Planning Commission
Meeting Agenda
*AMENDED

Monday, April 3, 2023 at 5:30 pm

City of Carpinteria, Council Chamber

5775 Carpinteria Avenue

Carpinteria, CA 93013

*Teleconference Location: 752 Kippen, Mayne Island, BC Canada, V0N 2J1

In-Person and Virtual Meeting

Attendance/Viewing Options:

- Attend the in-person meeting in City Council Chambers at City Hall (5775 Carpinteria Ave.)
- View the meeting live through the City's website (https://carpinteriaca.gov/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.
- 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@carpinteriaca.gov, (PLEASE NOTE NEW PUBLIC COMMENT EMAIL ADDRESS) or (2) the **eComment** link on the City's agenda website(https://carpinteriaca.gov/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.carpinteriaca.gov 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 Moyer
David Allen
Katherine Salant

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

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

1) **Via Real Hotel**
   Project # 16-1822-DP/CDP
   Address: 4110 Via Real
   Applicant: Kush Nathu, RAM Hotels
   Planner: Nick Bobroff

   Hearing on the request of Kush Nathu, RAM Hotels to consider Project 16-1822-DP/CDP (application filed April 19, 2016) for approval of a Development Plan and a Coastal Development Permit to demolish an existing 5,678 square foot former church building and all associated improvements, and to construct a two-story, 72-guestroom, 44,191 square foot hotel and associated improvements under the provisions of the Commercial Planned Development zone district and Residential Overlay district; and to approve the Mitigated Negative Declaration pursuant to the California Environmental Quality Act ("CEQA") Guidelines. The MND and all documents may be reviewed at the Community Development Department, 5775

Carpinteria Avenue, Carpinteria. The application involves APN 004-017-022, addressed as 4110 Via Real.

OTHER BUSINESS

MATTERS PRESENTED BY COMMISSIONERS

DIRECTOR'S REPORT

2) Architectural Review Board Meeting Minutes of January 26, 2023, and February 16, 2023
3) City calendar for the month of April, 2023
4) Planning Activity Report as of March 30, 2023
5) Building Permit Report as of March 30, 2023

ATTENDANCE OF PLANNING COMMISSIONERS FOR THE NEXT MEETING OF MONDAY, May 1, 2023

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@carpinteriaca.gov) 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, March 30, 2023 in the Community Development Department, on the City Hall Public Notices Board, and on the Internet.

PLANNING COMMISSION STAFF REPORT

MEETING DATE: APRIL 3, 2023

ITEM FOR CONSIDERATION

Via Real Hotel

16-1822-DP/CDP

Request for a Development Plan, and Coastal Development Permit to allow the removal of an existing 5,678 square foot former church building and all associated improvements, and the construction of a two-story, 72-guestroom, 44,191 square foot hotel and associated improvements under the provisions of the Commercial Planned Development with Residential Overlay zone district of the Carpinteria Municipal Code; and to approve and certify the Mitigated Negative Declaration ("MND") prepared for the project pursuant to the California Environmental Quality Act ("CEQA") Guidelines.

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

SIGNATURE

Reviewed by: Steve Goggia, Director
Community Development Department

SIGNATURE

Owner/Applicant: RAM Hotels

Agent: Kush Nathu

Project Location: 4110 Via Real

APN: 004-017-022

Zoning: Commercial Planned Development with Residential Overlay ("CPD/R")

General Plan Designation: General Commercial ("GC")



I. RECOMMENDATION

Adopt the attached Planning Commission Resolution No. PC-23-004, thereby approving Project 16-1822-DP/CDP to allow the removal of an existing 5,678 square foot former church building and all associated improvements, and the construction of a two-story, 72-guestroom, 44,191 square foot hotel and associated improvements under the provisions of the Commercial Planned Development with Residential Overlay zone district of the Carpinteria Municipal Code; and to approve and certify the Mitigated Negative Declaration ("MND") prepared for the project pursuant to the California Environmental Quality Act ("CEQA") Guidelines.

II. PROPOSED PROJECT DESCRIPTION

Development Plan

RAM Hotels proposes to construct and operate a 72-guestroom hotel on a 2.6-acre site. An existing single story, 5,678 square foot church building, children's play area, parking lot, vegetable garden and several small storage sheds would all be demolished and removed to accommodate the project. The new two-story hotel would have a building footprint of 22,460 square feet and a total square footage of 44,191 square feet. The maximum height of the new hotel would vary from 21 feet 10 inches to 25 feet, measured from the new finished grade to the top of the roof parapets.

In addition to 72 guestrooms, the hotel would include a fitness center, business center, breakfast area, meeting room, outdoor pool, and outdoor garden patio. The hotel would also include typical support services (i.e., main lobby, admin/offices, employee breakroom, kitchen, laundry/storage, etc.). Twelve employees would be required to operate the hotel during every eight-hour shift. The hotel will operate with twelve employees daily working the following 3 shifts: Morning from 7:00 AM to 3:00 PM; Evening 3:00 PM to 11:00 PM; Overnight 11:00 PM to 7:00 AM

The project would be served by one driveway accessed from Via Real at the southeastern corner of the property. A 77-space surface parking lot and two loading zones would serve the proposed hotel and be located around the side and rear perimeter of the project site. New site landscaping, lighting and walkways are proposed throughout, including around the building perimeter and around the parking lot. A new masonry wall would be constructed along the side and rear property lines. In some cases, the new wall would be located on top of a retaining wall to account for grade differences between adjoining properties. A separate paved private driveway easement located along the west (side) property line is proposed to remain "as is," and will continue to serve several properties located to the north (behind) the subject property.

The project requires earthwork and grading (estimated at 4,700 cubic yards of cut; 2,900 cubic yards of fill; net export of 1,800 cubic yards of cut) in order to establish a level building pad, meet flood zone requirements and address site drainage needs. The finished floor height of the proposed hotel would be, in places, up to approximately two feet six inches above existing grade. Onsite stormwater improvements included in the project description include use of pervious concrete paving for parking areas, use of landscaped retention basins around the perimeter of the hotel building to capture roof runoff, and the expansion and improvements of a large, landscaped stormwater treatment and detention basin along the project's Via Real frontage. Other surface and underground storm drain improvements are required to convey onsite stormwater flows to the proposed treatment and detention basin.

An existing drainage feature that runs north-to-south along the project site's western edge would be protected in place and enhanced as riparian habitat. A 50-foot protective creek buffer would be established and restored with appropriate riparian and upland native plantings. A permeable walking trail and passive seating area is proposed within the creek buffer area. A separate area of riparian woodland located along the northern (rear) property line, approximately at the middle of the site would be protected in place.

Utility improvements required as part of the project include installation of a new eight-inch water line underneath the eastern hotel drive aisle to connect the existing main line in Via Real to the water line north of the project site in the Trieste Lane right-of-way. New water meters and connections for the building, irrigation system and fire protection system would tie the proposed hotel into the new water line. A new fire hydrant would be constructed toward the rear northeast corner of the hotel; the existing hydrant at the project's southeast corner would remain. A new eight-inch sewer line would run through the eastern drive aisle toward the northeast corner of the property and continue on a northerly route up Trieste Lane, connecting to an existing main line on Venice Lane. A new underground pump station would be placed at the northeast corner of the hotel's parking lot, underneath a parking space. An existing sewer pump house and force main would be removed during site demolition and prep.

Proposed offsite and frontage improvements include re-constructing the driveway curb cut and apron at the project entrance, new street lane striping to allow for left-hand turn movements into- and out of the project site and restriping the bicycle lane across the project frontage.

Coastal Development Permit

A Coastal Development Permit is required to allow the proposed development as described above.

Proposed plans are included with this report as Attachment A, Exhibit 1. Story poles were erected in 2016 for the original iteration of the project. However, following multiple iterations of the project that each further reduced the overall building size and scale (discussed in more detail in the project history section, below), revised story poles were not required to be re-erected.

III. BACKGROUND

Site Characteristics and Setting

The project site is located in an urban area toward the west end of the City of Carpinteria, north of U.S. Highway 101 (U.S. 101), on Via Real. The 2.6-acre (113,839 square feet) site is presently improved with a single story 5,678 square foot church building, a children's play area, a surface parking lot, and vegetable garden. Several small storage buildings are located toward the rear of the property adjacent to the vegetable garden area. The site sits slightly above Via Real in elevation and slopes gently toward the street.

Several access, utility and drainage easements encumber the property: A 30-foot-wide easement for a water line runs along the property's east (side) property line; a three-foot wide easement occupies a portion of the same strip of land for other public utilities. Along the west (side) property line, a 30-foot-wide strip of land is encumbered by a (20-foot wide) access easement for the adjacent properties to the north behind the subject property, and a 10-foot-wide easement for drainage purposes (to accommodate historic offsite drainage from northerly properties and convey it to the existing outlet and culvert at Via Real). The drainage easement is occupied by the existing vegetated drainage feature that runs north to south through the property and expands to also encompass a 50-foot by 130-foot area at the southwest corner of the property around the existing concrete headwall and drainage outlet. A 10-foot-wide sewer easement traverses the southwest corner of the property as well.

The site is located within the 100-year floodplain (Zone A) according to the current FEMA Flood Insurance Rate Map ("FIRM") for the area. Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study ("FIS") by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations ("BFEs") or depths are available for this zone. However, a project-specific drainage study conducted by Stantec utilized the Letter of Map Revision based on fill ("LOMR-F") for the adjacent "Casas de las Flores" project, which was accepted by FEMA and established a BFE for the adjacent site. Extrapolating from this adjacent site, the Stantec study estimated the elevation at the project site to be 13.04 feet. In accordance with standard practices, the finished floor elevation ("FFE") of the proposed structure will be elevated a minimum of two feet above the 13.04-foot elevation.

The project site is located in the northwest corner of the City, and is bordered by agricultural land (in unincorporated Santa Barbara County) and single family residences to the north, an existing 37-unit apartment complex ("Pueblo del Estero," 4140 Via Real) to the east, the 43-unit "Casas de las Flores" affordable housing development immediately to the west, and Via Real/U.S. 101 to the south. This area of the City includes a mix of residential and commercial developments, including several nearby motel developments (Motel 6; and Sandyland Reef), limited retail/commercial/office uses and several larger multifamily residential developments. The area is included within Subarea 3 (Santa Monica, Canalino and El Carro Neighborhoods) in the Community Design Element of the City's General Plan / Coastal Land Use Plan.

The site is zoned Commercial Planned Development with a Residential Overlay ("CPD / R"). The property is subject to the Flood Hazard ("FH") and Coastal Appeals ("CA") overlay districts due to the site's location within the 100-year floodplain and the presence of the onsite drainage feature which meets the California Coastal Commission's definition of a stream feature. The property has a General Commercial ("GC") land use designation.

Project History

Conceptual Review

On two separate occasions, joint conceptual review hearings were held with the City Council and Planning Commission to consider possible hotel projects at this location. In July 2013, the Council and Commission reviewed a concept proposal for two hotels on the property. Both hotels were proposed to be three stories in height and contain a cumulative total of 150 guestrooms (one hotel would contain 70 rooms; the other 80 rooms). Each hotel would have contained its own meeting room, breakfast area, fitness center and indoor pool. Respective square footages for the two hotels were 37,929 square feet (70-room hotel) and 42,348 square feet (80-room hotel). Both hotels would have reached a maximum height of 30 feet. The two hotels would have shared a 150-space parking lot.

Overall, the prospect of developing a hotel project on the subject property was looked upon by some of the decision makers as possibly being an acceptable use at this location, however, the proposed two-hotel concept was viewed as both too intensive for the site and not sensitive to its setting. Concerns were expressed over the size, bulk and scale of the structures, the three-story height of both buildings, the character/design of the project, the compatibility of the project with neighboring properties (including setbacks from adjacent agricultural operations), the lack of adequate parking, and the potential for traffic impacts resulting from the project. It was suggested the applicants

consider an alternative design that was smaller in scale, lower in height, better addressed the street and was more sensitive to neighboring uses. On several occasions, the "Best Western" hotel on Carpinteria Avenue was referenced as a successful example for the applicant to consider in restudying the project.

In April 2014, the applicant returned to the City Council and Planning Commission with a revised concept for consideration. The revised concept continued to include two separate hotels on a shared lot, however elements of the project design had been changed in an attempt to address comments received at the previous concept hearing. These changes included reducing the total room count by 10 guestrooms (to 140 rooms, total), revising the building layouts and floor plans to be only partially two and three stories in height (and incorporating new second and third floor landscaped terraces), utilizing a shared, centralized outdoor "resort style" pool, and increasing the total number of parking spaces provided onsite to 157 spaces (127 of which would have been provided in a subterranean garage).

While the Councilmembers and Commissioners acknowledged the improved redesign, multiple concerns remained related to building height, impacts to view corridors, how the development related to the street, the potential for traffic impacts and the extent of the provided agricultural buffers. Several of the decision makers indicated they would prefer to see a single two-story hotel on the site.

