 101 to the north and UPRR which bisects the site. The coastal bluffs west of the project site are moderately trafficked areas used for recreation, walking, and biking. In 2017, The Land Trust for Santa Barbara County partnered with the Citizens for the Carpinteria Bluffs, the City of Carpinteria, the County of Santa Barbara, and over a thousand community members to purchase, initiate restoration, and ensure long-term maintenance of the Carpinteria Bluffs III property (also referred to as Rincon Bluffs Preserve), the 21-acre property directly to the west of the project site. A conservation easement of the Carpinteria Bluffs III property/Rincon Bluffs Preserve has been recorded which provides permanent preservation and provides long-term conservation of the open space, scenery, habitat for native plants and animals, and coastal access and recreational opportunities. And within the eastern portion of the project site, the currently developed Rincon Beach County Park provides infrastructure for recreation and is highly utilized. Areas to the south are associated with undeveloped beach areas and the Pacific Ocean. As discussed in Section 3.1.1.7, the proposed trail alignment is located adjacent to the Pacific Ocean and does not connect important habitat areas used by large or small terrestrial wildlife species, and minor changes to wind and weather patterns in a very local setting are not an impediment to birds moving long distance, particularly since

the overall height of the slope would remain at the same elevation. Mitigation measures have been identified to reduce potential impacts to special-status wildlife species and sensitive vegetation communities to less-than-significant levels. Therefore, cumulative impacts resulting from the proposed project, in combination with the reasonably foreseeable future projects in the area, would be less-than-significant.

3.3.5 Mitigation

MM-BIO-1 **Workers Environmental Awareness Program (WEAP).** The City shall fund an approved biologist to prepare and implement a worker education and awareness program (WEAP) specific to the project. The program shall be presented to all individuals involved in the construction of the project. The program shall include information focused on sensitive vegetation communities, sensitive wildlife and plant species, and common wildlife species and their habitats and shall include, but not be limited to, the following:

- Description of sensitive vegetation communities.
- Workers shall be provided with photographs of sensitive biological resources including sensitive wildlife and plant species.
- Workers shall be informed verbally and in writing of the various project tasks that require biological surveys and monitoring for resource protection.
- Workers shall be provided with a photograph or description of the markers for active bird nests, trees, or other mitigation areas, so that they shall know these are not to be disturbed without a biological monitor present.
- Workers shall be informed not to litter. All trash and litter shall be picked up and removed from the construction sites at the end of each day.
- Workers shall be informed to obey a speed limit of 15 miles per hour while traveling on the project site to avoid collisions with wildlife.
- Workers shall avoid driving over or otherwise disturbing areas outside the designated construction areas.

Plan Requirements and Timing: The applicant shall submit the WEAP to the City of Carpinteria (City) and County of Santa Barbara (County) for review and approval prior to ~~implementation~~ issuance of zoning clearance. All workers, contractors, and visitors shall attend the WEAP prior to entering the project site and performing any work. The applicant shall provide copies of the training attendance sheets to City of Carpinteria and County staff as a record of compliance with this measure on a monthly basis. The WEAP shall be reviewed and approved by the City of Carpinteria and County prior to Zoning Clearance approval. Implementation of the WEAP training shall occur prior to the start of construction and as new crew members are added to the project.

Monitoring: The City of Carpinteria and County permit compliance staff will ensure compliance with the WEAP throughout construction by review of attendance sheets and hardhats, inspection of the site, and interviewing workers, as appropriate.

MM-BIO-2 **Fencing.** To prevent inadvertent impacts on adjacent sensitive vegetation communities including County ESH and City ESHA, native vegetation, special-status species, and common wildlife species and their habitats, construction limits will be fenced with highly visible fencing and staked. Wildlife-safe highly visible construction fencing shall be installed to identify the limits of grading/disturbance,

which would reduce potential human trampling outside of the construction limits and minimize the potential spread of non-native weeds or invasive plant species. Wildlife-safe construction fencing and flagging shall remain in place during construction and replaced as needed.

Plan Requirements and Timing: The detailed fencing plan, showing the location of required fencing shall be reviewed and approved by City of Carpinteria and County staff prior to Zoning Clearance approval. This condition shall be printed on all project plans. The detailed fencing plan, showing the location of fencing shall be submitted to City of Carpinteria and County staff for review and approval prior to Zoning Clearance approval. The fence shall be installed prior to the start of ground disturbing activities.

Monitoring: The City of Carpinteria and County staff will inspect the project plans and site, to ensure compliance with this measure as appropriate.

MM-BIO-3 **Pre-construction California Legless Lizard Survey and Relocation**. Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:

1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall include areas with loose, moist soils occurring in scrub habitat with high coverage of deerweed (*Lotus scoparius*) or California goldenbush, in arroyo willow (*Salix lasiolepis*) thickets or in other suitable scrub or woodland habitat.
2. Capture and relocation shall take place no more than five days prior to the initiation of construction.
3. These surveys shall be performed by lightly raking loose soil, sand and leaf litter with a wooden rake for a sufficient period to determine that no legless lizards are present, or all legless lizards have been captured.
4. Any lizards found shall be placed in a receptacle with sand and a wet towel and relocated to the previously designated receptor site.

Plan Requirements and Timing: Prior to initiation of construction, capture and relocation efforts for California legless lizards shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

MM-BIO-4 **Pre-construction Woodrat Survey and Relocation**. Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted. Trapping shall be conducted by a qualified biologist and shall include the following steps:

1. Prior to initiation of capture and relocation, a suitable receptor site shall be located. This site shall be within similar habitat and an adequate distance away from any locations that might be subject to increased human disturbance, such as adjacent to a walking path.
2. These pre-construction surveys shall be performed searching all coastal sage scrub or coastal bluff scrub within the disturbance area for middens or other sign of the species.
3. Any middens and woodrats found shall be live-trapped and relocated to the pre-determined receptor site. The midden shall be dismantled and the materials placed at the relocation site.

Plan Requirements and Timing: Prior to initiation of construction, capture and relocation efforts for woodrat shall be conducted where appropriate. Trapping shall be conducted by a qualified biologist.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction survey and relocation efforts, if required, are completed prior to commencement of any earth-moving activities.

MM-BIO-5 **Habitat Mitigation and Monitoring Plan.** Prior to issuance of zoning clearance ~~approval of a coastal development permit~~, the City shall contract with a qualified biologist to develop a Habitat Mitigation and Monitoring ~~Reporting~~ Plan (Plan) to mitigate for impacts to County ESH/City ESHA vegetation communities. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities, and, therefore, preserve or provide wildlife habitat, in areas impacted by construction of the trail but outside the trail-related impervious surfaces and within similar habitats adjacent to the impacted biological resources. The Plan may focus on the following:

- In-kind, on-site restoration of areas where coastal sage scrub or coastal bluff scrub has been removed;
- Enhancement of ~~temporarily~~ impacted areas on site currently occupied by ornamental, disturbed or developed areas;
- Restoration of areas occupied by non-native habitats or native habitats with large components of non-native vegetation, within similar habitats adjacent to the impacted biological resources.

A total of 4.32 acres of impacts are proposed to County ESH/City ESHA native vegetation communities. Under the Plan, impacts to S3/County ESH/City ESHA native vegetation communities (California brittle bush – ashy buckwheat scrub alliance, *Encelia californica* association and lemonade berry scrub alliance, *Rhus integrifolia* association) that total 0.59 acres shall be restored in-kind at 4:1. Impacts to S4 and S5/County ESH/City ESHA native vegetation communities (quailbush scrub alliance, *Atriplex lentiformis* association, California sagebrush – (purple sage) scrub alliance, *Artemisia californica* association, and coyote brush scrub alliance, *Baccharis pilularis* association) that total 3.73 acres shall be restored in-kind at 2:1. To the extent feasible, restoration should occur on site and, any additional mitigation required shall be carried out on areas within adjacent land controlled by the County or City, such as the Rincon Bluffs Preserve or Rincon Beach County Park.

A qualified biologist/botanist shall develop the Plan, which shall provide specific measures to restore or enhance habitat to replace the loss of coastal sage scrub and coastal bluff scrub communities. This Plan shall be focused on adaptive management principles, and shall identify detailed enhancement areas and strategies based on the parameters outlined below, with long-term timing and monitoring requirements. The Plan shall:

1. Provide an up-to-date inventory of on-site native vegetation resources.
2. Define attainable and measurable goals and objectives to achieve through implementation of the Plan. Goals and objectives shall focus on replacement of coastal sage scrub, coastal bluff scrub and rare plants removed during construction.
3. Provide site selection and justification. Prior to identifying habitat restoration mitigation areas, both within the project area and adjacent lands, the habitat shall be surveyed for sensitive vegetation communities and special-status plant species, to ensure avoidance of impacts during habitat restoration implementation. Additionally, potential adjacent mitigation

lands shall be assessed to ensure sites are suitable and appropriate for implementation of habitat restoration for the impacted native vegetation communities.

4. Detail a restoration work plan including methodologies, restoration schedule, plant materials (seed and container plant) sourcing – locally genetic stock, and implementation strategies.
5. Provide a detailed maintenance plan to include removal of invasive non-native species.
6. Define annual and final performance standards. Prior to grading, the project-related native coastal bluff scrub and coastal scrub vegetation communities shall be assessed by vegetation community type for percent cover (both basal and vegetative), species diversity, density, and abundance. This project site native vegetation community data shall be used to define performance standards for native habitat restoration by vegetation layers (tree, shrub, grass, and forb) for each vegetation community type and for non-native plant species.
7. Identify that the restoration areas shall be irrigation-free for at least 3 years and the performance standards have remained stable (no negative trend for richness/ diversity/ abundance/ cover of native species and no positive trend for invasive/non-native cover for each vegetation layer) for at least 3 years.
8. Provide a monitoring plan to include methods and analysis of results. Also, include goals, success or failure criteria, and an adaptive management plan, contingency actions, and suggestions for failed restoration efforts.

Plan Requirements and Timing: Prior to issuance of ~~a grading permit~~ zoning clearance, the City of Carpinteria shall contract with a qualified biologist to develop a Plan. The Plan shall outline efforts to restore or enhance coastal sage scrub and coastal bluff scrub communities in areas impacted by construction of the project.

***Monitoring*:** The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. Additionally, California Department of Fish and Wildlife shall approve the Plan prior to issuance of zoning clearance ~~ground disturbance~~. City and County staff shall periodically conduct site inspections to ensure compliance on site. Restored areas shall be monitored for five years following planting. Annual reports and the final report shall be submitted to the City and County.

MM-BIO-6 **Weed Management Plan.** Prior to issuance of zoning clearance ~~approval of a coastal development permit~~, the City shall contract with a qualified biologist to develop a Weed Management Plan to be implemented during construction and implementation of the Habitat Mitigation and Monitoring Plan. The Weed Management Plan shall include, but is not limited to, the following:

- Prior to ground disturbance, a City approved qualified biologist shall map invasive weeds within the limits of impacts plus a 100-foot buffer. Invasive weeds shall be defined as California Invasive Plant Inventory Database (Cal-IPC) moderate and high ratings. Invasive species subject to control measures shall be identified. Note that non-native grasses such as bromes and wild oats shall be mapped but are not subject to control measures. Prior to ground disturbance, areas with invasive weeds shall be treated according to control methods below and BMPs for invasive weeds.

- To prevent the spread of invasive weeds and inhibit germination, the following shall be implemented.
    - Maintain vehicle wash and conduct inspections to monitor the types of materials brought on site to minimize the potential for invasive weed introduction
    - Limit disturbance areas to the permitted disturbance area
    - Limit ingress and egress to defined routes
    - Use certified weed-free products
- Invasive weed control methods shall include legally permitted herbicide, manual, and mechanical methods approved for application. The application of herbicides shall be in compliance with state and federal laws and regulations under the prescription of a pest control advisor, with the City's concurrence, and shall be implemented by a licensed qualified applicator. All product labels shall be followed. Spot treatments shall be the method of application and broadcast applications shall be avoided. Herbicides shall not be applied during or within 72 hours of a forecasted measurable rain event or during high wind conditions. Invasive weed debris accumulated during manual and mechanical methods shall be disposed of at an appropriate location off-site. Maintenance shall be timed to remove invasive weeds prior to seed production. The maintenance crew shall coordinate with the City approved biologist to avoid and minimize impacts to plant species and wildlife species.
- A City approved qualified biologist shall perform annual monitoring within the limits of disturbance and a 100-foot buffer to map and document invasive weed species. At any time during implementation of the Weed Management Plan, monitoring frequency may increase as needed to provide guidance to maintenance crews.

Plan Requirements and Timing: Prior to issuance of zoning clearance ~~a grading permit~~, the City of Carpinteria shall contract with a qualified biologist to develop a Plan. The Plan shall outline efforts to implement a weed management plan to control invasive weeds. Pre-construction survey results shall be reported and ongoing invasive weed control efforts and annual survey results shall be submitted annually and for the five year duration of the Habitat Mitigation and Monitoring Plan.

Monitoring: The City of Carpinteria and County staff shall ensure development of the Plan and adherence to Plan measures are completed prior to commencement of any earth-moving activities. City and County staff shall periodically conduct site inspections to ensure compliance on site and to ensure the plan is fully implemented.

MM-BIO-7 **Pre-construction Nesting Bird Surveys**. Within 30 days prior to any vegetation clearing, ground disturbance, or use of noise-generating equipment associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically mid-February through August in the project region, or as determined by a qualified biologist), the City shall have weekly surveys conducted by a qualified biologist to determine if active nests of special-status bird species, or of any bird species protected by the Migratory Bird Treaty Act or the

California Fish and Game Code, are present in the disturbance zone or within 300 feet (500 feet for raptors) of the area to be disturbed. The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground disturbance is delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground disturbance activities. The City or contractor shall provide the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort.