Architectural Review Board

Following the second joint concept review hearing, the applicant submitted a formal Development Plan and Coastal Development Permit application in April 2016, for a single 110-room hotel project with a total square footage of 55,465 square feet and a maximum height of up to 30 feet. Over the course of several meetings with the Architectural Review Board ("ARB") during the winter of 2016 and spring of 2017, the project was slightly scaled back in size (reduced to 102 rooms), and the building facades and architectural treatments run through a series of studies in an effort to address concerns raised by staff, neighbors and the ARB over the project's size, bulk, scale and impacts to public mountain views, and settling on an architectural character that related to Carpinteria's small beach town character. The revised project ultimately received a recommendation for preliminary approval from the ARB at their March 30, 2017 meeting.

Subsequent to the recommendation for preliminary ARB approval, a biological study completed in support of the required environmental review needed for the project determined that the onsite manmade drainage feature that runs north to south near the western boundary of the property met the California Coastal Commission's ("CCC") definition of a wetland. Following further study and direct consultation with CCC staff, it was determined by CCC staff that the drainage feature was more appropriately classified as a creek feature due to its hydrologic connection between adjacent upstream and downstream areas. As the site is located within the California Coastal Zone ("Coastal Zone"), and creeks are protected under the California Coastal Act ("Coastal Act"), the (original) hotel project could no longer be found to be consistent with applicable resource protection policies of the Coastal Act since the proposed design called for the filling of this drainage feature to facilitate the proposed hotel and parking lot. Accordingly, the determination of the drainage feature as a protected creek resource forced a redesign of the project to provide the required 50-foot setback from the edge of the creek to all new development.

A revised version of the project returned to the ARB in summer/fall 2019 to show how the site plan and development footprint had changed to conform to the required creek setback. Overall, the previously-approved architectural treatment and building facades were preserved but in a reduced footprint to account for the required setback. Over the course of two meetings, the applicant and ARB worked to refine the updated version of the project culminating in a (revised) recommendation for preliminary approval at their November 21, 2019 ARB meeting with the following comments:

- Consider use of a climbing vine, such as creeping fig (*Ficus repens*), on the east property line wall to visually soften areas around the parking lot where there is not adequate space available for landscape planters;
- ARB expressed a preference for the "Option 2" color and material scheme for the exterior building treatments.

A copy of the approved Minutes from the November 21, 2019 ARB meeting is included as Attachment B.

IV. ENVIRONMENTAL

An Initial Study checklist was completed for the project in 2022 in order to determine the potential significance of any environmental impacts pursuant to the California Environmental Quality Act ("CEQA"). Based upon anticipated environmental effects, a Mitigated Negative Declaration ("MND") was prepared for the project. The MND describes the proposed project and evaluates the potential for environmental impacts resulting from the project, and provides proposed Mitigation Measures that, if implemented, would reduce the severity of identified project impacts to less-than-significant levels.

The MND identified Class II impacts (significant, but feasibly mitigated to less-than-significant levels) for the following categories: Aesthetics; Agriculture and Forestry Resources; Biological Resources; Cultural Resources; Geology and Soils; Hydrology and Water Quality; Land Use and Planning; Noise; and Tribal Cultural Resources. With the incorporation of identified Mitigation Measures, all of these potential impacts would be reduced to a less-than-significant level. Additional Class III impacts (less-than-significant) were identified for: Aesthetics; Air Quality; Energy; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Noise; Population and Housing; Public Services; Recreation; Transportation; Utilities and Service Systems; and Wildfire. No Mitigation Measures are required to offset Class III impacts. The project's Class II impacts and proposed mitigation measures are summarized and included in the Mitigation Monitoring and Reporting Plan ("MMRP) included as Appendix I of the Proposed Final MND.

The Draft MND was available for a 30-day public review period from October 17, 2022 through November 16, 2022. During the public review period, comment letters were received from Sam Fearer from the California Coastal Commission, Ted Hamilton from the Santa Barbara Air Pollution Control District ("APCD"), Julie Tumamait-Stenslie of the Barbareño/Ventureño Band of Mission Indians (Chumash), and from Crystal Mendoza on behalf of the Santa Ynez Band of Chumash Indians. Their respective comments are summarized as follows: Mr. Fearer commented on the required protective buffers and restoration plans for the onsite riparian areas, and as a non-CEQA matter, raised the matter of providing low-cost visitor accommodations in accordance with the

Coastal Act. Mr. Hamilton offered several minor clarifications to the Air Quality discussion concerning references to APCD's most current clean air plan and the current County attainment status for Ozone (O_3). Ms. Tumamait-Stenslie recommended that a qualified archaeologist and Chumash tribal representative monitor be present during initial ground disturbance in case any unknown cultural resources are discovered. Ms. Mendoza acknowledged receipt of the Draft MND but had no further comments to share at this time.

A public hearing was held during the 30-day public review period with the City's Environmental Review Committee ("ERC") on November 1, 2022 to consider the adequacy of the Draft MND. No public comments were received, however, the ERC members shared a number of comments for suggested minor revisions to the Draft MND. These included: clarifying that the required buffers and restored riparian areas be protected through a deed restriction for the life of the project; revising references to "finished floor" to instead refer to "lowest floor" in the flood hazards discussion; acknowledging required compliance with the State's Model Water Efficient Landscape Ordinance ("MWELO"); including reference to Caltrans' use of quiet pavement and construction of any new nearby sound walls in the Noise section discussion; and clarifying whether the City's consulting biologist would be responsible for reviewing and approving the project's required restoration plan prior to acceptance by the City.

The Proposed Final MND includes a new Appendix J, Response to Comments, which summarizes the comments received, and where appropriate, refers the reader to where the relevant and/or updated discussion is located in the Proposed Final MND. Overall, only minor clarifications or revisions were necessary to address the comments received. Since all of the revisions incorporated into the Proposed Final MND simply clarified or provided additional details concerning the project, or made other insignificant changes to the Draft MND, the Proposed Final MND fails to rise to the level of requiring recirculation of the Draft MND pursuant to CEQA Guidelines §15088.5.

A copy of the Proposed Final MND is included as Attachment C.

V. ANALYSIS

The Planning Commission's review of this project is in its quasi-adjudicative capacity based on the record and information available at the meeting. The Planning Commission makes findings, based on factual evidence, that the proposed project complies with the City's General Plan/Coastal Land Use Plan and the relevant requirements of the Carpinteria Municipal Code ("CMC") in order to preserve the public health, safety or general welfare of the City.

The discussion below provides an analysis of the project in terms of its compliance with the relevant requirements of the CMC, and with the policies and objectives of the City's General Plan/Coastal Land Use Plan.

Carpinteria Municipal Code, Title 14, Zoning

Commercial Planned Development ("CPD") District, CMC §14.20

The subject property is zoned Commercial Planned development ("CPD") with a Residential ("R") Overlay. The CPD zone district allows for a range of commercial uses, including but not limited to, hotels and motels, subject to approval of a Development Plan and Coastal Development Permit by the

Planning Commission. The R Overlay would also allow this site to be eligible for consideration of a residential-only development in an otherwise commercial zone. The following table identifies the project's conformance with the applicable development standards for the CPD zone district:

Standard	Requirement/Allowance	Proposal
Setbacks Front	35 feet from centerline of street or 5 feet from property line, whichever is greater.	70 feet from centerline of street; 40 feet from property line.
Side (East)	20 feet min. from a residentially-zoned parcel	50 feet
Side* (West)	0 feet min.	90 feet
Rear	20 feet min. from a residentially-zoned parcel	69 feet
Height	30 feet max.	21 feet 10 inches to 25 feet
Density	N/A	N/A
Parking	1 space per guestroom (72) + 1 space per employee (5) 77 total spaces required	77 spaces provided
Off-street loading facilities	The Planning Commission determines the number of loading spaces which are to be not less than 10 x 30 feet.	Two loading spaces are provided
Landscaping	20% min. where feasible (22,768 sq. ft.); absolute min. of 10% (11,384 sq. ft.)	42% inclusive of walkways & terraces (47,883 square feet) 37% (41,721 square feet) planted areas, inclusive of creek buffer area
Masonry Wall	Where a commercial or office use abuts property in any residential zone, a masonry wall six (6) feet in height shall be erected and maintained between such uses and the residential zone.	6-foot high masonry wall proposed along the east side and rear property lines.
Screening of mechanical equipment & trash receptacle areas	Must be completely screened from surrounding properties by use of wall or fence, or enclosed within building	Mechanical equipment located inside building Fenced trash enclosure provided in rear yard

**See Creeks Preservation Program discussion below.*

As proposed and as demonstrated in the above summary table, the project complies with all applicable development standards for the CPD zone district.

Development Plan Approval

Pursuant to CMC 14.20.030, approval of a Development Plan is required to allow the proposed construction and operation of the described hotel. In order to approve a Development Plan for the project, the Planning Commission must make all of the findings for approval provided for in CMC 14.68.030, (Development Plan) Processing, which are listed below:

a. *The proposed development is in conformance with the provisions of the applicable zoning district, Local Coastal Plan and implementation programs, and General Plan.*
b. *The proposed development is sited and designed to avoid risks to life and property due to geologic, flood, or fire hazards and that the proposed density of development is consistent with these objectives.*
c. *The proposed development will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*
d. *The proposed development will not conflict with any recorded easements acquired by the public at large for access through the property or use of the property or any easements granted to any public agency or required as a condition of approval.*
e. *The proposed development will not adversely affect necessary community services and values including but not limited to traffic circulation, sewage disposal, fire protection, water supply, and police protection.*
f. *The proposed development will not be detrimental to the peace, health, safety, comfort, convenience, property values, or general welfare of the neighborhood.*

Staff believes all of the necessary findings for approval can be made. The proposed project is consistent with the type and intensity of development anticipated in urbanized areas of the City's commercial zoning districts. The project represents a reinvestment in an underutilized property along one of the City's main east-west arterial streets, and helps to serve an unmet need for visitor accommodations within the City. As designed, the project is consistent with all applicable requirements of the City's General Plan/Coastal Land Use Plan and Carpinteria Municipal Code, including Title 14, Zoning. The property is not located in a fire hazard zone. The project is located in a flood hazard zone according to the current FIRM for the area, but has been designed in compliance with building and construction standards for such settings.

The project has been designed to not interfere with any of the existing public utility or private access easements that encumber the property. Likewise, the project has been designed in accordance with the habitat protection policies of the City's Creeks Preservation Program, including but not limited to, the required 50-foot minimum buffer from the top of bank of the existing drainage channel. Necessary utilities and infrastructure to serve the project are in place and presently serve the existing church building on the site. Infrastructure upgrades proposed as part of the project would, in part, improve service for surrounding land uses in addition to benefitting the project itself. Appropriate conditions have been included in the project conditions of approval to address parking, geologic, noise, water quality, and air quality considerations. Additional supporting evidence is provided in the Findings for Approval, included as Attachment A, Exhibit 1 to this report.

Formula Business Regulations

In June 2022, the City Council adopted a temporary moratorium on the establishment of any new formula business, which was defined as any commercial business operating as a retail sales (with certain exceptions), restaurant / food service, and/or hotel or motel establishment, and which (a) has more than seven locations anywhere in the United States of America; and (b) has two or more of defined features common to all or substantially all of its locations (e.g., standardized array of services or products for sale, façade, architecture, décor, signage, etc.). In July 2022, the City Council extended the moratorium for an additional 10 months and 15 days, expiring on June 26, 2023 to allow time for staff and the City Council to develop and adopt permanent formula business regulations. The Council may extend the temporary moratorium for up to one additional year, if necessary, to allow sufficient time for the permanent regulations to be effectuated.

In February 2023, the City Council adopted upon a first reading, proposed permanent formula business regulations. The proposed permanent formula business regulations are substantially similar to those adopted for the temporary moratorium with several important distinctions: (a) it provided definitions of key terms; (b) provides an exemption from the regulations for the transfer of ownership of an existing formula business, provided the operation of the formula business remains substantially the same; and (c) establishes a public interest exception for the establishment of a formula business. The proposed permanent regulations will next be considered by the California Coastal Commission for certification, after which the permanent regulations will return to the City Council for adoption and effectuation upon a second reading of the ordinance. The City anticipates that this process will be complete prior to the termination of the temporary moratorium.

As hotels are one of the enumerated types of commercial uses that fall under the purview of both the temporary moratorium on formula businesses, and the proposed permanent formula business regulations, the operator for the hotel must comply the formula business regulations in place at the time of application for a certificate of occupancy and business license.

Planning staff has informed the applicant of the regulations, and applicant has not objected to them either during private discussions with staff or at any of the public meetings establishing the formula business regulations. Effectively, this would require the hotel to be operated as an independent entity or as part of a small brand with no more than seven locations total nationwide. Alternatively, the hotel operator could pursue an exception from the permanent regulations under the provided public interest exception once the permanent regulations are effectuated. If such an exception were granted, the operator would not be required to comply with the formula business regulations. The applicant may be available to respond to questions about its plan to comply with the City's formula business regulations. A condition addressing this requirement has been included in the recommended project conditions of approval (see Attachment A, Exhibit 3).

Carpinteria Municipal Code ("CMC"), §8.10- Stormwater Management

Pursuant to CMC §8.10, development projects must comply with the City's stormwater management requirements which include both construction phase water quality measures (e.g., erosion and sedimentation control, spill containment, etc.) and Low Impact Development ("LID") strategies for the post-construction (i.e., operational) phase of a project. Post-construction LID requirements are based upon the amount of the project's new or replaced impervious surfaces, wherein a project with a larger amount of qualifying impervious surfaces must implement additional measures to reduce, treat

and/or retain onsite storm-related runoff. Based on the project's provided building footprint and paved area statistics, the project would be required to meet the "Tier 4" stormwater requirements (projects which create or replace 22,500 square feet or more of net impervious surface) which include:

- Limit disturbance of natural drainage features;
- Limit clearing, grading, and soil compaction;
- Minimize impervious surfaces;
- Minimize runoff by dispersing runoff to landscape or using permeable pavements;
- Treat runoff with an approved and appropriately sized LID treatment system prior to discharge from the site;
- Prevent offsite drainage from events up to the 95th percentile rainfall event using Stormwater Control Measures; and
- Control peak flows to not exceed pre-project flows for the 2-year through 10-year events.

The project's preliminary drainage report and proposed plans (Sheet C1 through C11) show that the post-construction condition would result in approximately 66,000 square feet of new impervious surfaces (22,500 sq. ft. building footprint; 43,500 sq. ft. hardscape areas). The preliminary drainage report and proposed civil plans demonstrate the project's compliance with the LID requirements through the use of a suite of LID measures, including but not limited to: preservation of the existing onsite drainage course; use of permeable concrete paving for surface parking areas; use of site landscaping planters for bioretention facilities and connection of building downspouts to said planters; use of perforated drain lines under the parking lot areas; and construction of a large stormwater treatment basin that will be used to collect, treat, and limit/control stormwater flows from the site. The proposed stormwater control plan has been reviewed by the Public Works Department and found to preliminarily comply with the applicable LID standards. Appropriate requirements have been included in the recommended project conditions of approval to ensure that required stormwater elements are properly installed and maintained for the life of the project.

Creeks Preservation Program

Due to the presence of the Coastal Commission-designated stream feature running through the property, the proposed project must comply with the requirements of the City's Creeks Preservation Program. The requirements of the Creeks Preservation Program include maintaining a 50-foot protective buffer from the top of the stream bank for all new development, implementing a construction mitigation plan to avoid impacts to creek resources during construction, and implementation of a post-construction mitigation plan, which requires among other things, fencing, landscaping and site lighting that is appropriate to, and sensitive of, the nearby creek resources.

As designed, the proposed revised project provides the necessary 50-foot protective buffer. No new construction would occur within the buffer area aside from landscaping and a passive walking trail/seating area. Proposed landscaping for the creek feature, its required buffer area and for the separate designated riparian area will be a native plant mix, appropriate to a riparian habitat restoration application. No fencing in or along the creek buffer is proposed at this time, however if fencing is proposed at a later date, it will be required to be designed and constructed in a "wildlife-friendly" manner consistent with Creeks Preservation Program regulations. Updated lighting plans have not been provided for the current iteration of the project, but would be reviewed once they are

submitted (likely as part of final ARB review) for compliance with the Creeks Preservation Program requirements.

At this preliminary stage, it appears the proposed project can be found to be consistent with the development standards of the Creeks Preservation Program. Appropriate Mitigation Measures and project conditions have been incorporated into both the Proposed Final MND and recommended Conditions of Approval to ensure compliance with these requirements throughout the life of the project.

Carpinteria General Plan/Coastal Land Use Plan

The project site has a General Plan/Coastal Land Use Plan designation of GC. The project site is in Design Subarea 3 (Canalino, Santa Monica, and El Carro Neighborhoods) in the Community Design Element of the City's General Plan/Coastal Plan. The project is subject to the following 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.*

Policy LU-1a: *The policies of the Coastal Act (Public Resources Code Section 30210 through 30263) are hereby incorporated by reference (and shall be effective as if included in full herein) as the guiding policies of the land use plan.*

The proposed project represents a redevelopment opportunity in an urbanized part of the City on an existing developed lot served by all necessary utilities and services. The type and intensity of proposed development is consistent with the GC land use designation and corresponding CPD base zoning designation, and has been designed to comply with all applicable development standards, including applicable resource protection policies for the onsite creek feature and riparian habitat areas. The proposed use of the property as a hotel would be considered a visitor-serving commercial use and would expand the range and type of visitor-serving overnight accommodations offered in Carpinteria, adding a higher cost-type of hotel to the mix of accommodation options current offered. A more detailed analysis of the project's consistency with the City's General Plan/Coastal Land Use Plan and the Coastal Act is provided in the policy analyses below. Overall, the project can be found consistent with this Objective and Policy.

Policy 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.*

The subject property is located adjacent to a property designated for agriculture and located outside of the jurisdiction of the City. The proposed project has been designed to maintain a physical buffer from the shared property lines with this agricultural property, including preserving riparian habitat areas along the shared boundary. The Proposed Final MND also includes a Mitigation Measure, AG-1, calling for the recordation of an Informational Notice that requires the property owner and hotel operator to acknowledge the "right to farm" of the adjacent agricultural property and that any

inconvenience or discomfort from properly conducted agricultural operations, including noise, light, odor, dust or chemicals, will not be deemed a nuisance. Additional analysis concerning protection of agricultural resources in discussed below in response to Policy LU-3n. Therefore, the project can be found consistent with the intent of this Policy.

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-3a: *New development shall occur contiguous to existing developed areas of the city. Higher density in certain residential neighborhoods and for residential uses in commercial districts shall be provided as a means to concentrate development in the urban core consistent with zoning designations, particularly where redevelopment of existing structures is proposed.*

Policy LU-3b: *The Community Design Element shall guide the character of development, and represent a comprehensive statement of the community's visual objectives.*

Policy LU-3d: *Establish a commercial sector that balances the retail and service needs of citizens and tourists.*

Policy LU-3e: *Direct commercial development toward the center of town and in established commercial nodes. Exceptions include visitor-serving commercial uses in the Bluffs III sub-area, and commercial uses of a character, size and location that are intended solely to serve a specific neighborhood and thereby reduce vehicle trips.*

Policy LU-3f: *Encourage the remodeling and revitalization of neighborhoods and commercial areas in accordance with principles established in the Community Design Element.*

Policy LU-3g: *Provide for a range of business activities that bring vitality, revenue, and employment to Carpinteria and are compatible with its small town character.*

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 is located on a pre-existing developed parcel with access to all necessary services in an urbanized part of the City, and fronting on one of the City's main east-west arterial streets. The proposed hotel use is consistent with the property's GC land use designation and corresponding CPD base zone district designation. A hotel use is one of the types of commercial land uses anticipated for this area of the City. Such a use would expand the range and type of overnight visitor accommodations available in the City, introducing a new higher-cost accommodation option to the City's already healthy mix of lower- and moderate-cost overnight accommodation offerings.

Inherently, hotel uses are a low Vehicle Miles Traveled ("VMT")- generating land use and therefore would not be anticipated to significantly add to traffic or congestion on area roadways or intersections. Further, site is located along the MTD route 20 bus route, which both employees and

hotel guests could use to travel to other parts of Carpinteria or into the greater Santa Barbara south coast area.

The proposed hotel project has gone through a series of meetings with the City's decision-making bodies, including but not limited to the ARB, and through several design iterations in an effort to respond to feedback from neighbors, City staff, and City decision-makers. The proposed most current iteration of the project has been designed to conform to all applicable development standards, including coastal resource protection policies, and received a recommendation for approval from the City's ARB in November 2019. A more complete analysis of the project's consistency with applicable Community Design Element objectives and policies is provided below. Therefore, the project can be found consistent with all of the above Objectives and Policies.

Policy LU-3n: *Setbacks shall be created between agricultural and urban uses. The responsibility of providing the buffer shall rest with the property intensifying its use. The buffer shall be adequate to prevent impacts to adjacent agricultural production. Such impacts include increased limitations on the use of chemicals and fertilizers and increased conflicts between the urban use and the adjacent agricultural operations.*

The subject property abuts an agriculturally-zoned property in unincorporated Santa Barbara County along its northwest border. The proposed hotel project has been designed such that the hotel building would be located a minimum of 69 feet from the shared property line with the adjoining agricultural property. Further, the protected riparian areas and requisite buffer (for the drainage feature) are located along the shared property line and provide both a physical and visual buffer between the land uses. Also, as part of the MND prepared for the project, a Mitigation Measure was included to require the preparation and recordation of an Informational Notice to acknowledges the agricultural property's "right to farm" and discloses that any inconvenience or discomfort from properly conducted agricultural operations, including noise, light, odor, dust or chemicals, will not be deemed a nuisance. Accordingly, the project can be found consistent with the intent of this Policy.

Objective LU-5: *Maintain availability of agriculture, coastal -dependent industry and visitor-serving commercial development including hotels/motels, restaurants and commercial recreation uses.*

Policy LU-5a: *The City shall continue to give priority to agriculture, coastal-dependent industry and visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over residential, general industrial, or general commercial development.*

The subject property is designated for General Commercial land uses, which allows for visitor-serving uses such as hotels and motels. The City's existing overnight visitor accommodations include a state park campground (191 sites), six motels or hotels (totaling approximately 600 rooms), and approximately 200 vacation rental units. Campsites in Carpinteria State Park range from a starting nightly rate of $45 for a tent site to $70-80 for a site with utility hook-ups. Of the six motels and hotels in Carpinteria, four of them are classified as lower cost or budget motels and the two others would be classified as mid-range hotels. According to the most recent data available, the combined average daily room rate ("ADR") for the six hotels and motels in Carpinteria in 2021 was $136.10 and the hotel/motel occupancy rate was 65.1 percent.[1] Overall, the City's overnight visitor accommodations (with the exception of some of the vacation rentals, perhaps) trends toward the

[1] 2021 Carpinteria Valley Economic Profile prepared by the California Economic Forecast

lower cost end of the spectrum.[2] In comparing the above combined Carpinteria ADR data from 2021 against the most recent statewide ADR data from January 2023 ($180.64), it can be seen that even when the 2021 Carpinteria ADR is adjusted by the state consumer price index ("CPI") to current prices ($152.13), Carpinteria's average overnight visitor lodging accommodations run approximately 15% below the statewide average. It is assumed this is due to the majority of the City's motel and hotel rooms being assigned to the lower cost motels that comprise four of the six motel/hotel venues in Carpinteria.

The proposed hotel, which has been marketed as a "business class" hotel, would target a different clientele than most of the other overnight visitor accommodation offerings in the City (anticipating an off-season ADR of approximately $280 and a peak season ADR of approximately $360). At these rates, the proposed hotel would be classified as a "higher cost hotel" according to the Coastal Commission. Given the preponderance of lower cost and moderate cost offerings in Carpinteria, the addition of a higher cost hotel may serve a presently unmet need in the community, and accordingly, could actually help to expand public coastal access to Carpinteria by providing a fuller range of accommodation options.

Nevertheless, in an effort to further enhance lower cost visitor accommodation opportunities in Carpinteria and to ensure consistency with Coastal Act policies, including but not limited to, Section 30213, which specifically requires lower cost visitor and recreational facilities to be protected, encouraged, and where feasible, provided, staff believes the proposed project must also commit to making a percentage of their 72-guestrooms available and affordable to members of the public with low or moderate incomes. Whereas the Coastal Commission has typically placed the percentage of new hotel rooms to be set aside as low cost accommodations at 25% of the room total, staff believes that rate may be unnecessarily high in light of Carpinteria's existing stock of exclusively lower and moderate cost hotels. Accordingly, staff has conditioned the project to require 15% of the project total hotel rooms (equivalent to 11 hotel rooms) be set aside as and provided onsite exclusively for lower cost visitor accommodations at a rate that does not exceed 75% of the statewide "peak season" ADR at the time of occupancy clearance (and adjusted annually thereafter to reflect the CPI). The offered low cost visitor accommodation rooms shall be equivalent to standard double occupancy rooms (or better) and must be actively marketed to underserved communities. The low cost visitor accommodation condition also requires an ongoing monitoring component to ensure compliance over the life of the project. Supporting conditions are included to prohibit the conversion of any of the rooms designated for low cost visitor accommodation from being converted to residential use or used for stays longer than 30 days in duration unless otherwise specifically approved by the City. A condition requiring this obligation to provide low cost visitor accommodations for the life of the project to be recorded on the property title as a deed restriction is also included to ensure future owners, heirs and successors are aware of this requirement.