If active nests are found, including any nests for Cooper's hawk, clearing and use of noise-generating construction equipment within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. The results of the surveys, including graphics showing the locations of any nests detected, and any avoidance measures recommended, shall be submitted to the City and County within 14 days of completion of the pre-construction surveys to document compliance with applicable state and federal laws pertaining to the protection of native birds.

Plan Requirements and Timing: Pre-construction nesting bird surveys shall be completed within 30 days prior to any vegetation clearing or ground disturbance associated with construction or grading during the bird nesting season (typically mid-February to August). The surveys shall occur on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work.

Monitoring: The City of Carpinteria and County staff shall ensure the pre-construction nesting bird surveys and any avoidance requirements are completed prior to commencement of any earth-moving activities.

3.3.6 Level of Significance After Mitigation

Implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-3** would reduce impacts to California legless lizard to less than significant. Implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-4** would reduce impacts to San Diego desert woodrat to less than significant. After implementation of **MM-BIO-1**, **MM-BIO-2**, **MM-BIO-5**, and **MM-BIO-6** impacts to sensitive vegetation communities, including County ESH and City ESHA, would be less than significant**.** After implementation of **MM-BIO-1, MM-BIO-2,** and **MM-BIO-7**, impacts to nesting birds during the bird nesting season would be less than significant.

Section 3.5, Geology & Soils

3.5.4 Impact Analysis

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- ***i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?***
- ***ii. Strong seismic ground shaking?***
- ***iii. Seismic-related ground failure, including liquefaction?***
- ***iv. Landslides?***

The California Department of Conservation provides an index map that identifies all Official Maps of Earthquake Fault Zones delineated by the California Geological Survey through December 2010 under the Alquist-Priolo Earthquake Fault Zoning Act. According to the most recent data, the proposed project is not located within an Alquist-Priolo earthquake fault zone; however, the project site is to the north of the Pitas Point quadrangle (CGS 2018c). The northwestern corner of the Pitas Point quadrangle encompasses a very small portion of Santa Barbara County, consisting of the Rincon Point neighborhood south of Rincon Point Lane. The fault line within the Pitas Point Quadrangle that is closest to the proposed project runs northwest-southeast, north of La Conchita Beach in Ventura County, approximately two miles southeast from Rincon Beach County Park (Dibblee and Ehrenspeck 1986).

According to the City of Carpinteria's General Plan Fault Map, the Rincon Creek fault is located to the north of the proposed project and the Carpinteria Fault is located to the south (City of Carpinteria 2003). In the immediate vicinity of the proposed trail and parking lot, the project is located on the up-thrown side on an inferred fault located to the north of US Highway 101 near the connection to Highway 150 (City of Carpinteria 2003). According to the Santa Barbara County's South Coast Seismic Tectonic Map, the entire south coast portion of the county, including the project site, is rated as having a high seismic potential with a moderate possible variation from the assigned rating (County of Santa Barbara 2011). The Santa Barbara County South Coast Seismic Tectonic Map indicates that the Red Mountain fault is the closest known potentially active fault and traverses the proposed trail near the intersection of the UPRR and the trail alignment. The Red Mountain fault is approximately 39 km (24 miles) long and trends in a generally east-west direction, running parallel to the coastline, near the project area. A maximum credible earthquake of moment magnitude 6.8 has been assigned to this reverse displacement fault (CGS 1996).

The proposed project consists of a shared-use path with pedestrian bridge and other trail improvements. The project would not introduce new buildings that would be subject to structural damage in the unlikely event of strong seismic ground shaking. Moreover, there are no existing buildings within the project area that would pose a risk of loss, injury, or death as a result of potential structural damage caused by earth movement. However, the pedestrian bridge structure could be damaged by seismic activity if not designed to withstand the potential peak ground acceleration of 0.8 g, as identified in the Bengal geotechnical report (Appendix E).

Previously manipulated and engineered slopes along the trail alignment are proposed to be re-graded to achieve a finished slope face that is more gradual (less steep) than the existing slope faces. Slopes adjacent to US Highway 101 would be reshaped with those above the trail having a slope ratio of 1.25:1, fill slopes (which would be present only adjacent to the bridge over the UPRR) are proposed to have slope ratios between 2:1

and 4:1. For the portion of the path on the ocean side of the UPRR alignment, the regraded slopes for the trail "bench" would employ cut slopes with a ratio of 1:1 above the trail, while a ratio of 1.25:1 would be employed for the "reinforced" fill slopes below the trail. These slope angles are each shallower than existing conditions, ~~and mid-elevation benches in the slopes~~ and would ~~further~~ decrease the potential for mass soil movement (shallow landslides). It is important to note that all of the earthwork proposed for the project involves manipulation of manufactured slopes (previously modified landforms) and not natural topography. In addition, the project proposes to vegetate all new slope areas to minimize the potential for shallow erosion to occur.

The Carpinteria Valley is subject to geologic hazards related primarily to earthquakes and secondary hazards, such as landslides and liquefaction; the project includes manufactured slopes and a bridge structure that could be damaged by seismic ground shaking. As such, potential impacts relating to adverse effects caused by strong seismic ground shaking, or seismic related ground failure would be potentially significant. **Mitigation Measure (MM) GEO-1** through **MM-GEO-3** would reduce impacts to **less than significant with mitigation**.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Soils within the project site have been classified as Xerorthents, cut and fill areas (USDA 2020). The NRCS Web Soil Survey provides an erosion hazard rating that indicates the hazard of soil loss from off-road and off-trail areas after disturbance activities that expose the soil surface. Xerorthents in the project area have a moderate erosion hazard rating, which indicates that some erosion is likely and that erosion control measures may be needed (USDA 2020). The project does propose to vegetate all new slope area to minimize the potential for soil erosion to occur.

To prepare the site for trail construction, the trail alignment along with adjacent slopes would be graded to meet the proposed finished grade surface and to achieve stable slope profiles above and below the trail. It is anticipated that total cut would be approximately ~~107,386~~ 96,040 cubic yards and total fill would be approximately ~~14,860~~ 10,519 cubic yards during the grading phase. Cut material on site would be utilized for the necessary fill material, as feasible. The re-grading of previously manufactured slopes is intended to reduce the angle of the slope face, decreasing historic erosion rates and increasing the long-term stability of the slope faces. The lower angle slopes would not be noticeably different from the existing manufactured slopes but should eliminate or greatly reduce the amount of soil materials moving down the slope areas to be deposited on the trail or areas below the trail. Erosion potential would be lessened with the proposed engineered slope design. However, soil erosion could be increased unless proper slope construction techniques are employed. Accordingly, soil erosion impacts would be potentially significant. **MM-GEO-3** would reduce impacts to **less than significant with mitigation**.

Section 3.8 Hydrology & Water Quality

3.8.4 Impact Analysis

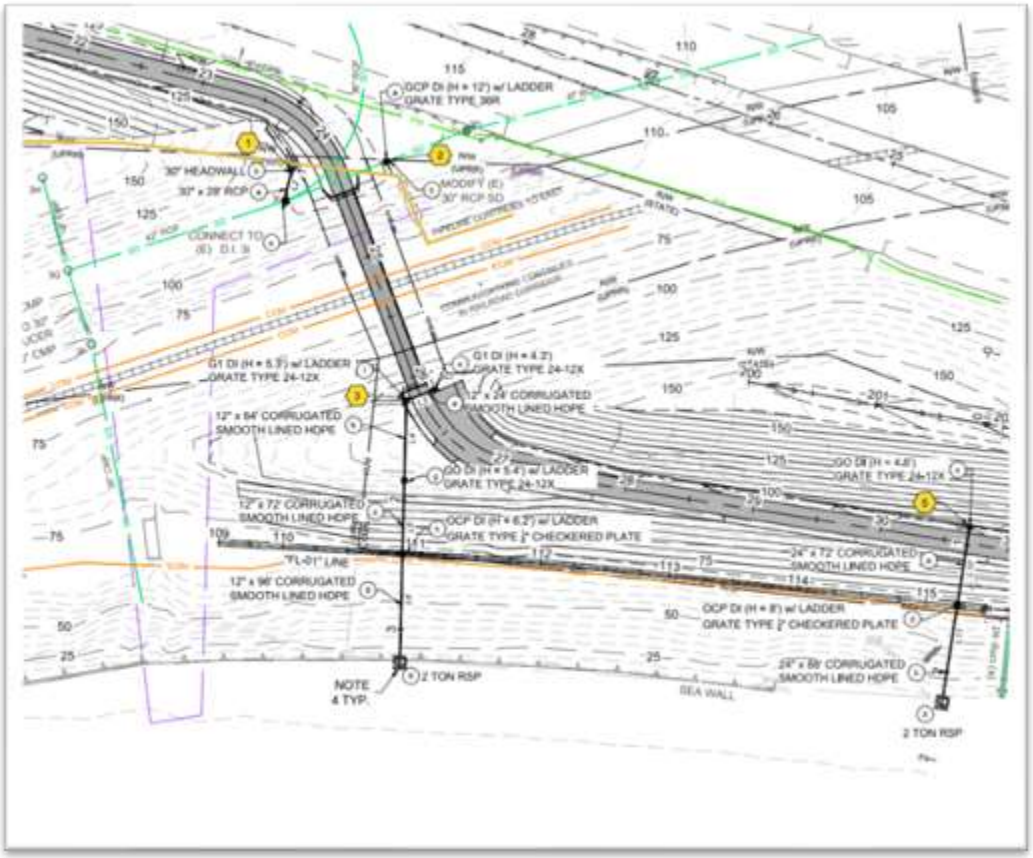
c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- ***i. result in substantial erosion or siltation on or off-site?***
- ***ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?***
- ***iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

iv. impede or redirect flood flows?

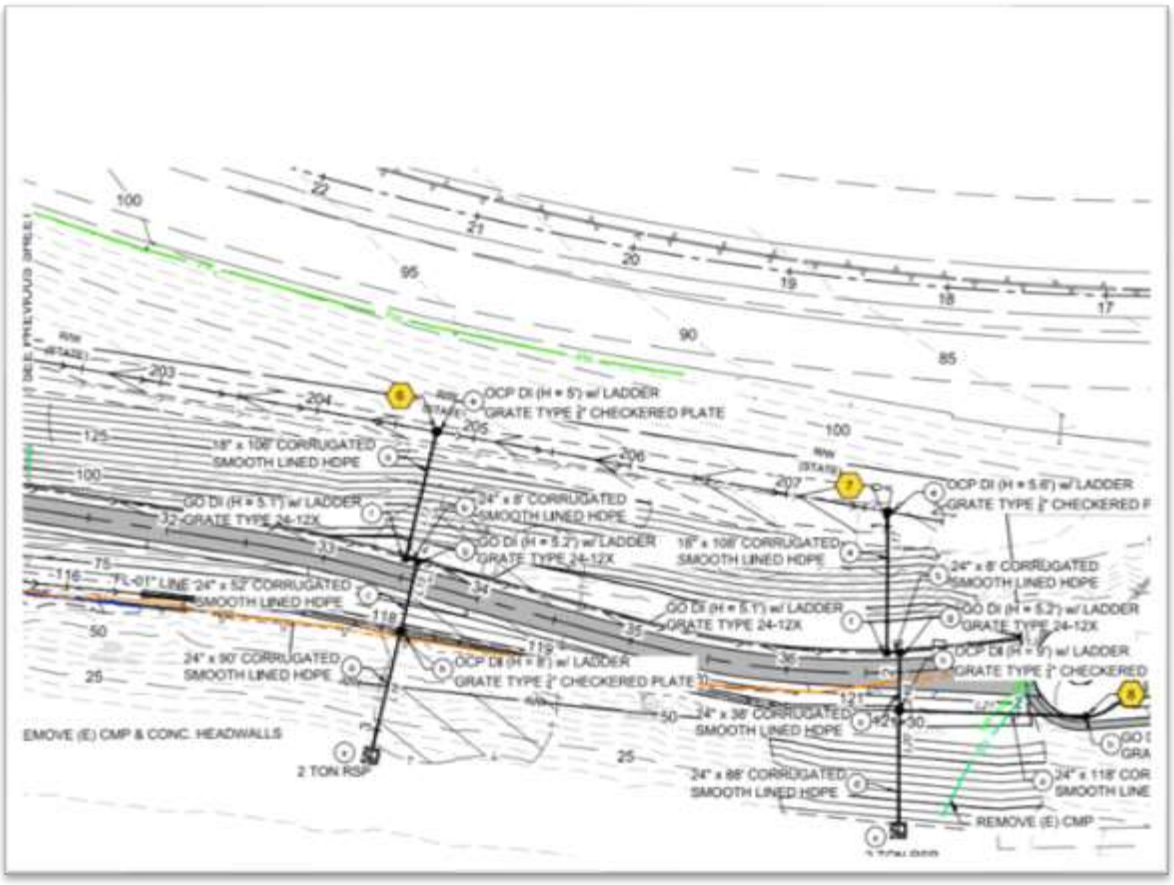
The project would moderately alter the existing drainage patterns of the site, via regrading of project slopes and short-term removal of vegetation, as well as through introduction of the impervious trail surface (approximately 1 acre of new impervious surface). Increased stormwater runoff and erosion potential during construction and until new vegetation is established are addressed under **MM-WAT-1, MM-WAT-2,** and **MM-WAT-3**. Long-term stormwater runoff from the trail surface would be collected by a concrete v-ditch adjacent to the trail, and released through a series of short length storm drains with discharge along the adjacent beach. The provision of project-specific storm drains would accommodate the storm runoff volumes anticipated from the project's impervious surfaces, and also avoid directing stormwater to existing public storm drain systems in the project vicinity that could lack surplus capacity to accommodate the project. Release of project storm drainage along the beach would not result in substantial erosion, as the introduction of impervious surface would be minimal compared to the overall project drainage area and the trail drainage will be divided into ~~6~~ 5 separate outlets to minimize the discharge volume from any of the outlets. Illustration ~~3.8-1~~ 2.6 (Project Description) illustrates these ~~6~~ 5 outlets.~~, three exist (blue color) and three would be new (magenta).~~ The Project would remove two heavily degraded storm drains and outlets and construct four new storm drain lines for the segment of trail south of the UPRR alignment.