Community Design Element

[2] According to the Coastal Commission's 2016 Public Workshop: Lower Cost Visitor Serving Accommodations, a "lower cost hotel" is defined as a hotel that charges no more than 75% of the statewide average daily rate, and a hotel that charges more than 125% of the statewide ADR would be considered a "higher cost hotel." A hotel that charges an ADR somewhere between a lower cost hotel and a higher cost hotel, as those terms are defined, would be considered a "moderate cost hotel."

Objective CD-1: *The size, scale and form of buildings, and their placement on a parcel should be compatible with adjacent and nearby properties, and with the dominant neighborhood or district development pattern.*

The subject property is presently improved with a single story 5,868 square foot church and minor accessory structures. Most of the lot is presently landscaped or unimproved. The immediately adjacent properties to the east and west are developed with large multifamily developments ("Casas de las Flores" to the west; "Pueblo del Estero," 4140 Via Real, to the east). Agricultural lands (outside of the City of Carpinteria) and detached single family residences border the subject property's rear property line.

The proposed hotel would be constructed in a "reverse" L-shaped floor plan at a slightly skewed angle to the site's Via Real frontage. The building would have a relatively consistent two story mass broken up by two outdoor spaces along the Via Real frontage (e.g., pool and patio) and a single story element at the northeast rear corner of the building with an outdoor landscaped terrace above. Building height would range from 21 feet 10 inches to 25 feet (measured from finished grade to the top of the roof parapets). Total square footage and lot coverage for the structure has been reduced from earlier iterations to 44,191 square feet (formerly 48,594 square feet) and 22,460 square feet (formerly 24,709 square feet), respectively.

The proposed hotel's front setback would measure 40 feet from the front property line at its closest point (and approximately 82 feet at its furthest point). As such, the proposed front setback is comparable to, or greater than, the immediately adjacent developments to either side along Via Real. Side and rear setbacks are generally comparable or greater than either of the adjacent Via Real developments.

The total square footage of the proposed hotel is also comparable to that of the adjacent "Casas del las Flores" project, however the building orientation/layout and massing is different. Given the proposed hotel's singular building layout and orientation on the lot, the building as presented to Via Real is arguably more visible and massive in its presence than the adjacent developments. However, the revised hotel's reduced building height (21 feet 10 inches to 25 feet) and significant breaks in the street front façade to create individual building modules helps to address previous massing, bulk and height concerns. From the single family residential properties behind the subject hotel property, the rear corner of the proposed hotel would still be visible, although the generous 69-foot setback from the property line, stepped-in second floor and provision of a single story element with an outdoor terrace above mitigates some of these impacts. The new six-foot high perimeter wall would also help to visually and physically separate the adjoining properties.

The proposed building layout would concentrate view corridors of the mountains to the drive aisle along the eastern side of the property, and more significantly over/through the creek buffer and (private) driveway along the western side of the property. Given the proximity of the hotel to the public right-of-way and its vertical height, only glimpses of the mountains are expected to be available over the top of the proposed hotel as viewed from Via Real.

The proposed project received an updated recommendation for preliminary approval from the ARB with only minor comments for further consideration. Based on the foregoing, staff believes the project is consistent with this Objective.

Objective CD-2: *Architectural designs based on historic regional building types should be encouraged to preserve and enhance the unique character of the city.*

The proposed building's architectural style is of a contemporary vernacular and is similar to recent large-scale commercial developments found throughout many southern California cities. With input from staff and the ARB, the chosen style was refined to be reminiscent of architectural treatments that are found on some of the larger multi-family residential developments located in the Beach Neighborhood, which exhibit various mid-century modern treatments, some with a coastal theme. The ARB reviewed and recommended approval of the proposed architectural style, finishes, and colors.

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).*

Views of the mountains are currently available from the entire length of the subject property's Via Real frontage, over and around the existing church building. The layout and height/mass of the proposed hotel would obscure some views of the mountains from Via Real, particularly as viewed from directly in front of the subject lot. Remaining view corridors to the mountains would be concentrated through the drive aisle at the east side of the lot, or more significantly over/through the creek buffer along the west side of the lot. Viewed from a distance (farther up/down Via Real, or from U.S. 101), the degree of impact to existing mountain views from the proposed hotel would be negligible due to the increased perspective.

Existing views to the ocean are not readily available from the subject site given the relatively flat topography of the area and existing vegetation along U.S. Highway 101, however views of the ocean may be available from the upper floors of surrounding development and may be available from the upper floor suites of the proposed hotel room.

Objective CD-7: *Enhance and maintain the Linden Avenue downtown core, the Carpinteria Avenue commercial core, the Eugenia Professional office area, the Casitas Village, Shepard's place Shopping Center, and the Cindy Lane-Mark Avenue industrial park districts.*

Policy CD-7a: *Retail and commercial uses should generally have large transparent "storefront" windows for display of merchandise to pedestrians. Blank sections of walls on street frontages are strongly discouraged.*

Policy CD-7b: *Buildings should be designed to incorporate signs that conform to the city's sign ordinance. Signs should be integrated with building architecture and adequately identify businesses. Freestanding monument signs are discouraged.*

Policy CD-7c: *Loading and trash facilities should be located where they are screened from view. The use of alley and service roads is encouraged for these facilities.*

The properties fronting on the west end of the City along Via Real are experiencing a gradual transformation as properties are redeveloped and improved. The existing church building and site improvements on the subject property are in a deteriorated condition and in need of updating. The proposed hotel project would represent yet another substantial reinvestment in this area of the City

(following upon the completion of the "Casas de las Flores" project and the recent permitting of additional storage mezzanine space at the McCann Mini Storage facility).

As discussed during previous conceptual review hearings with the City Council and Planning Commission, the use of this property for a hotel development can be found acceptable and appropriate for the site, provided it is designed and executed in a manner that is sensitive to the site and its surroundings, and that enhances the character of this part of the City. The proposed project has been designed to comply with the requirements of the CPD zone district, and has received a recommendation for approval from the ARB. The revised project has not resulted in any substantial changes to the design of the building, with the exception of the reduced building footprint/floor area, and revised parking and circulation layout. The current reduced intensity of the hotel development (now at 72 rooms) (as compared to previous iterations) is likely more in keeping with the scale of development envisioned by the City Council and Planning Commission in their early concept review deliberations.

The proposed building design features extensive windows along the street frontage and building articulation to break up the massing into smaller modules. A mix of building colors and materials also help to break up massing. Trash enclosures and loading facilities are placed within the project's interior, not readily visible from public areas. Building signage, as shown in the preliminary plans, appears to generally conform to the intent of the above policy. Signs will be considered in more detail by staff and the ARB at a later date as the project continues through the review and permitting process.

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

Objective CD-9: *To ensure that streets enhance the established city framework and design.*

Policy CD-9a: *The City shall promote the planting of appropriate street trees in existing and new neighborhoods to define and enhance the city's streetscape.*

Policy CD-9d: *Street trees on mixed-use and commercial frontages should be planted in decorative tree wells in the sidewalk.*

As part of the proposed project, the preliminary civil plans call for re-striping Via Real along the project frontage to allow for a striped median and left-hand turn pocket. The re-striping plan would eliminate a handful of existing public on-street parking spaces that presently exist along the property's frontage, but would preserve the class II bike lanes and provide an overall safer pedestrian, cyclist and motorist experience. To the east and west of the project frontage, street improvements would transition back to their existing standards.

There is not sufficient right-of-way width for wide sidewalks or parkway strips. Instead, the standard existing sidewalk width would be retained (and updated, where needed) along the project frontage. The proposed landscape plan calls for dense plantings along the project's street frontage, including a series of larger street trees and shrubs that would appear to meet the intent of the City's above Policies.

Objective CD-10: *Areas with attractive frontage designs should be maintained. New development should be carefully planned with frontage areas which maintain and enhance the quality of Carpinteria's streetscape.*

Policy CD-10a: *Minor variations in front yard building alignments within a block are encouraged. Relatively steady setback patterns clearly define the public space of the street and reinforce small town character.*

Policy CD-10c: *Commercial and mixed-use frontages should generally have wide sidewalks adequate to encourage customers and residents to walk, shop and linger in the public right-of-way. Commercial buildings should have large windows and entries on the street at the ground level. Residential ground floor uses should be set up or back from the street enough to afford privacy within the dwelling.*

The proposed hotel sits at a slight angle to the street. As such, the hotel's front setback from the property line would range from a minimum of approximately 40 feet at the east end of the building, to 82 feet at the west end. The building setback appears to generally relate to the adjacent buildings, particularly the "Casas de las Flores" development to the west, which has a comparable front setback of approximately 55- 60 feet. Despite the hotel's relatable front setback, the proposed building layout, which would present a continuous two-story mass to the street would signal a departure from the immediately adjacent developments that are comprised of multiple smaller, detached buildings in a clustered setting, although the relatively low height, articulated elevations, and generous densely landscaped setbacks would help to mitigate the massing.

The layout of the proposed hotel is such that the primary entrance is oriented toward the lot's interior rather than facing Via Real. Only secondary building entrances/exits (at the "breakfast area" and east hallway would face the street. The street-facing façade would however be well articulated with guestroom windows facing Via Real and provision of an outdoor patio area outside of the "breakfast area" entry, and an outdoor pool. Parking would be provided around the side and rear perimeter of the property and largely obscured from public view. The hotel's frontage would feature a significant landscaped buffer (primarily comprised of the vegetated treatment and detention basin), creek buffer restoration area, and walkways around the building perimeter and detention basin. It is not clear at this time whether a protective fence would be required between the public sidewalk and proposed detention basin (as found at the "Casas de las Flores" development), however the plans do call for a protective fence between the detention basin and adjacent hotel walkway.

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.*

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

Implementation Policy 2: *More urban, "formal" landscape designs may be used in the immediate vicinity, entryways or interior site areas of the commercially developed areas. Urban landscape species shall not be used adjacent to sensitive habitat areas.*

A preliminary landscape and irrigation plan has been provided as part of the proposed plans. The provided plans call for utilizing a mix of ornamental species and native or locally-adapted species throughout the project site. Plantings within the creek buffer, protected riparian areas, and the stormwater detention basin generally trend (correctly) toward California "native" species appropriate for these applications, although some of the selected species may not be native to this part of California. Accordingly, as part of the required Mitigation Measures for the Proposed Final MND and the recommended project conditions of approval, the project is required to retain a qualified landscape architect and/or biologist who specializes in habitat restoration projects to help refine and update the landscape plan as part of a habitat restoration plan for the protected onsite habitat areas. Landscaping plans for the remainder of the site will be required to conform to the state's MWELO requirements.

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.*

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.*

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.*

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

Building lighting has not been developed for the revised site plan. If the project moves forward, a lighting and photometric plan will be considered and reviewed by staff and the ARB as part of the design review process for consistency with these measures. Mitigation Measure AES-3, included in the Proposed Final MND requires development of a lighting plan utilizing low intensity, low glare, hooded and downward-oriented lighting throughout the project site and prohibits light spillover into adjacent properties or into protected habitat areas. Further, the project has been conditioned to require all exterior lighting to be consistent with these standards.

Objective CD-14: *Protect and preserve natural resources by reducing energy consumption.*

Policy CD-14a: *To ensure the effective utilization of energy resources, design measures shall be incorporated into project design that allow for development projects to comply with and exceed the minimum energy requirements of the City's Uniform Codes.*

Implementation Policy 7: *Building orientation shall be designed to maximize natural lighting and passive solar heating and cooling.*

Implementation Policy 8: *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.*

Implementation Policy 10: *Design of parking facilities shall take into consideration in addition to intended use, the layout of entrances and exits so as to avoid concentrations of cars or excessive idling.*

The proposed building layout was selected to maximize views toward the ocean and mountains for guests and to provide separation from adjacent land uses. The building orientation appears that it would also take advantage of and benefit from natural light for many of the hotel's guestrooms. Additional details concerning the building's energy efficient design features, if applicable, have not been provided as of yet. A preliminary planting plan has been provided that relies on mostly native and/or drought tolerant species, including a number of trees, although as noted previously, the planting plan will likely require further refinement to coordinate with the proposed stormwater improvements and creek buffer area (discussed elsewhere in this staff report).

Due to the amount of new/replaced impervious surfaces, the project triggers the City's Tier 4 stormwater requirements. To address these requirements, the project includes a number of onsite stormwater features including use of permeable asphalt for all parking stalls, installation of underground stormwater detention chambers throughout the project's internal drive aisles, use of landscape planter areas around the building perimeter for the capture and retention of roof runoff from the building, and construction of a large stormwater treatment and detention basin along the project's Via Real frontage. These features meet the intent of the City's stormwater requirements and would address/mitigate stormwater impacts anticipated with the project.

A 50-foot buffer running parallel to the existing drainage feature would be preserved and enhanced with native riparian plantings as part of a creek restoration component. A separate existing riparian woodland area would also be protected in place. The planting mix for the restoration and enhancement of these areas would include a variety of tree and groundcover species appropriate to a natural creek-side setting. A passive walking trail and seating area is proposed to meander through the creekside buffer area.

The site plan and vehicle circulation plan would make use of a perimeter drive aisle to provide access to onsite parking areas and the main hotel entrance/lobby. The layout is somewhat constrained by the various access, drainage and utility easements described previously that run along the east and west (side) property lines, and the protected stream channel and its required buffer. The proposed layout provides one vehicular entrance/exit for the hotel. The existing western driveway is proposed to remain and would be used only by the relevant easement holders on the properties to the north. Given the nature of the proposed use, it appears the proposed driveway and circulation layout is sufficient to avoid extended queuing of motorists waiting to enter/exit the site. As previously mentioned, the striping along Via Real is proposed to be updated to provide a striped median and left-hand turn lane, which would further improve vehicular circulation in and out of the site.

Subarea 3 Community Design Element

Objective CDS3-1: *Preserve and strengthen the visual and physical connections between this subarea, the downtown and other neighborhoods and districts in the city.*

Objective CDS3-2: *Preserve and enhance the existing residential neighborhood and ensure that new development enhances the neighborhood character.*

The subject property is located within a mixed use zone district where both commercial and residential developments are permitted, and in some cases are located immediately next to one another. Seeing as the subject property is bookended by large, multifamily residential developments, it is important that the proposed hotel be designed in a manner that is sensitive to, and appropriate for, surrounding residential uses. The overall size, height, massing, setbacks, and placement of amenities such as parking, loading and trash enclosure areas appear to be sensitive to surrounding uses.

Objective CDS3-3: *Ensure that new development is sensitive to the scale and character of the existing neighborhoods, and consistent with the city's "small beach town" image.*

As discussed elsewhere in this report, the proposed project complies with all of the minimum development standards for the CPD zone district. The proposed layout and building design/architecture, particularly as experienced from Via Real, have been found by the ARB to be sensitive to the scale and character of the site, and determined to be in keeping with the City's "small beach town" image. The current iteration of the project did not materially change any of the key design elements, with the exception of a further reduction to building size and amounts of paved area, and a commensurate increase in landscaped area. Overall, staff believes the project continues to be sensitive to the scale and character of the surrounding neighborhoods.

Policy CDS3-a: *Ensure that new development adjacent to designated city edges, abutting agricultural lands outside the city limits, are designed with rural and semi-rural elements and details, providing an appropriate transition and connection of the town to the countryside.*

As discussed elsewhere in this report, the proposed project abuts an agricultural property located outside of the City immediately to the north (of the rear property line). The proposed layout preserves the required 20-foot wide access easement to the adjoining property, which is used to access and serve the agricultural lands, and maintains a 69-foot and 153-foot buffer between the proposed hotel building and the property lines shared with the subject agricultural property. These large buffers, along with the protection of existing landscaping and riparian features along the west (side) and rear property lines, and preserving the agricultural property's exclusive driveway access all help to serve as transitional elements from the more urban development of the City to the surrounding rural and agricultural uses outside of the City.

Policy CDS3-b: *Enhance the pedestrian character of the neighborhoods' streets, parks and lanes.*

The proposed project would not impact the existing sidewalk along the project's frontage, however the proposed improvements along the lot's frontage, including site landscaping, the expanded detention basin and the hotel building itself, would change the pedestrian's experience on Via Real. Careful review by the ARB for site landscaping, any fencing and signage along the project's frontage will be required as part of any final design review. Staff notes the proposed hotel building would be set back at least 40 feet from the Via Real sidewalk, with most of the front yard used for landscape areas.

CDS3-Implementation Policy 40: *As a part of new development projects, fences fronting on collector and arterial streets shall be decorative and set back sufficiently to provide for landscaping that enhances the street corridor and eliminates potential for the fencing to cause a sight-distance obstruction. Existing wire or wood fencing along arterial streets shall either be replaced to comply*

with the setback and landscaping requirement above, or screened with landscaping (shrubs or vines) where feasible.

As noted previously, it is not clear at this time whether a protective fence, similar to that found on the "Casas de las Flores" development would be required to be built around the entire perimeter of the proposed onsite detention basin, which would be located directly behind the public sidewalk. If such a fence is necessary, staff and the ARB believe it should be as low as possible in height, adequately buffered from the sidewalk with landscaping and designed of materials that relate to the building's architectural treatments and/or are as visually transparent as possible. No other fencing is proposed along the project frontage at this time. Any necessary fencing for the detention basin will be reviewed by staff and ARB for consistency with this Policy.

CDS3-Implementation Policy 43: *Utility hardware, such as water meters and backflow preventers, electrical transformers, and similar devices should be located underground or in parkway strips whenever possible. These elements are not attractive in front yards. Parkway strips can also accommodate fire hydrants, traffic control signs and traffic signal controllers, keeping them away from sidewalks and pedestrians.*

As part of the proposed project, significant public utility improvements are proposed, including running new water and sewer lines through the eastern drive aisle and parking lot to connect Via Real utilities to existing utilities in the single family residential neighborhood to the north. This includes construction of a new underground sewer pump station proposed to be located at the rear northeast corner of the property underneath one of the proposed parking stalls. New water services, meter(s) and a fire backflow preventer would be installed within a landscape area set just inside of the lot from the proposed eastern driveway. The existing fire hydrant and water meter along the Via Real frontage, just behind the public sidewalk would be retained. New electrical, phone and cable services would be provided underground from a nearby pole. To the extent feasible, any new above-ground utility infrastructure would be located within and/or screened by landscape areas.

CDS3-Implementation Policy 45: *Commercial buildings located adjacent to residential parcels should be designed with the same scale of the residential buildings. This does not mean that they should look like residential buildings, but that the height and the increments of the building masses should be in scale with the residential buildings.*

The overall building square footage and setbacks for the proposed hotel development are comparable to that of the adjacent "Casas de las Flores" development. The relatively low building height for a two-story commercial building (21 feet 10 inches to 25 feet), larger than required setbacks, the articulated building massing, mix of colors and materials, and generous front and side yard landscape areas all help to mitigate the mass/size of the proposed 44,191 square foot hotel development. A large rear setback (69 feet) and the provision of a one-story element at the rear corner of the hotel building help to buffer the proposed development from adjacent single family residential development immediately to the north of the project site.

CDS3-Implementation Policy 46*: Front building facades for commercial and multifamily residential buildings should face the street.*

The proposed hotel's primary entrance would be oriented toward, and accessed from, the interior of the lot. Secondary entries would face Via Real. The front building façade would however feature

numerous guestroom windows and a small, covered patio (off the "breakfast area), and fenced pool area oriented toward the street. Walkways would lead through the front landscaped yard area, connecting to a passive walking trail through the creek buffer along the west side of the property.

Circulation Element

Policy C-3c: *Review new development proposals to improve neighborhood circulation patterns and enhance the inter-neighborhood routing characteristics of the city's master plan.*

Policy C-3h: *Require all new projects to demonstrate safe traffic flow integration with the Master Plan of Streets as well as street/drainage improvements function. This shall include construction traffic and the designation of construction routes.*

Several analyses of the project's anticipated impacts to traffic were conducted as part of the technical studies in support of the project's MND. Overall, the studies found that the proposed hotel project would not significantly add to roadway traffic or congestion at intersections, nor would the project generate significant VMT. Recent improvements to the Santa Monica Road / Via Real / U.S. Highway 101 intersection as part of the U.S. Highway 101 widening project have largely resolved historic peak hour low levels of service that had been observed there.

The proposed civil plans call for re-striping Via Real along the project's frontage to provide for a striped median and left turn lane pocket to allow for safer entering and existing of the hotel parking lot. The re-striping plan would also eliminate several on-street parking spaces along the project frontage to allow for an uninterrupted class II bike lane along the project frontage. The re-striping plan will be reviewed in more detail as part of any future Engineering Permit review.

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.*

Policy C-7e: *Provide continuous sidewalks, where appropriate, for safe pedestrian circulation and consider creative alternatives for such issues.*

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-8b: *Provide adequate right-of-way and improvements for bicycle lanes, when called for in future street dedications.*

Objective C-9: *Promote the use of public transit systems that provide mobility to all city residents, and reduce automobile congestion within the capabilities of the community.*

As part of the proposed project, the existing sidewalk and Class II bicycle lane along the project frontage would be updated and enhanced. The project is located along the MTR route 20 bus line and would be available to both employees and guests for use to reach other parts of Carpinteria and the greater Santa Barbara south coast.

Open Space, Recreation and Conservation Element

Objective OSC-6: *Preserve the natural environmental qualities of creekways and protect riparian habitat.*

Policy OSC-6a: *Support the preservation of creeks and their corridors as open space, and maintain and restore riparian habitat to protect the community's water quality, wildlife diversity, aesthetic values, and recreation opportunities.*

Policy OSC-6b: *Protect and restore degraded creeks on City-owned land where protection and restoration does not interfere with good flood control practices.*

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.*

OSC-6-Implementation Policy 25: *A setback of 50 feet from top of the upper bank of creeks or existing edge of riparian vegetation (dripline), whichever is further, shall be established and maintained for all development. This setback may be increased to account for site-specific conditions. The following factors shall be used to determine the extent of an increase in setback requirements:*

a. Soil type and stability of the stream corridor
b. How surface water filters into the ground
c. Types and amount of riparian vegetation and how such vegetation contributes to soil stability and habitat value
d. Slopes of the land on either side of the stream
e. Location of the 100 year floodplain boundary, and
f. Consistency with other applicable adopted plans, conditions, regulations and/or policies concerning protection of resources.

Where existing buildings and improvements, conforming as to use but nonconforming as to the minimum creek setback established herein, are damaged or destroyed by fire, flood, earthquake or other natural disaster, such buildings and improvements may be reconstructed to the same or lesser size and in the same general footprint location, provided that reconstruction shall be inaugurated by the submittal of a complete construction application within 24 months of the time of damage and be diligently carried to completion.

OSC-6-Implementation Policy 26: *Prior to issuance of a development permit, all projects shall conform with the applicable habitat protection policies including but not limited to the General Plan/Local Coastal Plan, Open Space Bluffs Master Program, Creek Preservation Ordinance, and the Zoning Ordinance.*

As discussed elsewhere in this report and in more detail in the Biological Resources section of the project's Proposed Final MND, the existing manmade drainage channel located along the western boundary of the subject property was determined by Coastal Commission staff to be classified as a coastal stream feature with hydrologic connectivity to the (downstream) Carpinteria Salt Marsh requiring protection under the Coastal Act and the City's LCP policies. Accordingly, the proposed hotel project underwent a redesign to maintain the required 50-foot setback for all new development and to include provisions for the restoration and enhancement of the creek feature and its required buffer. A separate isolated riparian woodland area was also identified for protection (discussed below). Sufficient measures have been included in both the Proposed Final MND's mitigation measures and in the recommended project conditions of approval to ensure the protection and enhancement of these features in a manner consistent with the above Objective and Policies both during construction and throughout the life of the project.

Proposed drainage plans for the project have been developed to utilize onsite retention and/or detention of stormwater wherever feasible so as to preserve existing runoff rates and drainage patterns. These stormwater measures are discussed in more detail elsewhere in this report.

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.*

A small isolated remnant riparian woodland area exists along the northern (rear) property line boundary of the site. The riparian woodland area is proposed to be protected in place and enhanced as part of the project through the required habitat restoration plan. Native vegetation located within the woodland, including but not limited to any native specimen trees, will be protected and incorporated into the restoration plan.

Objective OSC-10: *Conserve all water resources, and protect the quality of water.*

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

Conditions are included in the recommended project conditions of approval requiring the project to comply with current state and local energy and water efficiency requirements concerning resource conservation, water efficient landscaping, and stormwater runoff reduction. Likewise, standard project conditions of approval have been included to address construction-phase impacts to water quality as a result of runoff, spills, sedimentation and/or erosion. The MND prepared for the project also addresses water quality requirements which have been incorporated as conditions into the project conditions of approval.

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).*

Policy OSC-11c: *Promote use of solar heating and energy efficient building design to reduce stationary source emissions.*

As the buildout of the City has been contemplated and addressed in the City's General Plan/Coastal Land Use Plan and in the project-specific MND, the incremental contributions of the proposed project to regional air quality impacts have been accounted for and previously addressed in the County's Clean Air Plan. Nevertheless, standard measures are included in the project design and project conditions of approval to further reduce its impact on air quality and climate. These include siting the project within walking distance of existing mass transit routes, requiring compliance with current CBC requirements (e.g., rooftop PV systems, onsite bicycle storage facilities, etc.), and the inclusion of standard dust and emission reduction conditions to address construction-related impacts.