Illustrations 3.8-2 and 3.8-3 provide plan sheet excerpts of the proposed drainage system outlets, with connection to other drainage conveyance elements.



SOURCE: Bengal Engineering

Illustration 3.8-2 Design Details for Storm Drain Outlets #3 and #5



SOURCE: Bengal Engineering

Illustration 3.8-3 Design Details for Storm Drain Outlets #6 and #7

The proposed storm drain system includes concrete v-ditch for collection and conveyance of runoff water, drop inlets connecting to vertical drainpipes, and outlets at the beach elevation. The concrete v-ditch components would be durable, and not prone to weathering or failure over time. The vertical drains are proposed to be composed of a 12-inch diameter corrugated metal pipe. The pipe would be buried to cross beneath the trail section and would descend partly down the bluff face. However, in order to allow visual access for inspection of the pipe integrity, the lower portion of the storm drainpipe would be mounted on the surface of the slope/bluff face. The corrugated metal material was selected for weight consideration and as a superior material to PVC for withstanding damage from fire or sun exposure. However, the metal is prone to rust or corrosion, with the potential for collapse or failure over time. Leaks from the vertical drains would contribute to erosion of the bluff face, failure of a vertical storm drain could lead to significant erosion of the bluff face. The storm drains would be installed by the project, **MM-WAT-5** requires periodic inspection and maintenance of the storm drains in perpetuity to prevent failure of such facilities. Accordingly, the project's impacts on existing drainage patterns and storm drain systems would be potentially significant. Incorporation of **MM-WAT-5** would reduce impacts to **less than significant with mitigation**.

Section 3.9, Land Use and Planning

In response to comments received on May 3, 2021 by the County of Santa Barbara Planning and Development, the following changes have been made to Section 3.9.2, Relevant Plans, Policies, and Ordinances, included in the Draft EIR.

Santa Barbara County Comprehensive Plan

As indicated above, California State Government Code Section 65300 requires all cities and counties adopt a comprehensive, long-term general plan that outlines physical development of the county or city. The County of Santa Barbara refers to theirs as a Comprehensive Plan, to avoid confusion with the City of Santa Barbara General Plan. The comprehensive plan must cover a local jurisdiction's entire planning area so that it can adequately address the broad range of issues associated with the city or county's development. Ultimately, the comprehensive plan expresses the community's development goals and embodies public policy relative to the distribution of future public and private land uses. The Santa Barbara County Comprehensive Plan contains the following Elements: Agriculture, Circulation, Coastal Land use Plan, Conservation, Energy, Environmental Resources Management, Hazardous Waste, Housing, Land Use, Noise, Open Space, Scenic Highways, Seismic Safety & Safety. The Coastal Land Use Plan is described in further detail below, including applicable objectives and policies. The remaining elements of the County Comprehensive Plan are described within the EIR sections to which they pertain. The Santa Barbara County Comprehensive Plan Open Space Element includes the following applicable policies.

Coastal Land Use Plan Policy 7-33: To encourage walking and biking as alternatives to travel by automobile, the County shall strongly encourage development of new pedestrian and/or bicycle-friendly paths along the highway corridor. Improvements to Highway 101 shall not remove existing bikeways or pedestrian paths or preclude the development of proposed bikeways or pedestrian paths that are identified in the County's Comprehensive Plan, Coastal Land Use Plan and community plans, without providing comparable or better replacement facilities.

Coastal Act Policy 30211. Development shall not interfere with the public's right of access to the sea where acquired through use, custom, or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Policy 30252. The location and amount of new development should maintain and enhance public access to the coast by: (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation; (5) assuring the potential for public transit for high-intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

Coastal Act Policy 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall

be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners and natural resource areas from overuse.

Coastal Act Policy 30212.5 Wherever appropriate and feasible, public-facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Coastal Act Policy 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Coastal Land Use Plan Policy 7-8: Increased opportunities for beach access shall be provided in the Carpinteria planning area.

Coastal Land Use Plan Policy 3-13: Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Coastal Land Use Plan Policy 3-14: All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Coastal Act Policy 30240 (b). Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Coastal Land Use Plan Policy 4-3: In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Circulation Element Policy 5C: The County shall continue to develop programs that encourage the use of alternative modes of transportation including, but not limited to, an updated bicycle route plan, park and ride facilities, and transportation demand management ordinances.

3.9.4 Impact Analysis

a) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site within the City of Carpinteria has a Carpinteria General Plan/Coastal Land Use Plan land use designation of Visitor-Serving Commercial (2003) and has been zoned for Resort Zone District use. The portion of the project within the County of Santa Barbara is designated as Other Open Land and Recreation and is zoned Transportation Corridor and Recreation (County of Santa Barbara 2010). The proposed trail is an apt use for the

City's and County's vision for the properties within each jurisdiction. The provision of the proposed multi-use trail within the coastal zone would also meet the objectives in Coastal Act Policies to expand low cost recreation opportunities, enhance access to coastal and beach resources, and to support alternative modes of transportation. The proposed multi-use trail would assist in achieving similar objectives in Carpinteria and Santa Barbara County coastal land use policies that strongly encourage development of a trail parallel to the US Highway 101 corridor, provision of alternative transportation facilities, and enhancement of public access to the beach While the proposed trail in some areas would traverse areas designated as environmentally sensitive habitat area (ESHA), the avoidance of which is generally prioritized in local coastal plan and Coastal Act policies, mitigation measures require the restoration of areas outside the trail to fully offset the removal of native plants to accommodate trail construction (refer to Section 3.3, Biological Resources). The proposed trail would involve substantial earthwork, which is generally discouraged by local coastal land use policies; however the earthwork is focused on the remediation of artificially steep slope areas which are remnants of previous transportation facilities within the Project corridor, and does not involve modification of natural landforms. Mitigation measures require that new slopes follow specifications in the Project geotechnical study to achieve replacement slopes that are stable. With the incorporation of mitigation measures identified in this document to reduce environmental impacts to less than significant levels, the proposed project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project. In addition, no habitat conservation plans or natural community conservation plans apply to the project site. Overall, the proposed project would achieve the goal of enhanced coastal access. In addition, with respect to consideration of parking related to coastal access, construction is not anticipated to reduce parking availability. No parking spaces would be removed by the proposed project. However, absent mitigation, impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. **Mitigation Measures (MM) AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** would reduce impacts to conflicts with any land use plan, policy, or regulations to **less than significant with mitigation.**

b) Would the project result in cumulatively considerable impacts to land use and planning?

The proposed project would be consistent with the land use and zoning designations that have been assigned to the project site parcels. It would also implement a number of policies aimed at increasing public access to the beach as well as providing transportation alternatives for non-vehicle travel. While portions of the proposed trail would traverse designated ESHA, **MM-BIO-1** through **MM-BIO-4** would be required to fully offset the project's reduction in habitat area (refer to Section 3.3). The proposed trail would involve substantial earthwork; however, the earthwork is focused on the remediation of artificially steep slope areas which are remnants of previous transportation facilities within the Project corridor. **MM-GEO-1 through MM-GEO-3** would ensure that all trail elements and replacement slopes are stable. In addition, impacts due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be potentially significant. Therefore, **Mitigation Measures (MM) AES-1; MM-BIO-1** through **MM-BIO-6; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1** would reduce impacts to conflicts with any land use plan, policy, or regulations to less than significant with mitigation. Therefore, with implementation of all mitigation included in the EIR, the proposed project would not have a considerable contribution to any cumulative land use or planning impact.

Section 3.11, Recreation

3.11.4 Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project includes a shared-use path for walking and biking. The proposed trail would fill in an existing segment of the California Coastal Trail between the Carpinteria Bluffs Nature Preserve, which includes several miles of interconnected coastal bluff open space trails, and Rincon Beach County Park with 1 mile of the trail along the bluff. As the Rincon segment will expand the Carpinteria Coastal Trail System and would connect the City of Carpinteria with Rincon Beach County Park and points east and west along the Pacific Coast Bikeway and California Coastal Trail, it would provide additional recreation and access opportunities along the Santa Barbara County and Ventura County coastline. The proposed trail also would serve to fill in missing segments in the California Missions Trail and the Juan Bautista de Anza National Historic Trail. The project would provide a safe, direct and scenic coastal pedestrian and bike trail link to Ventura County paralleling U.S. Highway 101 and would formalize one railroad overcrossing along this segment, providing for safe access to the coast.

Although the air space above the proposed trail is not a public recreational facility for the purposes of the CEQA Guidelines, the proposed trail also is not expected to significantly impair the ability of paragliders and hang-gliders. Members of the paragliding and hang-gliding community have expressed concern that the proposed regrading of slopes along the trail alignment could adversely impact wind uplift conditions, such that paragliding and hang-gliding opportunities in the air space above the property could be eliminated, or substantially reduced.

The portion of the bluff face that would be regraded for the proposed trail was previously altered to create a bench for the UPRR alignment, and this steep manufactured slope is not considered to be stable in the long term with or without the project (the railroad was previously re-aligned away from this slope). Reducing the steepness of the slope face (making it less vertical) is necessary to avoid it collapsing over time and ensuring the longevity of the proposed new trail. Comments from the soaring community indicate a belief the proposed lessening of the bluff face slope angle could reduce or eliminate wind uplift patterns along the re-graded bluff slope area.

In order to evaluate the change in wind uplift patterns above the bluff face from the proposed regrading for the project, Dudek commissioned an Airflow Analysis for the Proposed Regrading of the Rincon Bluffs study (Airflow Study) by an expert in fluid dynamics; the Airflow Study is included as Appendix I of this Environmental Impact Report. Several different approaches were used, based upon published literature including wind tunnel experiments and direct field measurements of the amplification effects of a slope or vertical face on horizontal wind vectors perpendicular to the slope face. In the published literature reviewed for this Airflow Study, certain investigators compared the average slope angle of the entire slope or bluff face to determine the wind amplification effect, while others compared the angle of just the upper portion of the slope. The analysis of the effects of the originally proposed regrading of the bluff face for the project (which previously included a mid-elevation bench above the trail) concluded that the proposed regrading could reduce the vertical airflow velocity by 10% to 30% relative to current conditions; for altitudes relevant to soaring activities, the reduction is expected to be closer to 30% (Appendix I). Given the updated project design that no longer incorporates a mid-elevation bench above the trail, the Air Flow Study (Appendix I) found that the elimination of the upper bench would result

in a reduction in the vertical wind speed along the bluff edge by 10% to 20%, rather than the 30% maximum reduction resulting from the originally proposed project. In practical terms, a reduction in vertical wind speeds along the bluffs caused by regrading could maintain conditions favorable for paragliding and hang-gliding activities to occur in the air space over the trail alignment. A vertical wind speed reduction of 10% to 20% would have a lower effect upon soaring opportunities than the 30% reduction associated with the originally proposed project. As such, the updated project design could result in conditions that allow for soaring more frequently than the originally proposed project. ~~Based on available experimental results, the introduction of an upper bench above the trail is expected to provide a small increase in turbulence (on the order of 5%) at an altitude of 30 feet above the front of the bluffs, becoming negligible by an altitude of approximately 75 feet (Appendix I).~~

Published records of wind speeds favorable to paragliding and hang-gliding above the bluffs along the trail alignment do not exist. However, the Torrey Pines Gliderport is a dedicated soaring facility adjacent to the ocean bluffs in San Diego County, that exhibit similar characteristics to the bluffs along the Rincon Trail alignment. At Torrey Pines, about 7-15 mph of wind coming from the west (perpendicular to the bluffs) is generally needed for paragliding tandems; hang gliding tandems generally need 10-18 mph, also from the west (Torrey Pines Gliderport 2021). This evidences a wind regime that is successful in supporting soaring operations with an approximately 50% range of wind speeds (lowest viable wind speed representing 50% of the top speed). Consequently, the maximum predicted reduction in vertical wind velocity (~~30%~~ 20%) caused by the proposed regrading of bluffs along the trail segment south of the UPRR alignment should not eliminate favorable wind uplift patterns above the bluff face for soaring activities. The existing ~~20%~~ 30% of the upper portion of wind speeds successful for soaring should continue to provide acceptable uplift conditions; thus the proposed trail alignment would not cause paragliders and hang-gliders to use other air space, such that substantial physical deterioration of those facilities would occur or be accelerated. The upper end of the wind speed regime considered acceptable for soaring activities also may be extended somewhat by reduced updraft velocities, which may create additional opportunities for soaring activities during conditions with high wind velocities. In addition, the bluff west of where the proposed trail would cross the UPRR alignment would not be altered in any way by the proposed trail. Therefore, while the proposed regrading of the ocean bluffs will cause some modification of vertical wind velocities supporting soaring activities, it is unknown what the net effect will be on the number of days annually in which the wind conditions within the project alignment are favorable for soaring. Given the uncertainty above and the Airflow Study analysis that the maximum predicted reduction in vertical wind velocity will be ~~30%~~ 20% given the absence of a mid-elevation bench above the trail, the proposed project would have a **less than significant impact on recreational resources**.

Section 6.0, Alternatives

6.6.2 Maximize Existing Benchwork/Topography Alternative (Alternative 2)

Project Alternative 2 Impact Analysis

Biological Resources

The Maximum Existing Benchwork/Topography Alternative, would overall disturb ~~less~~ more area than the proposed project. The project impacts a total of 5.05 acres and this alternative impacts a total of 6.30 acres, resulting in an increase of 1.25 acres. ~~Project temporary impacts total 4.02 acres and this alternative has no temporary impacts identified, resulting in a net decrease of 4.02 acres of temporary impacts. It should be noted that although temporary impacts have not been identified, this alternative will likely result in temporary impacts. Project~~

~~permanent impacts total 1.02 acres and this alternative includes 0.67 acres of permanent impacts resulting in a net decrease of 0.35 acres of permanent impacts. Overall, the net impacts will decrease by 4.37 acres under this alternative since less grading and earthwork is required~~. More specifically, the project would result in 4.32 acres of impacts to County ESH and City ESHA and this alternative would result in 5.48 acres of impacts to County ESH and City ESHA, resulting in an increase of 1.16 acres of impacts to County ESH and City ESHA. ~~More specifically, the project would result in 3.55 acres of temporary impacts to County ESH and City ESHA and this alternative has no temporary impacts identified, resulting in a net decrease of 3.55 acres of temporary impacts to County ESH and City ESHA. The project will result in 0.76 acres of permanent impacts to County ESH and City ESHA and this alternative includes 0.51 acres of permanent impacts to County ESH and City ESHA, resulting in a net decrease of 0.25 acres of permanent impacts to County ESH and City ESHA. Overall, the net impacts to County ESH and City ESHA would decrease by 3.80 acres under this alternative since less grading and earthwork is required.~~

Because the vast majority of impacts under the proposed project are occurring within sensitive native vegetation communities identified as County ESH and City ESHA and require mitigation, this alternative would result in ~~fewer~~ more overall impacts. However, mitigation measures associated with County ESH and City ESHAs would still be required. While ~~less~~ more area is proposed to be impacted under this alternative, similar impacts to special-status wildlife species and nesting birds may occur and would require similar mitigation. Therefore, due to the ~~decreased~~ increased overall direct impacts to sensitive native vegetation communities identified as County ESH and City ESHA, impacts to biological resources would be ~~reduced~~ increased under the Maximum Existing Benchwork/Topography Alternative, Alternative 2 and **MM-BIO-1** through **MM-BIO-6** would continue to be required..

6.6.3 Steeper Slopes/Reduced Earthwork Alternative (Alternative 3)

Project Alternative 3 Summary

Under the proposed project, to achieve compliance with pathway surface slope limitations under the Americans with Disability Act (ADA), the existing benched slope would be regraded along the entire trail alignment. On some portions of the trail (along the segments north of the UPRR alignment), the proposed project also includes ~~creation~~ reconstruction of an existing second earthwork bench on the new slope above the trail to reduce erosion potential. Several agencies provided comments indicating that earthwork should be reduced as much as possible in order for the Project to achieve compliance with applicable resource protection policies and to minimize environmental impacts. In response, a refined ~~The~~ Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) has been developed that would: 1) reduce the paved width of the trail from 16 feet to 14 feet for the segment south of the UPRR crossing; 2) re-align the trail slightly in the segment south of the UPRR crossing to re-use a longer portion of the existing historic bench; and, 3) remove one of the earthwork benches that was originally proposed on the slope above the trail alignment, for ~~a portion of~~ the trail ~~length~~ segment south of the UPRR crossing.

Figure 6-2 (Concept Design 6% Grade) illustrates the alignment of the trail for the segment south of the UPRR crossing under the refined Steeper Slopes/Reduced Earthwork Alternative (Alternative 3). In order to capitalize on the existing historic bench, the trail would need to descend slightly more steeply from the UPRR over-crossing bridge, resulting in a trail segment of approximately 690 feet in length with trail surface slope of 6% as compared to the proposed project that employs a 5% grade along this trail segment. It should be noted that 5% is the maximum trail surface slope for a path/trail to be ADA compliant, and consequently the easterly 690 foot portion of the trail southward of the UPRR crossing would not evidently achieve ADA compliance under the refined Alternative 3. The U.S. Access Board (USAB) is responsible for developing accessibility guidelines for the construction and alteration of facilities covered by the Americans with Disabilities Act (ADA) of 1990 and the Architectural Barriers Act (ABA) of

1968. The guidelines ensure that the facilities are readily accessible to and usable by people with disabilities. The Access Board issued the current guidelines in 2004. According to the USAB guidelines, segments of the trail may qualify for an exception to the maximum surface slope, where compliance is not practicable due to terrain. Not practicable may be defined as requiring extensive cuts or fills that are difficult to construct and maintain, cause drainage or erosion impacts, or create other adverse environmental impacts (https://www.access-board.gov/aba/guides/chapter-10-outdoor/#conditions-for-exceptions-1019). If this exception were to be granted for the 690 foot segment with 6% ground slope, the entire trail could potentially be considered ADA compliant.

The cross sections proposed under Alternative 3 are shown in Illustration 6-1, Steeper Slopes/Reduced Earthwork Alternative (Alternative 3) Trail Cross Section, below. ~~Alternative 3 would result in a 7.6% reduction of earthwork, or 10,015 less CY, compared to the project.~~ Regarding the export of earth materials from the site, refined Alternative 3 would reduce exported materials volume by approximately 121 CY (from 85,521 CY to 85,400 CY) compared to the proposed project. Under refined Alternative 3, the proposed alignment would be the same as the proposed project for the segment north of the UPRR corridor. Similar to the proposed project, a bridge would be provided to provide safe crossing for trail users over the UPRR. However, the exact alignment and cross section of the trail south of the UPRR crossing, on the eastern portion of the trail alignment, would be different. More specifically, ~~Alternative 3 would not provide benches above the trail (to control drainage and rockfall);~~ the trail would intersect the existing historic railroad bench at a more westerly point; and, a segment of the trail approximately 690 feet in length would descend at a slightly steeper grade (6%).

Project Alternative 3 Impact Analysis

Air Quality

Alternative 3 would result in ~~96,077 CY of cut and 10,570 CY of fill, resulting in 85,507~~ 85,400 CY of export. This is lower than the proposed project's ~~92,526~~ 85, 521 CY of export and therefore would result in fewer haul trucks during construction. Therefore, criteria air pollutant emissions during construction are expected to be less than the proposed project. Impacts would be less than significant during construction. During operation, Alternative 3 would result in emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and similar to that of the proposed project.

Biological Resources

Alternative 3 would disturb approximately the same area as the proposed project. While the volume of sediment removed and grading configuration proposed for this alternative would reduce overall earthwork, it would occur within the same overall grading and development footprint since the location of the trail alignment would be substantially the same as for the proposed project. Additionally, impacts to special-status wildlife species and nesting birds would be similar under this alternative since the impact footprint is approximately the same. The Steeper Slopes/Reduced Earthwork Alternative would result in similar impacts to biological resources as the proposed project and would require similar mitigation because development would generally occur within the same footprint as the proposed project. Therefore, the Steeper Slopes/Reduced Earthwork Alternative would result in similar impacts to biological resources and **MM-BIO-1** through **MM-BIO-7** would continue to be required to address potentially significant biological resources impacts under Alternative 3.

Cultural Resources

Alternative 3 would disturb approximately the same area as the proposed project. As discussed in Section 3.4, cultural resources are present between the UPRR crossing bridge and U.S. Highway 101. Development under Alternative ~~2~~ 3 would still result in development of the trail segment north of the UPRR crossing in the identical alignment to the proposed project, ~~same area~~, and would therefore result in equivalent impacts to these existing cultural resources. In addition, the project could still potentially impact undiscovered cultural resources along the overall trail alignment, including archaeological resources and human remains. **MM-CR-1** through **MM-CR-4** would still be required. Impacts would be similar to the proposed project.

Energy

Alternative 3 would result in ~~96,077 CY of cut and 10,570 CY of fill, resulting in 85,507~~ 85,400 CY of export. This is lower than the proposed project's ~~92,526~~ 85, 521 CY of export and therefore would result in fewer haul trucks during construction. Therefore, energy use during construction is expected to be less than the proposed project. During operation, Alternative 3 would result in energy use from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary use of a light-duty truck that would generate nominal energy usage. Operational impacts would be considered less than significant, and similar to the proposed project.

Geology and Soils

Alternative 3 would result in ~~110,019~~ 40 less CY of ~~earthwork~~ excavation, compared to the project, and 121 CY less exported earth materials. Under Alternative 3, the proposed alignment would be substantially the same as the proposed project. However, for the cross section of the trail south of the UPRR crossing, on the eastern portion of the trail alignment, Alternative 3 would re-align the trail slightly to re-use a longer portion of the existing historic bench and would employ a trail surface slope of 6% for the easterly 690 feet of the trail ~~not provide benches above the trail~~. Given the slightly lower volume of earthwork involved, temporary erosion impacts during construction would be slightly reduced with this alternative; however, **MM-GEO-3** would continue to be required. The same bridge structure over the UPRR alignment would be employed, and therefore **MM-GEO-1** and **MM-GEO-2** would continue to be required. Updated geotechnical design details would be needed to address long-term stability of the regraded slopes south of the UPRR alignment, but the project engineers have indicated that feasible methods to achieve such stability are available and could be detailed in an updated geotechnical report if Alternative 3 were to be selected for implementation. It should be noted that **MM-GEO-3** mandates preparation of an updated geotechnical investigation to address final trail design, and incorporation of all identified recommendations from the updated geotechnical investigation during implementation of the final selected trail design. Therefore, impacts would be similar to the proposed project.

Greenhouse Gas Emissions

Alternative 3 would result in ~~96,077 CY of cut and 10,570 CY of fill, resulting in 85,507~~ 85,400 CY of export. This is lower than the proposed project's ~~92,526~~ 85, 521 CY of export and therefore would result in fewer haul trucks during construction. Therefore, GHG emissions during construction are expected to be less than the proposed project. Impacts would be less than significant during construction. During operation, Alternative 3 would result in GHG emissions from maintenance activities similar to the proposed project. Maintenance activities include landscape watering, vegetation control and other trail amenity care and repair, which would involve the temporary

use of a light-duty truck that would generate nominal air pollutant emissions. Operational impacts would be considered less than significant, and similar to the proposed project.

Hazards and Hazardous Emissions

Alternative 3 would involve an identical trail length to the project, but would reduce ~~earthwork~~ the volume of exported earth materials by approximately ~~10,019~~ 121 CY. The use of heavy equipment would be slightly reduced in duration, compared to the project, due to the reduced ~~earthwork~~ volume of exported earth materials. The section of the trail north of the UPRR corridor (the western portion) would have the same potential to encounter soils with ADL. Overall, impacts would remain similar or the same as the project relative to the volumes of hazardous materials associated with construction and the risk of release, as well as handling and disposal of ADL containing soils. **MM-WAT-2** and **MM-HAZ-1** would continue to be required, and residual impacts under Alternative 3 would also be less than significant.

Hydrology and Water Quality

Alternative 3 would involve an identical trail length to the project and would have substantially similar total earthwork volumes as the project ~~but would reduce earthwork by approximately 10,019~~. With slightly reduced ~~earthwork~~ volume of excavated and exported earth materials, the potential for erosion during construction would be reduced under Alternative 3, as compared to the proposed project; however, **MM-WAT-1**, **MM-WAT-2**, and **MM-WAT-3** would continue to be required to address potential erosion and other water quality impacts during construction. The trail alignment under Alternative 3 would substantially match the project, and therefore all of the proposed storm drain components would continue to adequately serve the stormwater runoff volumes from the project. As with the proposed project, **MM-WAT-4**, **MM-WAT-5**, and **MM-WAT-6** would continue to be required to address long-term operational affects upon water quality. Overall, Alternative 3 would marginally reduce hydrology and water quality impacts when compared to the project.

Land Use and Planning

The proposed project would result in less than significant impacts to land use and planning with incorporation of **MM-BIO-1** through **MM-BIO-4**, which prescribe required mitigation measures to satisfy requirements found in City and County policies governing ESHA. As discussed under Biological Resources, above, Alternative 3 would disturb approximately the same area as the proposed project, resulting in similar impacts to ESHA. In addition, the project would result in less than significant impacts to conflicts with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect with implementation of **MM-AES-1; MM-BIO-1** through **MM-BIO-7; MM-CR-1** through **MM-CR-4; MM-GEO-1 through MM-GEO-3; MM-HAZ-1; MM-WAT-1** through **MM-WAT-6; MM-NOI-1** through **MM-NOI-2; MM-TCR-1**. It is anticipated that Alternative ~~2~~ 3 would require similar mitigation measures to reduce potential land use impacts. Thus, impacts to land use and planning would be similar under this alternative.

Noise

Alternative 3 would involve an identical trail length and substantially similar alignment to the project but would reduce the volume of exported earth material by approximately 121 CY, compared to the proposed project ~~earthwork by approximately 10,019 CY. With reduced earthwork volume, the duration for earthwork activities using heavy equipment would be lessened~~, and lessening the number of off-site haul truck trips; nonetheless **MM-NOI-1** and **MM-NOI-2** would continue to be required to reduce construction noise impacts to a less than significant level. Noise impacts from Alternative 3 would be similar to the project, but somewhat less due to the reduced earthwork volumes involved, as compared to the project.