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. New development shall be subject to all of the following measures:*

a. *Height and siting restrictions to avoid obstruction of existing views of visual resources from the nearest public areas.*
b. *In addition 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. In such cases, the new structure shall not be greater in height than adjacent structures and shall not encroach seaward beyond a plane created by extending a straight line ("stringline") between the nearest building corners of the existing buildings on either side of the proposed development. Patios, balconies, porches and similar appurtenances, shall not encroach beyond a plane created by extending a straight line between the nearest corners closest to the beach from the existing balconies, porches or similar appurtenances on either side of the proposed development. If the stringline is grossly inconsistent with the established line of seaward encroachment, the Planning Commission or City Council may act to establish an encroachment limit that is consistent with the dominant encroachment line while still limiting seaward encroachment as much as possible.*
c. *Special landscaping requirements to mitigate visual impacts.*

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 fill 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 preparation 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 investigation and reports remain as open space.*

The overall site plan, layout and character of the proposed development generally relates to the development pattern established by other developments in the area, including but not limited to the adjoining multi-family residential developments and two larger motel buildings on the same block of Via Real. Overall building height, location relative to the front property line, and building massing were found to be appropriate by staff and the ARB during preliminary review of the project.

With respect to proposed earthwork and landform modification, the existing developed site sits a couple of feet above sidewalk grade and drains towards the front and west side of the lot (towards the existing manmade drainage channel). In order to establish a flat building pad, and more importantly, to conform to design standards for new construction within a 100-year floodplain, the site will require limited grading (approximately 4,700 cy of cut; 2,900 cy of fill; and a net export of 800 cy). Overall, grades and building pad elevations will be comparable to the adjacent "Casas de las Flores" development.

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

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

No known cultural resource sites or historic resources are known to occur onsite or in the immediate project vicinity. Nevertheless, the potential remains to uncover previously unknown cultural resources during construction. At the request of local Chumash Native American representatives, a Mitigation Measure, CR-1, was included in the Proposed Final MND to require monitoring by a qualified archaeologist and Chumash Native American representative during periods of initial ground disturbance (e.g., grading and excavation / recompaction).

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 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.*

S-1-Implementation Policy 2: *Site specific geotechnical studies are required to more accurately determine the potential for liquefaction. These studies shall be performed prior to new construction and for the retrofit of critical facilities. The studies should include site-specific depth to groundwater and soil composition. Areas having liquefiable sediments should be identified, and structures should be designed to withstand liquefaction.*

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.*

S-3-Implementation Policy 7: *Geotechnical investigations shall be performed on properties proposed to be developed in areas identified as having high potential for expansive soils or soil settlement.*

According to Figures S-2 and S-3 in the Safety Element of the City's General Plan/Coastal Land Use Plan, the project site is located in an area of the City with high potential for liquefaction and expansive soils. A project-specific geotechnical investigation has been completed and concluded that the proposed project could safely be built so long as the recommendations included therein for soil preparation and foundation design/construction are followed. A requirement to comply with the recommendations of the project-specific geotechnical investigation has been included in the recommended conditions of approval.

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

Implementation Policy 10: *Compliance with the City's Floodplain Management Measures will be required prior to issuance of building permits for any type of individual development project proposed in the 100-year floodplain.*

As discussed previously, the project site is presently located within the 100-year floodplain (zone A) according to the current FIRM for the area. The project proposes to adjust finished grades and finished floor elevation for the proposed building to be located above the extrapolated 100-year floodplain's BFE for the area (based on the previous analysis completed for the adjacent "Casas de las Flores" project. The project has been designed to conform to the standards of the City's floodplain management ordinance and has been preliminarily reviewed by the Public Works Department. A more thorough review of compliance with applicable floodplain standards will be completed as part of the review and approval of an Engineering Permit for construction.

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.*

Policy S-5b: *All new structures, whether within or outside the urban limit zone, must adhere to the city Fire Sprinkler Ordinance.*

The project site is not located within an area identified on any official City maps as being vulnerable to wildland fire hazards. If approved, the project would, however, be conditioned to require compliance with the requirements of the Carpinteria-Summerland Fire Protection District, including but not limited to the installation of an additional onsite fire hydrant and a fire sprinkler system throughout the building.

Noise Element

Objective N-1: *The City will minimize noise impacts of Highway 101 traffic on residential and other sensitive land uses.*

Policy N-1a: *The City will plan noise-compatible land uses or design developments with noise attenuation features near Highway 101.*

According to Figures N-1 and N-2 in the Noise Element of the City's General Plan/Coastal Land Use Plan, the project site is located in a noise contour area of 65-70 dBA, primarily as a result of the proximity of Via Real and U.S. Highway 101 to the project site. Exposure of transient lodging uses to these noise levels is considered to be within a "conditionally acceptable" range. As part of the ongoing U.S. Highway 101 HOV Lanes widening project, highway paving has been replaced with "quiet paving" and sound walls have been constructed along some sections of the highway in this area of the City which may help to mitigate highway-generated noise for this project and surrounding areas. Nevertheless, the project has been conditioned to require an acoustical analysis be completed for the proposed hotel to ensure interior noise levels would not exceed applicable standards.

Objective N-3: *The City will minimize the adverse effects of traffic generated noise from City streets on residential and other sensitive land uses.*

N-3-Implementation Policy 1: *The City will use the land use/noise compatibility matrix shown on Figure N-3 to determine the appropriateness of land uses relative to roadway noise.*

N-3-Implementation Policy 2: *An acoustical study showing the ability to meet state noise insulation standards will be required for any development proposed in an area where noise exceeds the "normally acceptable" level shown on Figure N-3.*

N-3-Implementation Policy 3: *The City will enforce the California Noise Insulation Standards (Title 25 California Administrative Code) to ensure an acceptable interior noise level of 45 CNEL in habitable rooms.*

As stated above with respect to freeway noise impacts, the project site is located in the 65-70 dBA noise contour, which is considered to be a "conditionally acceptable" noise exposure level for transient lodging land uses. Based on the City's past experience with residential development in areas in close proximity to the highway, staff is confident that the interior noise standard described in Implementation Policy 3 (above) can be achieved through standard construction techniques, insulation, and modern dual pane windows. Nevertheless, a condition has been included in the recommended project conditions of approval requiring an acoustical study to identify the needed attenuation measures and construction techniques to ensure the new apartment units comply with this standard.

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

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

The project site is surrounded by multi- and single family residential land uses along both sides and a portion of its rear property line. While building construction would be set back approximately 50 feet or more from the closest property line shared with a residential land use, site grading and other site improvements (utilities, paving, walls, etc.) would be located closer and in some cases right up to the shared property lines with these sensitive receptors.

In anticipation of the potential for construction-phase noise impacts for adjoining residential land uses, the project's Proposed Final MND includes a number of mitigation measures intended to address and minimize nuisance noise impacts. These measures include limiting construction hours to Monday through Friday, 7:00 a.m. to 5:00 p.m., requiring mechanical equipment and vehicles be properly maintained, outfitted with muffling devices and physically buffered from surrounding uses, whenever feasible, use of a temporary sound curtain or blanket if noise thresholds would be exceeded during construction for the nearest residential land uses, and assignment of a noise monitor to be responsible for responding to and addressing any noise complaints that are received. All of these measures have been incorporated into the project conditions of approval.

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.*

Policy 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 non-residential 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.*

Policy PF-5c: *The City will ensure that new development will not adversely impact services and facilities provided to existing development.*

The proposed project has been reviewed by all special districts that would serve the project, and all have indicated an ability to serve the property. All agencies have indicated an ability to serve the project without any reduction in service levels for surrounding existing development. Where applicable, the requirements of the special districts have been included in the recommended project conditions of approval. Development Impact Fees imposed by the City and similar mitigation fees from the special districts that would serve the project would apply to the project and are described below in Section VI, Development Impact Fees.

Housing Element

The City's 2015-2023 Housing Element is responsible for outlining the City's plan for addressing the existing and future housing needs of the community during the prescribed housing cycle. An updated

Housing Element for the 6th Cycle (2023-2031) is presently under development. The Housing Element identifies strategies and programs that focus on: 1.) providing diverse housing sites and opportunities; 2) conserving and improving the existing affordable housing stock; 3.) removing governmental and other constraints to housing development; and 4.) promoting equal housing opportunities.

The following Housing Element program categories, goals and policies are relevant to the proposed hotel project:

Program Category #1. *Make Sites Available to Accommodate the RHNA.*

Goals:

- *Attain additions to the housing supply that meet the housing needs of all economic segments.*
- *Maintain a jobs-housing balance or ratio within the 0.75 to 1.25 range suggested by the Santa Barbara County Association of Governments.*

Policies:

- **Adequate Sites:** *Provide sufficient sites in the General Plan/Coastal Plan and zoning map to meet the housing needs allocated to the City by the Regional Housing Needs Allocation (RHNA) Plan.*
- **Housing Types:** *In the General Plan/Coastal Plan and implementing ordinances, provide for a mix of housing types consistent with the City's needs, including single-family detached and multi-family housing.*

The project site is zoned CPD/R, which could allow for residential units on the property, either integrated as part of a larger mixed use development, or as part of a stand-alone residential-only development like the properties immediately adjoining to the east and west. Despite the accommodating zoning designation, the site has not been specifically identified in either the current Housing Element or the draft 6th cycle Housing Element as a possible site for infill residential development. Redevelopment of the site into a hotel, which is also consistent with the site's zoning designation, would likely take the property out of consideration for future conversion into a residential land use for the foreseeable future.

No residential units are currently provided onsite, nor are any residential units proposed as part of the project. Therefore, there would be no net loss or gain of residential units as a result of this project. The project would replace an aging and underutilized church building with a new 72-guestroom hotel. The new use would likely generate modest net new employment opportunities as compared to the existing setting, however the net increase in jobs resulting from the project would not have a materially significant impact on the City's overall jobs-housing balance.

VI. DEVELOPMENT IMPACT FEES

A series of ordinances and resolutions adopted by the City Council require the payment of various development impact fees to offset the proposed project's incremental share of public infrastructure demands. If the project were approved as submitted, it would be subject to the fees as shown in the following table. The amounts shown are estimates only. The actual amounts will be calculated in accordance with the fee resolutions in effect when the fees are paid. The Fees are updated annually in July.

The developer of a project that is required to pay development impact fees may apply to the City Council for a reduction, adjustment or waiver of any of those fees based on the absence of any reasonable relationship or nexus between the impacts of the proposed development and either the amount of the fee(s) charged or the type of facilities to be financed. The application must be in writing and must be submitted to the city clerk either ten days prior to the public hearing on the development permit for the project, or if no development permit is required, at the time of building permit application.

Estimated Development Impact Fees as of March 24, 2023

The following is an estimate for a 72-guestroom, 44,191 square foot hotel development. The fee estimate credits the project for the 5,678 sq. ft. church building to be demolished as part of the project.

Fee Type	Fee	Total Fee
Streets and Thoroughfares • Church credit • Hotel	 -$1.94/ sq. ft. $811.53/ room	$47,414.84
Highway Interchanges & Bridges • Church credit • Hotel	 -$9.91/ sq. ft. $4,143.62/ room	$242,071.66
Traffic Control Facilities • Church credit • Hotel	 -$0.80/ sq. ft. $333.49/ room	$19,468.88
General Facilities & Equipment • Church credit • Hotel	 -$0.36/ sq. ft. $29.29/ room	$64.80
Storm Drainage Facilities • Church credit • Hotel	 -$0.90/ sq. ft. $0.90/ sq. ft.	$34,661.70
Open Space Acquisition • Church credit • Hotel	 -$5.77/ sq. ft. $459.10/ room	$293.14
TOTAL		**$343,975.02**

Other Estimated Fees

Fee Type	Fee	Total Fee
Carp.-Summerland Fire District Fire Mitigation Fee (commercial) Plan Review Fee	TBD	TBD
Carpinteria Sanitary District Development Impact Fee Sewer Service Charge	TBD	TBD
Carpinteria Water District Capital Cost Recovery Fees Installation Deposits	TBD	TBD

School District Hotel	$0.29/ sq ft	$12,815.39
New Construction Tax	$0.0450/ sq. ft.	$1,988.60
Landscape Bond	$500.00 or $0.03/sq. ft.	$500.00
TOTAL		**TBD**

VII. ACTION OPTIONS

1. Adopt Resolution PC-23-004, thereby approving Project 16-1822-DP/CDP to allow the removal of an existing 5,678 square foot former church building and all associated improvements, and the construction of a two-story, 72-guestroom, 44,191 square foot hotel and associated improvements under the provisions of the Commercial Planned Development with Residential Overlay zone district of the Carpinteria Municipal Code; and to approve and certify the Mitigated Negative Declaration ("MND") prepared for the project pursuant to the California Environmental Quality Act ("CEQA") Guidelines.; and adopt the Findings in Attachment A, Exhibit 1 and Conditions of Approval as proposed in Attachment A, Exhibit 3. (staff's recommendation)

2. Direct the applicant to prepare project revisions 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

Attachment A Resolution PC-23-004
- Exhibit 1 – Findings for Approval
- Exhibit 2 – Proposed Plan set
- Exhibit 3 – Recommended Conditions of Approval

Attachment B November 21, 2019 ARB Meeting Minutes

Attachment C Proposed Final Mitigated Negative Declaration

Attachment A

Resolution No. PC-23-004

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

RESOLUTION NO. PC-23-004

A RESOLUTION OF THE CITY OF CARPINTERIA PLANNING COMMISSION APPROVING THE DEVELOPMENT PLAN AND COASTAL DEVELOPMENT PERMIT 16-1822-DP/CDP TO ALLOW THE REMOVAL OF AN EXISTING 5,678 SQ. FT. CHURCH AND ALL ASSOCIATED IMPROVEMENTS; AND THE CONSTRUCTION OF A TWO-STORY, 72-GUESTROOM, 44,191 SQ. FT. HOTEL AND ASSOCIATED IMPROVEMENTS; AND TO APPROVE AND CERTIFY THE MITIGATED NEGATIVE DECLARATION (MND) PREPARED FOR THE PROJECT PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES. THE PROJECT IS LOCATED AT 4110 VIA REAL (APN 004-017-022).