Recreation

Under Alternative 3, a multi-use trail for cyclists and pedestrians ~~identical~~ that is substantially similar to the proposed project would be constructed and operated, and the substantial gap that currently exists in the Coastal Trail system would be filled. Enhancement of local and regional biking and hiking opportunities delivered by the project would also be achieved under Alternative 3, and recreational benefits of the project would be realized. ~~A critical difference would be incorporated, however, in the grading profile for the trail segment along the bluff face adjacent to the ocean; this segment would not be re-graded to create a second bench above the trail bench (unlike the proposed project). The Air Flow Study (Appendix I) found that the elimination of the upper bench would result in a reduction in the vertical wind speed along the bluff edge by 10% to 20%, rather than the 30% maximum reduction resulting from the proposed project. In practical terms, a reduction in vertical wind speeds along the bluffs caused by regrading could maintain conditions favorable for paragliding and hang gliding activities to occur in the air space over the trail alignment. A vertical wind speed reduction of 10% to 20% would have a lower effect upon soaring opportunities than the 30% reduction associated with the proposed project. As such, Alternative 3 could have lesser impacts on recreation resources and opportunities than the project, specifically in regard to soaring opportunities.~~ Alternative 3 would continue to meet primary recreational objectives for the project by providing a trail that offers views of the Pacific Ocean, ~~that is ADA compliant,~~ and which achieves a safe connection between Carpinteria and the Rincon Beach County Park that can function as an alternative transportation mechanism. ~~This alternative would therefore have lesser impacts on recreation resources than the proposed project.~~

In order to capitalize on the existing historic bench that exists in the trail alignment for the portion south of the UPRR alignment, the design for Alternative 3 (refined) descends slightly more steeply from the UPRR over-crossing bridge, resulting in a trail surface slope of 6% as compared to the proposed project that employs a 5% grade along this trail segment (which measures approximately 690 feet in length). It should be noted that 5% is the maximum trail surface slope for a path/trail to be ADA compliant, and consequently the 690 foot portion of the trail southward of the UPRR crossing would not achieve ADA compliance under the refined Alternative 3. A definition of slope percent is useful for understanding this proposed trail surface slope. A 5% trail surface means that the elevation of the trail changes 5 vertical feet for every 100 feet of distance traveled along the trail. By comparison, a 6% trail would have a change in elevation of 6 feet for every 100 feet of travel. From a practical perspective, an increase of 1% slope in the trail surface over the ADA limit should not substantially reduce the usability of the trail segment south of the UPRR crossing. For bicycling, a slope of 4-6% is considered a manageable gradient (The Climbing Cyclist, 2013); the proposed trail slope would remain in this range. For walking or hiking, 5% slopes are comfortable, with a maximum slope of not more than 10% recommended to maintain enjoyment for the widest variety of trail users (Ventura County Trails, 2004). Persons with mobility limitations should be able to access the portion of the proposed Alternative 3 trail from the western terminus to the overlook at the south end of the UPRR crossing bridge, as this segment would achieve compliance with the ADA 5% maximum slope limit. Consequently, the incorporation of a 6% slope for a 690 foot portion of the trail segment south of the UPRR crossing would still support use of the entire project trail alignment by cyclists and pedestrians, while preservation of the trail surface slope at no greater than 5% for the remainder segments would allow access from Rincon Bluffs Preserve to the trail overlook on the south side of the UPRR bridge for visitors that may have mobility limitations. Recreation objectives of the project would therefore be substantially met under Alternative 3.

Furthermore, the U.S. Access Board (USAB) is responsible for developing accessibility guidelines for the construction and alteration of facilities covered by the Americans with Disabilities Act (ADA) of 1990 and the Architectural Barriers Act (ABA) of 1968. The guidelines ensure that the facilities are readily accessible to and usable by people with disabilities. The Access Board issued the current guidelines in 2004. According to the USAB guidelines,

segments of the trail may qualify for an exception to the maximum surface slope, where compliance is not practicable due to terrain. Not practicable may be defined as requiring extensive cuts or fills that are difficult to construct and maintain, cause drainage or erosion impacts, or create other adverse environmental impacts (https://www.access-board.gov/aba/guides/chapter-10-outdoor/#conditions-for-exceptions-1019). If this exception were to be granted for the 690-foot segment with 6% ground slope, the entire trail could potentially be considered ADA compliant. Because of the slightly greater slope percent (690 feet of the trail at 6% instead of 5%), the refined Alternative 3 would have marginally greater impacts on recreation than the project.

Transportation

Under Alternative 3, a multi-use trail for cyclists and pedestrians ~~identical~~ substantially similar to the project would be constructed and operated. In order to capitalize on the existing historic bench that exists in the trail alignment for the portion south of the UPRR alignment, the design for Alternative 3 (refined) descends slightly more steeply from the UPRR over-crossing bridge, resulting in a trail surface slope of 6% for a 690 foot portion as compared to the proposed project that employs a 5% grade along this trail segment; this slight increase in the proposed trail surface slope would not be expected to deter use of the trail by pedestrians or cyclists (refer to Recreation discussion above). Alternative 3 would therefore also close the substantial gap that currently exists in the Coastal Trail system, equivalent to the project. The use of a vehicle by residents in visiting the Rincon Beach County Park would be expected to decline under Alternative 3 as well, due to the existence of a new safe alternative to vehicle travel from points within Carpinteria. Transportation hazards associated with pedestrians crossing the UPRR alignment to navigate to Rincon Beach County Park would be resolved. In this regard, the enhancements of local and regional biking and hiking opportunities delivered by the project would occur under Alternative 3, and a solution to existing pedestrian hazards of the project would also be realized. This alternative would have transportation benefits and impacts equivalent to the project.

Utilities and Service Systems

Alternative 3 would involve an identical trail length to the project but would reduce ~~earthwork~~ excavation volumes by approximately 40 CY and exported earth materials volume by approximately ~~10,019~~ 121 CY. Although Alternative 3 would result in these reduced earthwork volumes, impacts to existing drainage patterns of the site would still occur. Therefore, **MM-WAT-1, MM-WAT-2, MM-WAT-3, and MM-WAT-4** would continue to be required. Therefore, impacts to utilities and service systems would be similar under Alternative 3.

Relation to Project Objectives

~~Given that~~ Alternative 3 would employ substantially the same alignment as the proposed project and would incorporate a~~n identical~~ trail width the same as, or similar to, the project (the Alternative 3 trail would continue to have a paved width of 16 feet for the segments north of the UPRR corridor, but would employ a paved width of 14-feet south of the UPRR corridor). Alternative 3 would also be ADA compliant in the segments north of the UPRR corridor but would marginally exceed the 5% maximum allowable trail surface by 1% for a 690 foot segment of the trail south of the UPRR corridor. This alternative would be ~~equivalent~~ substantially comparable to the project in meeting ~~all~~ the stated project objectives, with the exception of an intent to ensure that the entire trail length would be accessible to individuals that have impaired mobility. It should be noted, according to USAB guidelines, segments of the trail may qualify for an exception to the maximum surface slope, where compliance is not practicable due to terrain. Not practicable may be defined as requiring extensive cuts or fills that are difficult to construct and maintain, cause drainage or erosion impacts, or create other adverse environmental impacts; If this exception were to be

granted for the 690-foot segment with 6% ground slope, the entire trail could potentially be considered ADA compliant.

The incorporation of a 6% slope for a 690 foot portion of the trail segment south of the UPRR crossing would still support use of the entire project trail alignment by cyclists and pedestrians, while preservation of the trail surface slope at no greater than 5% for the remainder segments would allow access from Rincon Bluffs Preserve to the trail overlook on the south side of the UPRR bridge for visitors that may have mobility limitations. With regard to the project objective of reducing regional greenhouse gas emissions, Alternative 3 would be marginally more successful in meeting this objective, as ~~earthwork~~ exported earth material volumes and therefore haul truck operations would be reduced under this alternative, leading to fewer construction equipment emission contributions to greenhouse gas levels.

6.6.4 Freeway Adjacent Trail Avoiding Bluff Face Alternative (Alternative 4)

Project Alternative 4 Impact Analysis

Biological Resources

Alternative 4 would overall disturb more area than the proposed project. The proposed project impacts a total of 5.05 acres and this alternative impacts a total of 6.10 acres, resulting in an increase of 1.05 acres. More specifically, the project would result in 4.32 acres of impacts to County ESH and City ESHA and this alternative would result in 5.21 acres of impacts to County ESH and City ESHA, resulting in an increase of 0.89 acres of impacts to County ESH and City ESHA.

Because the vast majority of impacts under the proposed project are occurring within sensitive native vegetation communities identified as County ESH and City ESHA and require mitigation, this alternative would result in more overall impacts and the mitigation measures associated with County ESH and City ESHAs would still be required. While more area is proposed to be impacted under this alternative, similar impacts to special-status wildlife species and nesting birds may occur and would require similar mitigation. Therefore, due to the increased overall direct impacts to sensitive native vegetation communities identified as County ESH and City ESHA, impacts to biological resources would be increased under the Freeway Adjacent Trail Avoiding Bluff Face Alternative, Alternative 4, and **MM-BIO-1** through **MM-BIO-7** would continue to be required to address potentially significant biological resources impacts under Alternative 4.

~~Based on impacts within the biological survey area, this alternative would result in a decrease of impacts to sensitive biological resources. However, since a portion of the trail alignment under this alternative has not been surveyed (vegetation mapping, special status plant species, wildlife species, and tree assessment) a complete comparison analysis cannot be performed to determine if impacts to sensitive biological resources would be increased or reduced under the Freeway Adjacent Trail Avoiding Bluff Face Alternative. Therefore, additional surveys to detect potential sensitive biological resources would be required, and would include vegetation mapping, special status plant species surveys, a special status wildlife species habitat assessment, and a tree assessment. While it is unlikely that additional special status plant or wildlife species may be present along the new trail alignment, since it is located within similar habitats and along previously disturbed and graded slopes within the proposed project footprint, this alternative may result in greater impacts to sensitive vegetation communities included as County ESH and City ESHA, and qualifying trees. The trail alignment under Alternative 4 is longer as compared to the proposed project resulting in more permanent impacts to undeveloped land, and may require removal of eucalyptus trees~~

~~located at the eastern terminus of the Rincon Beach County Park parking lot, which are qualifying trees and require mitigation for removal under Santa Barbara County Article II Zoning Ordinance. Therefore, Alternative 4 may require additional mitigation for impacts to sensitive vegetation communities, including County ESH and City ESHA. More specifically, Alternative 4 may result in greater areas of impacts to vegetation communities and therefore require greater mitigation acreages, outlined in a Habitat Mitigation and Monitoring Plan (see MM BIO 5). Mitigation for removal of any qualifying trees impacted would also be required under Alternative 4. Similar impacts to special-status wildlife species and nesting birds are anticipated and would require similar mitigation.~~

Cultural Resources

Alternative 4 would result in greater ground disturbance compared to the proposed project, due to the longer length of the trail. It is anticipated that impacts to existing cultural resources would still occur, and that potential impacts to undiscovered cultural resources, including archaeological resources and human remains would be greater due to ~~greater~~ the increased area of development. ~~However, the presence of cultural resources within the area expanding the project footprint southeast, past the Rincon Beach County Park, and terminating at Bates Road, are unknown at this time~~. Although the proposed additional ground disturbance for Alternative 4 extends into a previously recorded archaeological site, there is significant evidence that the proposed ground disturbance would occur within previously disturbed soils and imported fill soils. The area unique to Alternative 4 ~~area proposed~~, or expanding the project footprint southeast, past the Rincon Beach County Park, and terminating at Bates Road, has been subject to significant ground disturbances including massive cut and fill grading and construction of the following: original UPRR railroad, original and widening of Highway 2, Highway 101 road and ramp construction, and the Bates Road overcrossing. Evidence of ground disturbance is documented in as-built plans for Highway 101 and the archaeological site record for CA-SBA-1 and associated field notes. The full potential presence and extent of cultural resources within the area expanding the project footprint are not fully known at this time since evidence points to any existing native soils being buried by several feet of disturbed and fill soils. Therefore, ~~development in this area would require additional investigation to appropriately determine the presence of existing cultural resources and potential impacts to these resources~~. **MM-CUL-1** through **MM-CUL-4** would still be required. Due to the longer length of the trail under Alternative 4, impacts to cultural resources would be ~~slightly~~ greater than the proposed project ~~and additional~~ , but would be appropriately addressed through implementation of **MM-CUL-1** through **MM-CUL-4**. ~~mitigation may be required~~.

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Section 3.3 Biological Resources

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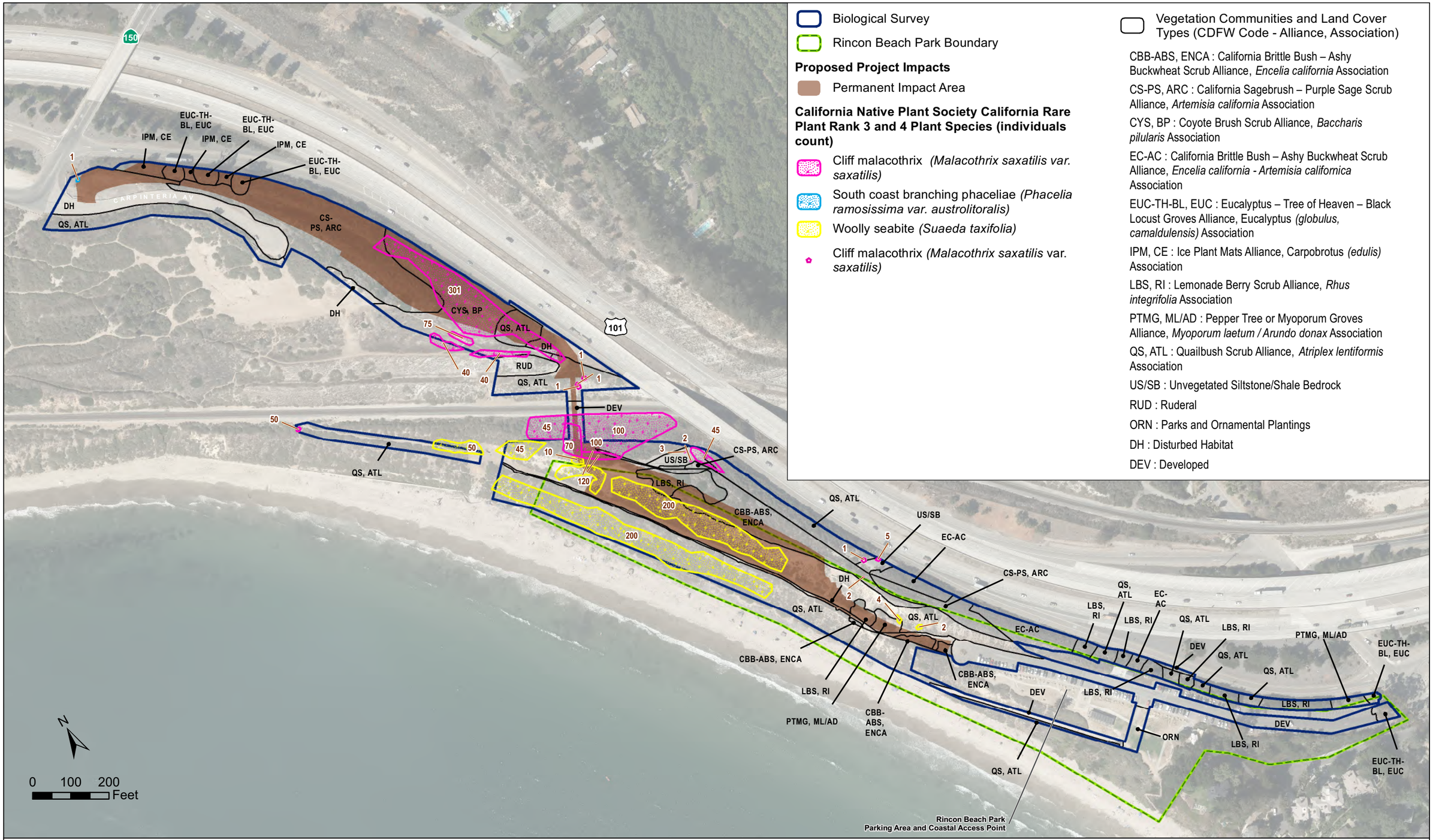
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AERIAL SOURCE: Sanborn 2020
ENGINEERING SOURCE: Bengal 2021

FIGURE 3.3-1

Biological Resources

Carpinteria Rincon Trail EIR

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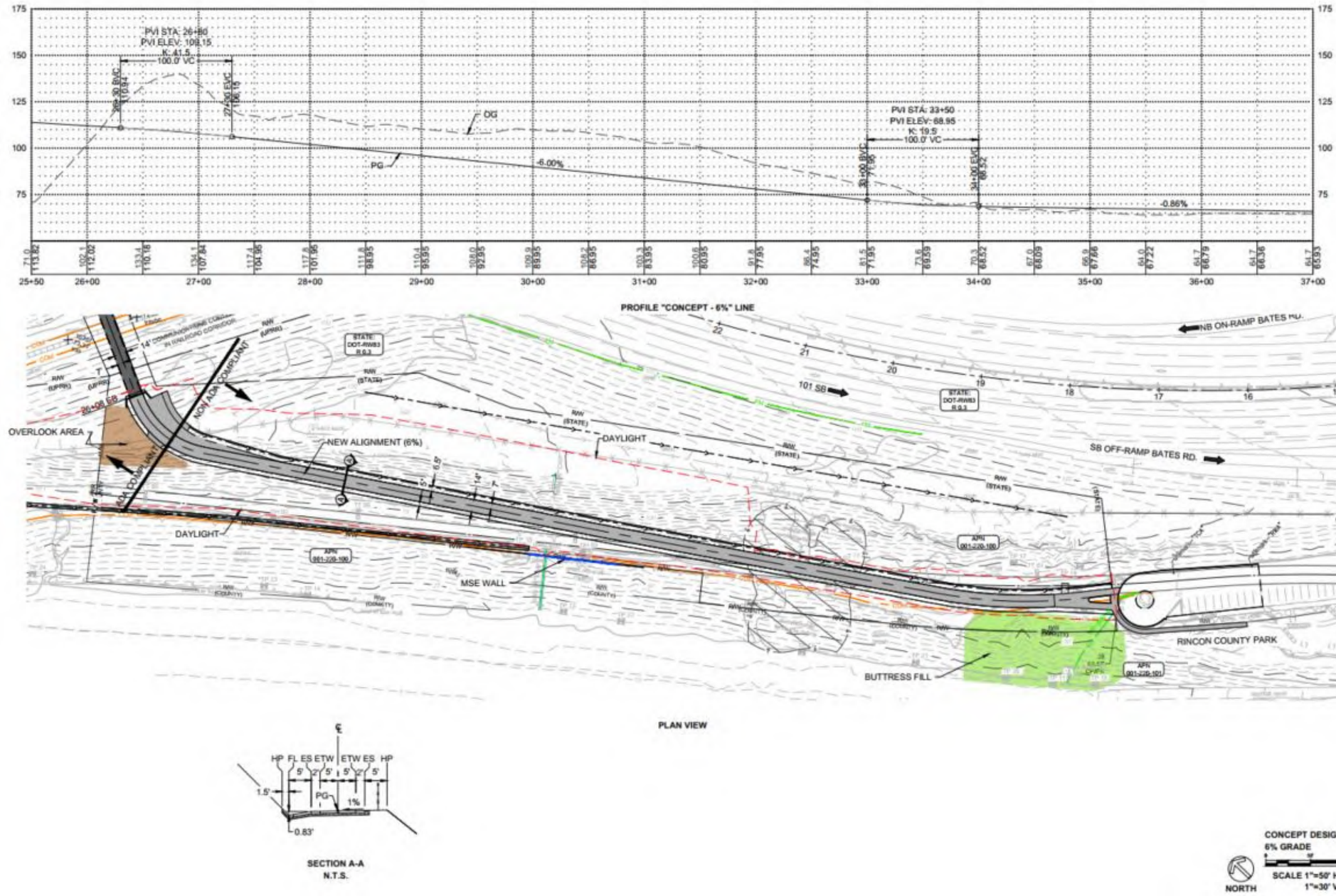


FIGURE 6.2

Concept Design Alternative 3

Carpinteria Rincon Trail EIR

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Appendix C1, Plant and Wildlife Species Compendium

ASTERACEAE—SUNFLOWER FAMILY

Artemisia douglasiana—Douglas' sagewort

BRASSICACEAE—MUSTARD FAMILY

* *Sisymbrium altissimum*—tall tumblemustard

CRASSULACEAE—STONECROP FAMILY

Dudleya edulis—fingertips

LAMIACEAE—MINT FAMILY

* *Salvia mellifera*—black sage

RUBIACEAE—MADDER FAMILY

Galium aparine— stickywilly

Appendix C2, Plant and Wildlife Species Not Expected to Occur within the Biological Survey Area

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/10–560	Not expected to occur. Suitable marsh or swamp habitat is not present.
Astragalus pycnostachyus var. *lanosissimus*	Ventura marsh milk-vetch	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/perennial herb/(June)Aug–Oct/3–115	Not expected to occur. While suitable coastal scrub habitat is present, this species rarely occurs on sandy bluffs as compared to within coastal salt marsh margins or coastal dunes (CDFW 2020). There is only one occurrence in the region[2] which is considered

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
				possibly extirpated (CDFW 2020).
Calochortus fimbriatus	late-flowered mariposa lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; often serpentinite/perennial bulbiferous herb/June–Aug/902–6,250	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Calochortus palmeri var. *palmeri*	Palmer's mariposa lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; mesic/perennial bulbiferous herb/Apr–July/2,325–7,840	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. Suitable dune, marsh, or swamp habitat is not present.
Delphinium umbraculorum	umbrella larkspur	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/Apr–June/1,310–5,245	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Fritillaria ojaiensis	Ojai fritillary	None/None/1B.2	Broadleafed upland forest (mesic), Chaparral, Cismontane woodland, Lower montane coniferous forest; rocky/perennial bulbiferous herb/Feb–May/738–3,270	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/3–4,000	Not expected to occur. Suitable vernal pool, playa, marsh, or swamp habitat is not present.

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Layia heterotricha	pale-yellow layia	None/None/1B.1	Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; alkaline or clay/annual herb/Mar–June/984–5,590	Not expected to occur. The site is outside of the species' known elevation range. Additionally, only marginally suitable habitat is present.
Monardella hypoleuca ssp. *hypoleuca*	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug(Sep–Dec)/164–5,000	Not expected to occur. No suitable chaparral or woodland habitat present. Although this species is mapped along Rincon Creek all the way to the ocean just behind the project site, it is associated with the riparian habitat of the creek which is not present on site (CDFW 2020).
Nasturtium gambelii	Gambel's water cress	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/16–1,080	Not expected to occur. Suitable marsh or swamp habitat is not present.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/98–2,145	Not expected to occur. Although chenopod scrub habitat is present, vernal pools are absent within the project site. This species is not known to occur within the region[2] (CDFW 2020).
Navarretia ojaiensis	Ojai navarretia	None/None/1B.1	Chaparral (openings), Coastal scrub (openings), Valley and foothill grassland/annual herb/May–July/902–2,030	Not expected to occur. The site is outside of the species' known elevation range.

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Navarretia peninsularis	Baja navarretia	None/None/1B.2	Chaparral (openings), Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; mesic/annual herb/(May)June–Aug/4,920–7,545	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Nolina cismontana	chaparral nolina	None/None/1B.2	Chaparral, Coastal scrub; sandstone or gabbro/perennial evergreen shrub/(Mar)May–July/459–4,180	Not expected to occur. The site is outside of the species' known elevation range.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/49–2,165	Not expected to occur. Suitable vernal pool habitat is absent within the project site. Additionally, this species is not known to occur within the region[2] (CDFW 2020).
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	Marshes and swamps (assorted shallow freshwater)/perennial rhizomatous herb (emergent)/May–Oct(Nov)/0–2,130	Not expected to occur. Suitable marsh or swamp habitat is not present. Additionally, the only one occurrence in the region[2] is considered extirpated (CDFW 2020).
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/49–5,015	Low potential to occur. Suitable coastal scrub habitat is present, however mesic habitats such as springs or marshes are absent. The only occurrence in the region[2] was last confirmed in 1962 and is located in Oak View (CDFW 2020). This species was not detected during 2018, 2019, or 2021 special-status plant species surveys.

Special-Status Plant Species Not Expected to Occur within the Biological Survey Area

Scientific Name	Common Name	Regulatory Status[1]	Habitat Requirements	Potential to Occur within the BSA
Streptanthus campestris	southern jewelflower	None/None/1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; rocky/perennial herb/(Apr)May–July/2,950–7,545	Not expected to occur. The site is outside of the species' known elevation range. Additionally, suitable habitat is not present.
Thelypteris puberula var. *sonorensis*	Sonoran maiden fern	None/None/2B.2	Meadows and seeps (seeps and streams)/perennial rhizomatous herb/Jan–Sep/164–2,000	Not expected to occur. Suitable meadow or seep habitat is not present.

1 **Status Legend:**
FE: Federally listed as endangered
SE: State listed as endangered
CRPR 1A: Plants presumed extinct in California
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants rare, threatened, or endangered in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Plants about which more information is needed – a review list
CRPR 4: Plants of limited distribution – a watch list
.1 Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

2 **Region:** "Region" refers to species recorded in the USGS 7.5-minute White Ledge Peak quadrangle, as well as the surrounding coastal quadrangles including Carpinteria, Pitas Point, Ventura, and Matilija (CDFW 2020; CNPS 2020).