REQUESTED BY KUSH NATHU, RAM HOTELS

WHEREAS, the City of Carpinteria Planning Commission has considered an application for a Development Plan and Coastal Development Permit filed by Kush Nathu, RAM Hotels on April 19, 2016 to allow the removal of an existing 5,678 square foot former church building and all associated improvements, and the construction of a two-story, 72-guestroom, 44,191 square foot hotel; and

WHEREAS, the current application was subsequently deemed complete and accepted by the City as being consistent with the applicable submittal requirements on January 6, 2020; and

WHEREAS, the City of Carpinteria Architectural Review Board considered the proposed project at their November 21, 2019 meeting wherein the project was recommended for revised preliminary approval; and

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

WHEREAS, in accordance with the California Environmental Quality Act ("CEQA"), a Mitigated Negative Declaration ("MND") dated December 2022 has been prepared for the project and has been noticed and subject to public review as required under CEQA; 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 Mitigated Negative Declaration prepared for the project has been accepted and certified as having met the procedural requirements of the California Environmental Quality Act; and

2. The Development Plan and Coastal Development Permit are approved, making the Findings for approval outlined in Attachment A.

3. The Development Plan 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 3rd day of April 2023, 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 3rd day of April 2023.

Attachment A

Exhibit 1:

Findings for Approval

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

ATTACHMENT A: FINDINGS FOR APPROVAL

PLANNING COMMISSION HEARING
PROJECT 16-1822-DP/CDP
APRIL 3, 2023

VIA REAL HOTEL, 4110 VIA REAL
REQUESTED BY KUSH NATHU, RAM HOTELS

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.

1.1 Procedures

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 process for public review of the subject Local Coastal Development Permit has been properly conducted as follows:

a. An application for a Coastal Development Permit was submitted on April 19, 2016, and deemed complete and accepted by the City as being consistent with the applicable submittal requirements on January 6, 2020. 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 district and to be consistent with the City's Local Coastal Program Land Use Plan, the Interpretive Guidelines of the Coastal Commission and the California Coastal Act.

c. The project has been reviewed by the City's Architectural Review Board at three duly noticed public meetings which included, but were 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 15091, 15096, 15097, 15162, 15164):

a. The Mitigated Negative Declaration ("MND") dated December 2022 was presented to the City of Carpinteria Planning Commission, and all voting members of the Commission have reviewed and considered the MND prior to approving this project. The MND reflects the independent judgment of the Planning Commission and is adequate for this proposed project.

b. The Planning Commission finds and certifies that the MND dated December 2022 constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA. The Planning Commission further finds and certifies that the MND has been completed in compliance with CEQA.

c. 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.

d. 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 monitoring program for this project to ensure compliance during project implementation.

e. 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 MND. These findings are supported by substantial evidence in the record, including the MND dated December 2022, and associated appendix materials. The MND identified the potential for Class II, significant but mitigable impacts in the areas of Aesthetics, Agriculture and Forestry Resources, Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Noise, and Tribal Cultural Resources.

    i. Aesthetics: Construction of a new two-story hotel and associated improvements

on a property that has been historically improved with a smaller, one-story building and large open lot would be a marked visual change to the area setting. A larger, more highly visible building and associated site and building lighting and signage may detract from the visual quality of the area and from available public views from U.S. Highway 101 and Via Real toward the Santa Ynez Mountains.

With the incorporation of the identified mitigation measures as project conditions of approval, all impacts would be reduced to a less than significant level. Measure AES-1 requires the design, scale and character of the project architecture, and final selected building colors and materials to be compatible and blend harmoniously with vicinity development and the City's small beach town character, and that the project be reviewed and approved by the City's Architectural Review Board ("ARB"). Measure AES-2 requires all project mechanical equipment, trash enclosures and similar appurtenances to be screened and hidden from public view. Measure AES-3 requires any exterior night lighting to be low intensity, low glare design, minimum height, hooded and directed downward onto the project site to prevent spill-over, and to be reviewed and approved by the ARB. Measure AES-4 requires all project signage to be reviewed and approved by the ARB for compatibility with area settings and to ensure it does not pose a nuisance or safety hazard for adjoining land uses.

ii. Agricultural & Forestry Resources: The project site is located next to a property zoned and used for agriculture outside of the City's jurisdiction. The ongoing viability of agricultural properties located along the urban/rural boundary such as this one are often threatened by encroaching land uses that can pose incompatible with typical farming practices. Over time, land use incompatibilities can erode the rural, agricultural character and productivity of the Carpinteria Valley. To address this concern and ensure that the proposed hotel operations do not threaten ongoing agricultural activities, Measure AG-1 requires the applicant to record an Informational Notice on the property title that acknowledges the neighboring property's "right to farm" and that further acknowledges that inconveniences or impacts associated with typical farming activities will not be deemed a nuisance. The Notice must also be disclosed to the hotel operator and staff, and be made available to hotel guests.

iii. Biological Resources: Sensitive biological resources are located onsite, including a Coastal Commission-defined creek feature that has hydrologic connectivity to the (downstream) Carpinteria Salt Marsh, and a separate remnant riparian woodland area. Both features contain and support limited native vegetation and may support sensitive species, including but not limited to nesting birds. These areas are considered protected habitats under the Coastal Act and the City's Local Coastal Program ("LCP"). Impacts to these resources could therefore be

potentially significant.

Potential project impacts associated with biological resources would be mitigated to less than significant levels through mitigation measures and other requirements applied as conditions of approval. Measure Bio-1 requires clearing, grading and construction activities to begin outside of nesting bird season(s) if feasible. Otherwise, a pre-construction nesting bird survey must be completed and avoidance measures incorporated into construction activities as warranted. Measure BIO-2 requires the preparation and implementation of a habitat restoration plan that would address both protective measures of the identified habitat areas during construction, and the restoration/enhancement of these areas during the post-construction phase. The restoration plan must be prepared by a qualified biologist and include an ongoing monitoring plan to ensure the successful completion of the restoration project. The restoration plan must also be reviewed and approved by the California Department of Fish and Wildlife ("CDFW"), as applicable. Measure BIO-3 requires the design and construction of a stormwater treatment wetland/detention basin onsite. The planting and maintenance of the stormwater features must be included in the project-required habitat restoration plan.

iv. Cultural Resources: The project site is not located in an area known to contain any previously recorded cultural resources; nevertheless, the potential remains for previously undiscovered cultural resources to be encountered during project construction. To mitigate and reduce potentially significant impacts to a less than significant levels, Measure CR-1 requires a qualified archaeologist and Chumash Native American observer to be present during periods of initial ground disturbance to monitor construction activities and identify and protect any encountered cultural resources.

v. Geology & Soils: The project site is located in an area known to be tectonically active and to contain higher potential for liquefaction and expansive soils. Such conditions could threaten the safety of hotel guests and staff in the event of a large earthquake event. To reduce this potentially significant impact to a less than significant level, Measure GEO-1 requires the project to comply with the recommendations outlined in a project-specific geotechnical report.

vi. Hydrology & Water Quality: The proposed project involves a significant amount of earthwork to prepare the site for the new development. The potential for stormwater runoff during construction could have water quality impacts for downstream receiving bodies, such as the Carpinteria Salt Marsh. Likewise, in the post-construction condition, the project involves the replacement and/or expansion of impervious surfaces over the existing condition, which could result

in a net increase of runoff during storm events. The project site is also located in a designated flood hazard zone according to the current Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") for the area. Finally, the project will require significant more water than the existing mostly vacant use requires. These higher water demands will require service upgrades to properly serve the new development.

Mitigation of hydrology and water quality impacts would be addressed through the following mitigation measures which have been incorporated into the project conditions of approval. Measure WQ-1 requires the applicant to comply with the County of Santa Barbara Technical Guide for Low Impact Development and submit to the City for review and approval a Storm Water Control Plan. Measure WQ-2 requires the project to comply with all National Pollution Discharge Elimination System ("NPDES") permit requirements and receive coverage under the State Water Resources Control Board's Construction General Permit. Measure WQ-3 requires the submittal, approval, and implementation of an erosion and sedimentation control plan which must be maintained throughout construction activities. Measure WQ-4 requires the project to be designed in compliance with all flood hazard zone construction requirements, including but not limited to minimum finished floor heights above the established base flood elevation for the site. Measure WS-1 requires the project to comply with and provide the required improvements outlined in the Carpinteria Valley Water District's condition letter for the project.

vii. Land Use & Planning: The City of Carpinteria's General Plan/Coastal Land Use Plan contains a number of objectives and policies that apply to the proposed project, and that were adopted to mitigate the cumulative impacts associated with the buildout of the City. Identified potentially significantly environmental effects related to aesthetics/visual resources, agricultural resources, biological resources, cultural resources, geology/soils, water quality/hydrology, noise, and tribal cultural resources have the potential to contradict policy requirements of the City's General Plan/Coastal Plan, however the identified mitigation measures for these issue areas, which have been incorporated into the project conditions of approval, would reduce these impacts to less than significant levels and ensure the project remains consistent with all applicable General Plan/Coastal Land Use Plan requirements.

viii. Noise: Excavation, grading and construction activities would temporarily generate noise levels and/or vibrations that have the potential to exceed City thresholds for nearby sensitive receptors. Due to the project's adjacency to U.S. Highway 101, interior noise levels have the potential to exceed thresholds for habitable areas.

Mitigation includes Measure N-1, which limits noise producing construction activities to the hours between 7:00 a.m. and 5:00 p.m. Monday through Friday; Measures N-2 through N-4 require all construction equipment and vehicles to be properly maintained and outfitted with appropriate noise reducing measures; and, where feasible, to be located and buffered so as to not unduly impact neighboring residences. Measure N-5 requires the project to employ sound curtains along property boundaries shared with sensitive receptors if construction activities are found to likely exceed noise thresholds. Measure N-6 requires the assignment of a project noise monitor to be the designated point of contact for any noise complaints, and to be responsible for taking necessary measures to address any remedy any received complaints. Measures N-7 through N-9 stipulate building construction standards that must be adhered to in order to ensure interior noise thresholds are not exceeded. These measures would reduce noise impacts to less than significant levels and have been incorporated into the project conditions of approval.

ix. Tribal Cultural Resources: Measure CR-1, described above in the Cultural Resources section would address any potentially significant effects related to undiscovered tribal cultural resources that may be present on the project site.

1.3 Development Plan Findings

Pursuant to Carpinteria Municipal Code §14.68.030(9), the Planning Commission shall determine that all of the following criteria have been met prior to approving or approving with conditions a Development Plan:

a. *The proposed development is in conformance with the provisions of the applicable zoning district, Coastal Plan and implementation programs, and General Plan.*

As presented in the staff report prepared for the Planning Commission hearing of April 3, 2023, and herein incorporated by reference, the project involves the replacement of a former church building with a new two-story, 72-guestroom hotel pursuant to the site's General Commercial ("GC") land use designation in the City's General Plan/Coastal Land Use Plan ("GP/CLUP") and the corresponding base zoning designation of Commercial Planned Development ("CPD") district on the City's Zoning Map. The proposed hotel development is consistent with the types of land uses anticipated in the GC land use category and the CPD zone district. Further, the project has been designed to comply with all applicable development standards of the CPD zone district.