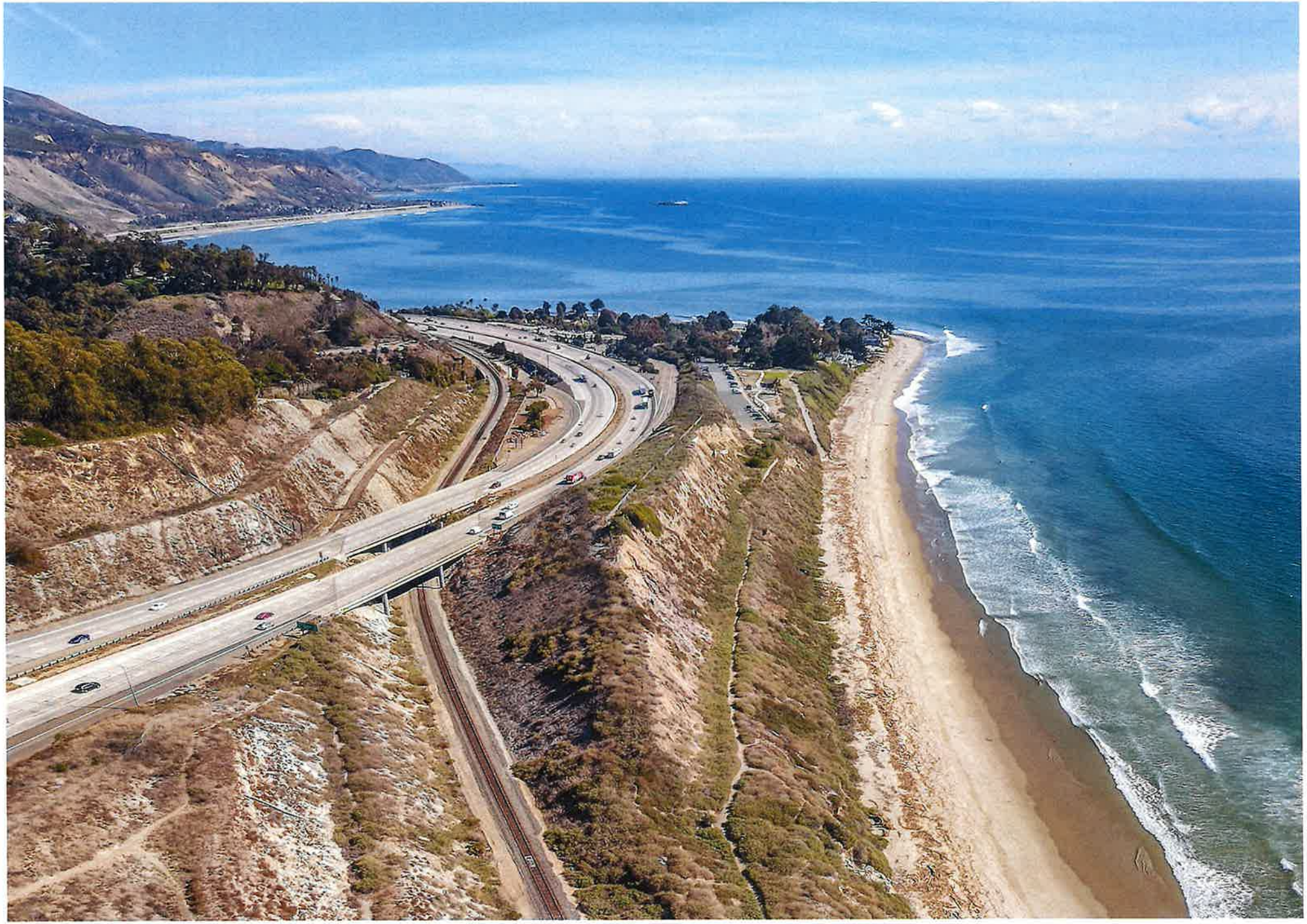
Exhibit 4

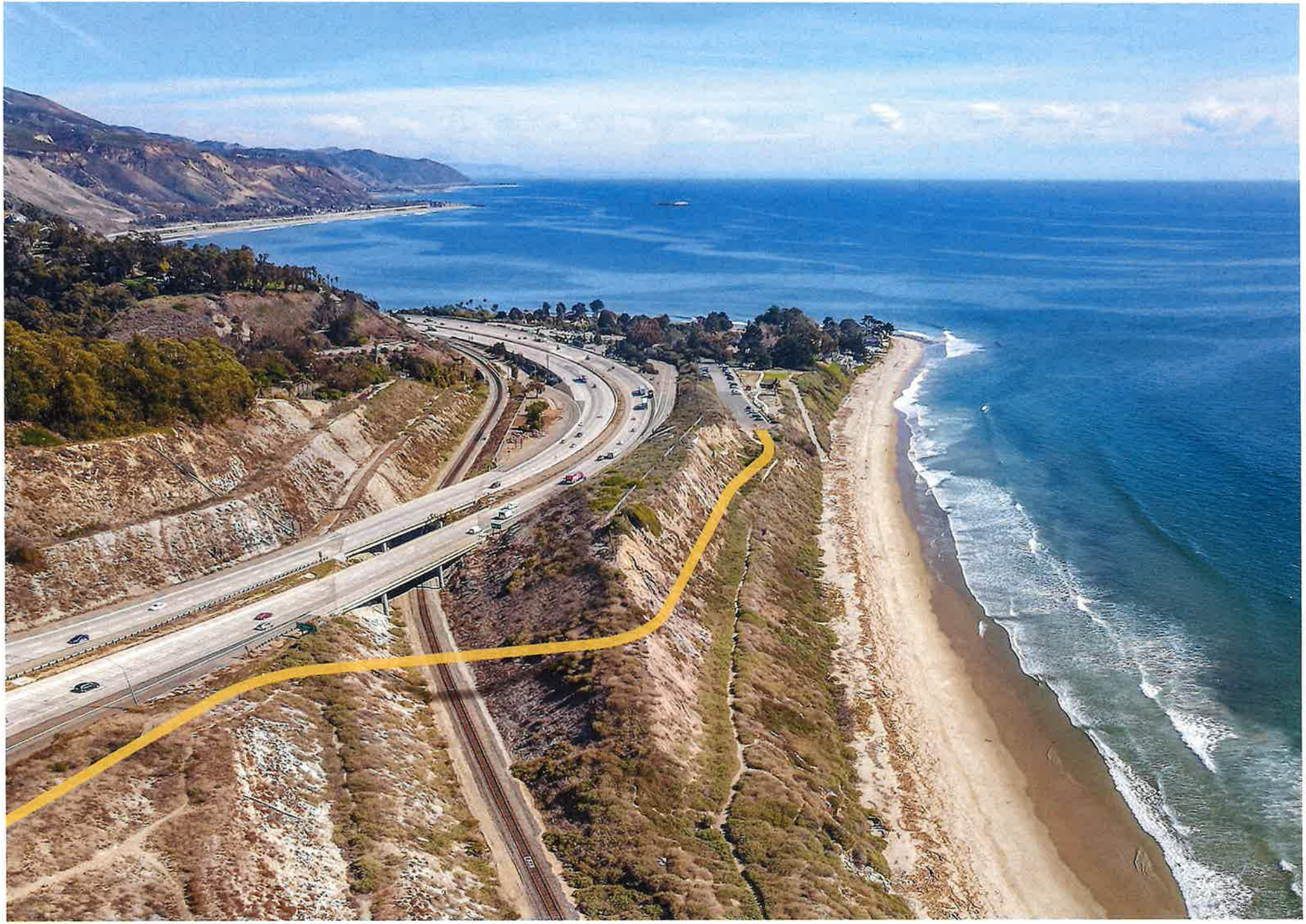
Supporting Project Exhibits & Graphics

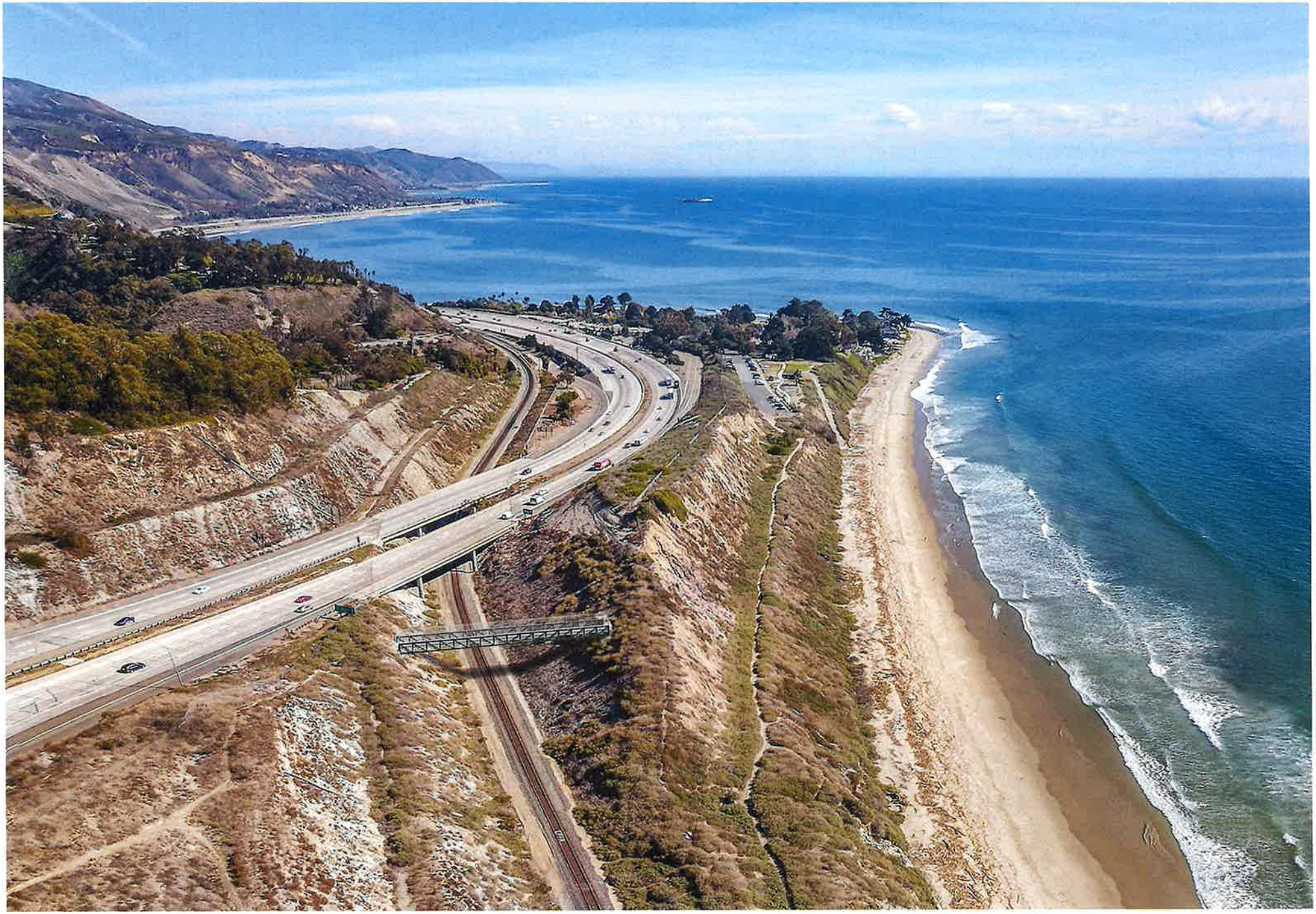
Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022



RINCON MULTI-USE TRAIL PLAN VIEW







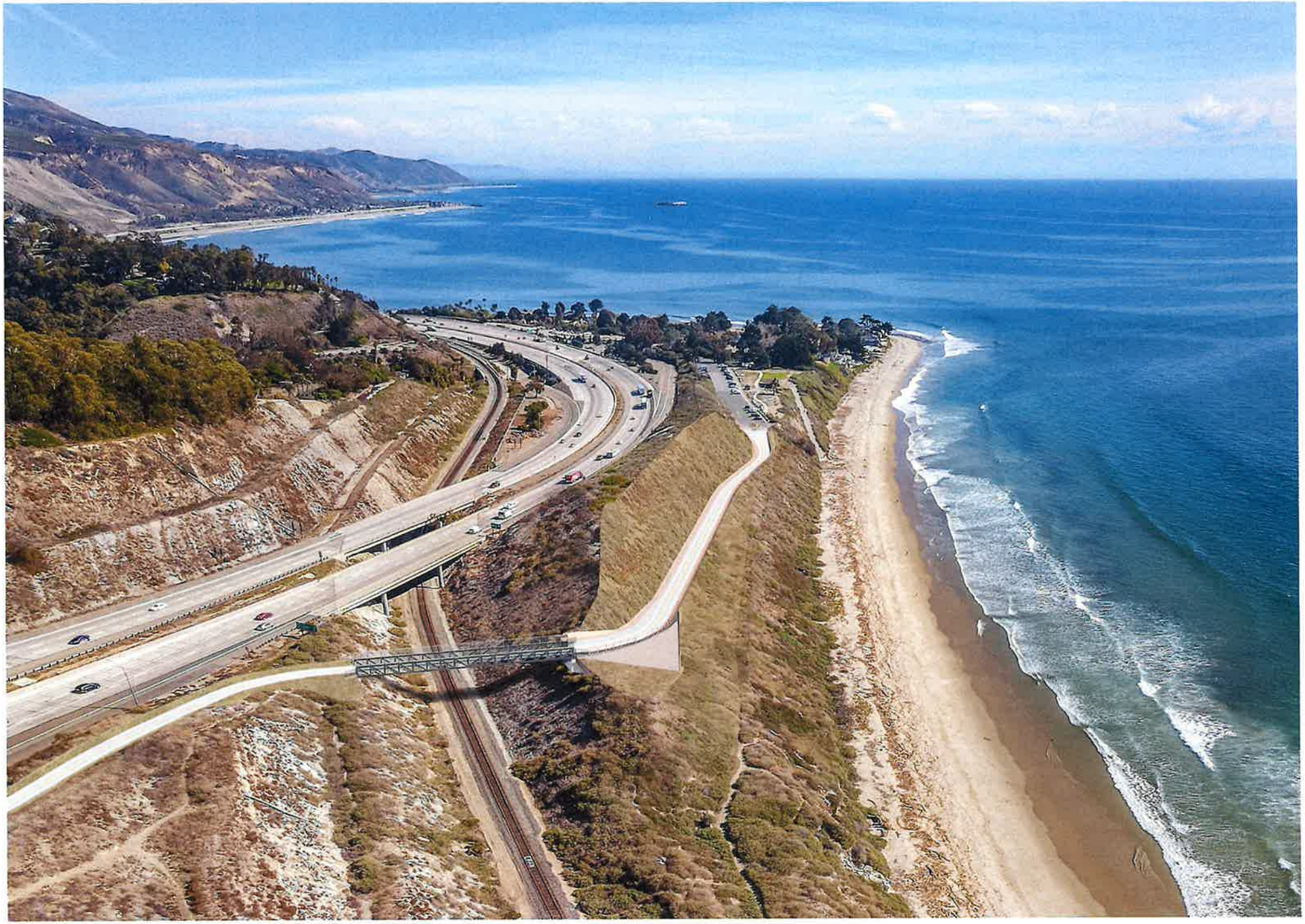






Exhibit 5

October 28, 2021 ARB Meeting Minutes & Public Comment Letters Submitted to the ARB

Rincon Trail Project
19-2015-CUP/CDP
PC Hearing, January 18, 2022

Boardmember Discussion:
Boardmember Reginato started the discussion by suggesting that the dumpster should be enclosed and that a few bougainvillea should be added to the landscaping along Linden Avenue.

Boardmember Blakemore agreed with Boardmember Reginato's comments and added that the bougainvillea should be extended along the full perimeter of the wrought iron fencing, including at the north side by the classrooms and along the church parking lot.

Boardmember Johnson asked if the wrought iron would be solid or hollow, and commented that the contractor should be consulted to ensure that the fence would not sag with weight added if the material will be hollow. He suggested that the trash enclosure should be large enough to contain the extra waste generated during special events. He agreed with the expanded landscaping, and suggested that additional landscaping should be added to the northern parking lot by the classrooms. He did comment that the fence is not consistent with the intentions of the design guidelines and he would prefer a 5-foot-tall fence, but understands that this fence will serve a specific purpose for the school.

Boardmember Stein agreed with the comments of the other boardmembers. He clarified that this project is different than the Reality fence because this fence is for a school and not a commercial enterprise. He agreed with Boardmember Johnson about the strength of the fence materials.

ACTION: Motion by Boardmember Johnson, seconded by Boardmember Blakemore, to recommend preliminary/final approval to the Community Development Director with the following comments:

- Construct a slatted chain link fence trash enclosure for the dumpster along the northerly property line; and
- Boardmember Blakemore to review an updated landscape plan based on ARB comments prior to issuance of any Building Permits.

VOTE: 4-0, Rodriguez abstained.

2) Project: Rincon Trail, 19-2015-CUP/CDP
Address: Eastern terminus of Carpinteria Avenue
Applicant: Matt Roberts, City of Carpinteria Parks and Recreation Department
Planner: Nick Bobroff

Request of Matt Roberts, City of Carpinteria Parks and Recreation Department, to consider Project 19-2015-CUP/CDP for preliminary review of a proposal to construct a new public multi-use trail connecting the eastern terminus of Carpinteria Avenue to Rincon Beach County Park located in unincorporated Santa Barbara County. The proposed trail would be approximately 16 feet in width and have a total length of 2,800 linear feet. The portion of the trail located within the City of Carpinteria is the westernmost 850 feet. The City portion of the project is located within City and Caltrans rights-of-way near the southeastern corner of the City.

No Ex Parte Communications were disclosed.

Staff presented the project to the Board, describing the overall project alignment and details, project history and objectives. Staff explained that because of the cross-jurisdictional nature of the project, the County SBAR had already reviewed the County portion of the trail at a conceptual level and the City

ARB was being asked to review the City's portion of the trail along with design features that should be common throughout the trail project (e.g., railings, fencing, etc.).

John Ilasin, Public Works Director, and Scott Onishuk, Bengal Engineering, provided some additional details about the bridge construction specifications, design standards from UPRR and Caltrans, and minor revisions made to the railing and fencing details ahead of the ARB meeting.

Public Comment:
James Zinder, President of the Santa Barbara Soaring Association, alleged that his group did not receive proper 14-day advance notice of the ARB meeting (staff note: Staff clarified that for ARB meetings, only 7-day notice is provided, which the SBSA confirmed receiving by email. Interested parties were also invited to submit their contact information to staff in order to be added to the notification list for future meetings.). He also stated that he believed the eastern terminus of the trail was unsafe due to emptying cyclists into the Rincon Beach parking lot.

Karl Cameron expressed his opposition to the project and referred to a petition signed by 3,000 others that were also opposed to the proposed trail alignment. He expressed skepticism over the severity of the ancient landslide and the inability to construct a trail through the area like what was shown on the original approved version of the project back in 2015, which he noted the soaring community did not object to since it would not have affected their flying conditions. He asked why the ARB were not considering Alternative 4 described in the EIR (trail along the highway to Bates Rd) or an Alternative 5 (trail on the other side of the highway). He reiterated his fear that, as proposed, the project would ruin the area for flying.

Ottis Gillespie made various allegations that construction has commenced on portions of the trail ahead of any permits or approvals being granted.

John Greynald urged the ARB to not approve the plans as presented, describing them as being too preliminary or tentative at this stage, and that more needs to be known and understood before approval is granted. He accused the City of "steamrolling" the soaring community by continuing to push this project forward despite the soaring community's opposition. He also alleged that the project is violating multiple City rules and asserted that the soaring community was prepared to file a lawsuit and would prevail.

George Jimenez submitted a public comment letter and summarized his comments verbally. He expressed his opposition to the proposed project, describing it as too large, incompatible with its setting, subject to excessive earthwork and erosion, likely to cause a dangerous condition for cyclists entering the Rincon Beach parking lot, and that it would ruin flying at the site forever. He urged the ARB and City staff to consider instead a trail on the north side of the bluff or the north side of the highway. He also alleged that he did not receive proper advance notification of the meeting. A copy of his entire letter is on file with the Community Development Department.

Janica noted that the Bates site is important to the soaring community both because it is a coastal site that allows for launching and landing in the same area, and because of the site's smooth laminar flow which creates favorable flying conditions. She noted that for free flight enthusiasts, the bigger the bluff face, the better, and that's why she was opposed to trail designs that required extensive earthwork. She recommended the trail be narrowed to 8 feet in width to reduce earthwork. She

expressed safety concerns for flying in areas with chain link fencing and light poles, as these pose obstacles that sails or other types of flying rigs can get snagged on.

Gary Mussell, Friends of Bates Beach, expressed concern over the trail directing cyclists into the Rincon Beach park parking lot. He explained he studied the location but could not come up with any likely routes that could be developed to safely convey cyclists down to Bates Rd along the edge of the parking lot to avoid cars. He noted that for this reason, the City's Environmental Review Committee expressed a preference for Alternative 4 (trail along north side of bluff) and urged the ARB to also consider this alternative. He also asked why there is no railing shown around the proposed bluff overlook area, suggesting this could be a safety hazard.

Public comment letters were received from the following individuals. Copies of the letters are on file with the Community Development Department:

Cary Hitsman submitted a public comment letter supporting the addition of a multiuse trail between Carpinteria Avenue and Rincon Beach County Park.

Leslie Ogden, President, Channel Islands Bicycle Club, expressed support for a trail connecting the City of Carpinteria to Rincon Beach County Park. She noted the regular use of the area by cyclists and explained the existing alternative options are not safe or suitable for all prospective trail users.

Edword Skuowl alleged that the proposed trail project would illegally harm endangered plant life, irreversibly alter the Migratory Bird Treaty Act, dangerously affect monarch butterflies in the area, and negatively impact California Condors. He supported Alternative 4 (trail along the north side of the bluff), which he believed would not have any of these impacts, would avoid a major lawsuit, and avoid changing the air flow of the area.

Boardmember Discussion:
The Boardmembers discussed the bridge railing and fencing, and how to treat the protective railing/fencing on top of the wing walls at each end of the bridge. It was suggested that rather than carrying the post and rail fence up to the bridge, it may be better to mimic the appearance of the bridge truss railing for the railing on the wing walls.

Bridge color was also a group topic. It was suggested that it would be preferential to simply leave the bridge structure and chain link safety fence as raw galvanized rather than painting these features. It was noted it would be lower maintenance and as the galvanized finish grays out, it would take on a subdued appearance that should blend in well. It would also generally match the finish of the bike path railing used south of Rincon along the shoulder of the highway.

Other comments from the Boardmembers included:

Boardmember Johnson recommended the lookout area be designed and shaped to look more organic and natural. Similarly, he recommended the bluff faces also be sculpted to give them a more naturalized look. Revegetation of the affected areas will be important to achieve an attractive appearance. He supported the use of the post and rail fence for the trail. He suggested use of a color concrete would be a nice feature. He also supported the inclusion of subdued solar lighting along the trail, where needed for safety.

Boardmember Blakemore noted that she will be very interested in reviewing the restoration and planting plan once it's ready. She expressed her preference for the continuation of the post and rail fence for the northern portion of the trail, if allowed by Caltrans.

Boardmember Reginato explained that he liked the appearance of the post and rail fence but thought it would be wise to switch to a concrete product with the same appearance for maintenance reasons. He clarified that he would like to see the trail descend to the existing (former) railroad bench as soon as possible in order to minimize alteration of the bluff face. He described the end of the trail at Rincon Beach Park as being dangerous as there is not a safe space for cyclists to ride through the lot currently, and noted he could not support the project as currently proposed because of this element of the design. He asked whether e-bikes would be allowed on the trail, noting they travel at high speeds which would add further danger for traveling through the Rincon Beach Park parking lot.

Boardmember Rodriguez liked the idea of using a concrete version of the post and rail fence. He also supported continuing the post and rail fence for the north portion of the trail, if allowed. He pointed out the existing cypress trees that grow along the north bluff adjacent the on-ramp and suggested it could be nice to continue these along this side of the trail, if possible. He agreed that lighting for safety is needed in some parts of the trail and that it could be kept low in height and intensity. If possible, he asked the design team to study options for integrating the bridge railing and safety fencing into one feature, like what is used on the new freeway overpasses in Carpinteria. He also asked if there were any options for modifying and extending the existing walkway along the park to serve as a continuation of the bike path through the parking lot.

Boardmember Stein had no objections to the proposed alignment. He agreed with the other Boardmembers about the preference for a concrete post and rail fencing, and about safety concerns at the Rincon Beach park end of the trail.

ACTION: Motion by Boardmember Rodriguez, seconded by Boardmember Johnson, to recommend preliminary approval to the Planning Commission with their comments attached.

VOTE: 5-0

OTHER BUSINESS:

CONSENT CALENDAR:

3) Action Minutes of the Architectural Review Board Meeting of October 14, 2021

ACTION: Motion by Boardmember Rodriguez, seconded by Boardmember Blakemore, to approve the Minutes as presented.

VOTE: 4-0-1 (Stein abstain)

MATTERS REFERRED BY THE PLANNING COMMISSION/CITY COUNCIL: None

MATTERS PRESENTED BY BOARDMEMBERS/STAFF:

4) Sanctuary Beach Condominiums: Staff presented two requested revisions for the Board's consideration. One revision would raise the window head heights on the rear building in order to

Nick Bobroff

From: Cary Hitsman <chitsman@gmail.com>
Sent: Wednesday, October 27, 2021 8:21 AM
To: Nick Bobroff
Subject: New Carpinteria Multi Use Trail

Follow Up Flag: Follow up
Flag Status: Flagged

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

I support the addition of a multi use trail from Carpinteria Ave to Rincon Beach County Park.

Cary Hitsman

Nick Bobroff

m: President CIBike <presidentcibike@gmail.com>
Sent: Monday, October 25, 2021 9:54 PM
To: Nick Bobroff
Subject: Multi-Use Path Connector to Rincon Beach County Park

Follow Up Flag: Follow up
Flag Status: Flagged

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Nick Bobroff, Principal Planner
Community Development Department
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013

Subject: Multi-Use Path Connector to Rincon Beach County Park

Dear Mr. Bobroff:

The Channel Islands Bicycle Club (CIBike) is an organization of over 300 cyclists in Ventura County. We regularly bike the coast route between Carpinteria and Ventura. CIBike advocates for safe bicycle infrastructure and promotes cycling for commuting, recreation, tourism and sport.

CIBike supports the construction of a multi-use path to connect the City of Carpinteria to Rincon Beach County Park and the Ralph Fertig Coastal Bike Path. The coast route between Carpinteria and Ventura is part of the official Pacific Coast Bike Route. As a result, we regularly see long-distance, fully loaded bikes traveling through the area. Additionally, large numbers of residents and visitors routinely bike the route between Carpinteria and Ventura.

Currently, cyclists must use Bates Road or ride on the Interstate 101 shoulder. Neither is suitable for less experienced cyclists or families with children. Walkers regularly travel along the railroad tracks between Carpinteria and Rincon Beach Park, also clearly unsafe. A dedicated bike/walking path will greatly enhance safety for all.

We understand there are design issues for the path still being considered through the planning and public review process. CIBike maintains that the benefits of bicycling and walking for recreation and transportation are significant and provide ample justification for a well-designed, safe, multi-use path.

Thank you for your efforts to expand access for walkers and cyclists to Carpinteria and Santa Barbara County's coastal areas.

Sincerely,

Leslie Ogden
President, Channel Islands Bicycle Club

Nick Bobroff

From: ME <drawdeylf@gmail.com>
Sent: Thursday, October 21, 2021 8:42 PM
To: Nick Bobroff
Subject: Re: Carpinteria Rincon Multi-Use Trail
Attachments: image006.png

Follow Up Flag: Follow up
Flag Status: Flagged

****EXTERNAL EMAIL****

CAUTION: This email originated from outside the City of Carpinteria. DO NOT OPEN attachments or CLICK on links unless you are sure they are safe. Remember, reputable vendors, banks, etc. will not ask you to disclose passwords or other sensitive information.

Hey Nick

There was a Proposed plan 4 last time.

What happened?

1 you are still ILLEGALLY altering Endangered plant life in the Pictured Plan. FEDERAL LAW INFRACTION
2 you are IRREVERSIBLY altering the MIGRATORY bird act. FEDERAL LAW INFRACTION.
3 the MONARCH butterflies that are currently living At the Point will be Dangerously effected. As a Nearly Endangered species.
4 California Condors an their last spot they come to FEED an SOAR before turning back towards Fillmore CA! Federal law Infraction.

So why are we back to plan 1? We all moved onto plan 4.

Which does NOT effect the Migratory birds, does m
Not affect the Monarchs, an does not Affect the Endangered plant spices on the front of the hill. Leaves the Condors out of the picture.
Avoiding Major Law Suits. AVOIDING changing the Air Flow (coreolus effect/rotor) through the Multi million dollar homes an Monarch habitat.

Which are ALL AGAINST Federal Law. No matter what the Little white rule Book says.

Is the city of Carpinteria that Desperate for 6million dollars? With Pending litigation over the said plan that could cost 40-50million in legal fees by the time 4 Major Federal law suits were all done.

Seriously concerned

Mr. Edword, Skuowl
Citizen/resident