The project has also been designed to comply with applicable resource protection and hazard mitigation policies and regulations related to protection of creeks, water quality, agricultural resources, geologic hazards and flood hazards. Appropriate mitigation

measures were identified in the project-specific MND to address potential impacts related to these issue areas and have been incorporated in the project conditions of approval.

The project has also been found to be consistent with the General Plan/Coastal Plan's Land Use, Community Design, Circulation, Open Space/Recreation/Conservation, Noise, Safety, Public Facilities and Services, and Housing Element Objectives and Policies as discussed in the Planning Commission staff report. The General Plan/Coastal Plan encourages new visitor-serving commercial businesses to increase vitality and promote economic development in the City's commercial core and expand public coastal access opportunities, including a range of overnight visitor accommodation options. The proposed building has been reviewed and recommend for approval by the City's ARB as being consistent with the design intentions of the Community Design Element. Given the generally low traffic and VMT impacts of a hotel use, the project would not have a detrimental effect on area traffic circulation or climate goals. Appropriate measures are included in the conditions of approval to address potential noise impacts, water quality, flood hazards and geologic hazards, and to ensure the new use complies with all applicable requirements of the local Fire, Water and Sanitary Districts. Thus, this finding can be made.

b. *The proposed development is sited and designed to avoid risks to life and property due to geologic, flood, or fire hazards and that the proposed density of development is consistent with these objectives.*

The subject parcel is not located within a known fire hazard zone. Nevertheless, the project is conditioned by the Carpinteria-Summerland Fire Protection District to provide a fire sprinkler system for the building and to provide an additional fire hydrant to serve the property. The project site is located in an area mapped as part of a 100-year flood zone, and also within an area known to have the potential for liquefaction and/or expansive soils. The project has been conditioned to require it to be designed in compliance with applicable flood hazard design standards, including but not limited to a minimum finished floor height above the established base flood elevation for the site. Likewise, the project geotechnical consultant has prepared a site-specific soils investigation and concluded the site can accommodate the proposed development, provided the engineer's recommended measures are implemented during the design and construction phase of the building's foundation and paved areas. A condition requiring compliance with the project-specific geotechnical report has been included in the project conditions of approval. Thus, the proposed density of development is appropriate to the site and does not pose a geologic, flood or fire hazard to its occupants or neighboring uses.

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

The project site contains two separate features deemed to be protected habitat under the City's LCP and the Coastal Act: (1) a manmade drainage feature with hydrologic connectivity to the (downstream) Carpinteria Salt Marsh; and (2) an isolated remnant riparian woodland area. Both features are proposed to be protected in place, including a requisite 50-foot protective buffer for the onsite drainage feature. Consistent with the City's Creeks Preservation Program and other LCP resource protection policies, these riparian habitat features would be restored, enhanced, and protected for the life of the project. Additional design measures and project conditions have been incorporated into the project to reduce stormwater runoff and preserve historic offsite drainage rates and improve water quality. No sensitive species have been observed onsite in past surveys, however the potential exists for nesting birds to be present in trees on or around the property. Accordingly, a nesting bird survey is required prior to any clearing or construction activity if work is slated to begin during nesting season.

The project-specific MND also addresses the project's other potential environmental effects including, but not limited to, aesthetics, agricultural resources, cultural resources, geology/soils, water quality/hydrology, and noise. Mitigation measures for these issue areas would reduce potential impacts to less than significant levels. With the inclusion of these measures and their incorporation into the project conditions of approval, this finding can be made.

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

There are no known recorded easements on the property for public access. There are, however, several public utility easements across portions of the property and overlapping private access easements for adjoining properties to the north of the project site. All existing public utility easements and private access easements have been preserved and incorporated into the project plans. No additional easements are proposed or required of the project at this time.

e. *The proposed development will not adversely affect necessary community services and values including but not limited to traffic circulation, sewage disposal, fire protection, water supply, and police protection.*

Concerning fire, sanitary, water and police services, the agencies potentially affected by this project have been notified and have indicated an ability to continue to serve the property. The proposed development would not by itself, or cumulatively, impose an

increased demand on public services that would adversely affect the availability of these services to support existing or future development. The project will however be required to pay appropriate mitigation fees, connection fees and/or development impact fees to the respective agencies to pay for its incremental share of any future infrastructure upgrades to these services, and the project will be required to install additional sewer and water service upgrades meant to improve service and reliability in the project area.

With respect to traffic circulation, the surrounding road network in the project area generally operates at adequate levels of service. Given the nature of vehicle trips associated with a hotel use and the limited number of employees per shift, the increased number of vehicle trips resulting from the project would be nominal and can be accommodated by existing roadway capacities without significantly affecting traffic circulation. Restriping of Via Real along the project frontage is proposed in order to facilitate safe turning movements in and out of the project driveway, and to maintain a class II bicycle lane along the project frontage. Therefore, this finding can be made.

f. *The proposed development will not be detrimental to the peace, health, safety, comfort, convenience, property values, or general welfare of the neighborhood.*

The proposed hotel development represents an urban redevelopment project of an underutilized but developed lot that occupies a large lot in a mixed-use district along the City's primary east-west arterial north of U.S. Highway 101. The introduction of a new "business class" hotel serves to provide an additional visitor accommodation option within the City not presently otherwise provided. The proposed type of use is consistent with those anticipated for this zone district and land use designation. Overall, the use is generally low intensity in terms of metrics such as vehicle trips generated, employee demands, and potential neighbor nuisance effects. Efforts have been made to incorporate large building setbacks, judicious use of landscape screening and walls, and careful design and placement of building elements and project mechanical equipment, lighting and similar amenities to avoid impacts to neighboring uses. Measures are in place to avoid potential land use conflicts with neighboring agricultural uses. Measures are also in place to minimize construction-phase impacts on surrounding land uses, including but not limited to construction noise and dust impacts, and measures related to the ongoing upkeep and maintenance of the site.

In an effort to preserve the City's "small beach town" character and to be consistent with the City's temporary moratorium and pending permanent regulations on formula businesses, the proposed hotel has been conditioned to be run and managed by an operator that does not qualify as a "formula business." The hotel must also make available 15 percent of its rooms as low cost overnight visitor accommodations to meet the intent of City LCP and Coastal Act public access policies.

Given the above factors, the project does not have the potential to be detrimental to the peace, health, safety, comfort, convenience, property values, or general welfare of the neighborhood.

1.4 Coastal Development Permit Findings

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 findings:

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

The project is consistent with the Local Coastal Program as discussed in the Planning Commission staff report dated April 2, 2023 and incorporated herein by reference. The project involves the redevelopment of a (former) church into a 72-room hotel development pursuant to Chapter 14.20 (CPD district) of the City's Zoning Code. As designed, the project meets all applicable development standards. The project is also consistent with the types of commercial uses anticipated in the GC land use designation.

A new hotel would provide for expanded visitor accommodation options in Carpinteria. Such uses are considered a priority land use of the Coastal Act. In this case, the contemplated "business class" hotel would provide a new type of overnight accommodation not generally currently available in Carpinteria. Nevertheless, in order to ensure opportunities are also made available to households of lower- and moderate-incomes, 15% of the hotel rooms are conditioned to be aside and made available to lower income visitors for the life of the project.

The project has also been designed to include appropriate resource protection measures for the onsite drainage feature and separate remnant riparian woodland area. These features would be protected in place, including the requisite protective buffer for the drainage feature, for the life of the project. Appropriate conditions have been placed on the project to require construction-phase and post-construction measures to protect and enhance these resources.

As discussed in the staff report and herein incorporated by reference, the project is also consistent with the applicable objectives and policies of the Community Design, Open Space/Recreation/Conservation, Circulation, Safety, Noise, and Public Facilities and Services elements of the City's LCP. Appropriate conditions and measures are included in the project conditions of approval to address any potential impacts related to noise, water quality, hazards, cultural resources, public safety or public services/facilities.

Attachment A

Exhibit 2:

Proposed Plans

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

SHEET INDEX

SHEET	DRAWING TITLE
A1	PROJECT INFORMATION, VICINITY MAP AND PROPOSED SITE PLAN
A2	SITE INFORMATION- AERIAL MAP AND SITE PHOTOS
A3	OVERALL SITE SECTION AND SURROUNDING
A4	PROPOSED LANDSCAPE PLAN
A5	PROPOSED LEVEL 01 PLAN
A6	PROPOSED LEVEL 02 PLAN
A7	PROPOSED EXTERIOR ELEVATIONS
A8	PROPOSED EXTERIOR ELEVATIONS
A9	BUILDING AND SITE SECTIONS
A10	RENDERING- VIEW FROM VIA REAL
A11	RENDERING- VIEW OF MAIN ENTRANCE
A12	DESIGN COMPARISON
A13	ELEVATION COMPARISON
L-1	PLANTING PLAN- COLOR
LP-1	PLANTING PLAN
LI-1	IRRIGATION PLAN
C-1	SITE TOPOGRAPHIC MAP
C-2	SITE TOPOGRAPHIC MAP
C-3	PRELIMINARY GRADING AND DRAINAGE PLAN
C-4	PRELIMINARY GRADING AND DRAINAGE PLAN
C-5	PRELIMINARY WATER AND SEWER PLAN
C-6	PRELIMINARY WATER AND SEWER PLAN
C-7	PRELIMINARY EROSION CONTROL PLAN
C-8	PRELIMINARY EROSION CONTROL PLAN
C-9	SECTIONS
C-10	PRELIMINARY SIGNAGE AND STRIPING PLAN
C-11	DETAILS
OP-1A,1B	OPTION 1 EXTERIOR ELEVATIONS
OP-1C,1D	OPTION 1 RENDERING OF VIA REAL AND MAIN ENTRANCE
OP-2A,2B	OPTION 2 EXTERIOR ELEVATIONS
OP-2C,2D	OPTION 2 RENDERING OF VIA REAL AND MAIN ENTRANCE

PROJECT INFORMATION

PROJECT ADDRESS:	4110 VIA REAL, CARPINTERIA, CA 93013
ASSESSOR PARCEL NUMBER:	004-017-022
GROSS PARCEL AREA:	± 113,839 SQ.FT. (± 2.62 ACRES)
LEGAL DESCRIPTION:	PARCEL C OF PARCEL MAP NO. 25114 IN THE CITY OF CARPINTERIA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, AS SHOWN ON MAP FILED IN BOOK 39, PAGES 15 THROUGH 16 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.
GENERAL PLAN LAND USE:	GENERAL COMMERCIAL (GC)
ZONING:	COMMERCIAL PLANNED DEVELOPMENT DISTRICT/ RESIDENTIAL OVERLAY (CPD/R)
BUILDING HEIGHT:	30 FEET MAXIMUM

PROPOSED PROJECT

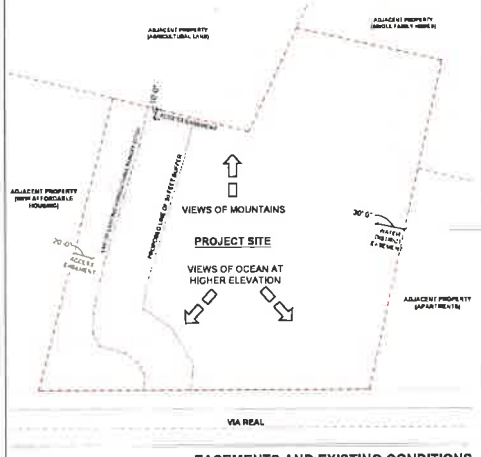
PROPOSED USE:	NEW HOTEL (FAIRFIELD INN & SUITES BY MARRIOTT)
NO. OF GUESTROOMS:	72 GUESTROOMS
NO. OF STORIES:	2 STORY
TOTAL BUILDING AREA:	44,191 SQ.FT (GROSS)
LOT COVERAGE:	BUILDING FOOTPRINT = 22,460 SQ.FT. (20 %)
PARKING REQUIRED:	77 SPACES (72 FOR GUESTROOMS + 5 EMPLOYEES)
PARKING PROVIDED:	77 SPACES (INCLUDES 4 ACCESSIBLE PARKING) 2 LOADING AREAS PROVIDED AT GRADE LEVEL

REPORTS INCLUDED:

STORMWATER CONTROL PLAN- DATED JULY 20, 2019
(PREPARED BY STANTEC CONSULTING SERVICES INC.)



VICINITY MAP



EASEMENTS AND EXISTING CONDITIONS



SITE COVERAGE

TOTAL LOT AREA	113,839 SQ.FT.	(100 %)
BUILDING FOOTPRINT	22,511 SQ.FT.	(20 %)
DRIVEWAYS/ PARKING (INCLUDES 18,718 SQ.FT. EASEMENT)	43,496 SQ.FT.	(38 %)
LANDSCAPE (INCLUDES TERRACE & WALKWAYS)	47,832 SQ.FT.	(42 %)
TERRACE & WALKWAYS	6,111 SQ.FT. (5 %)	

PROPOSED SITE PLAN

0' 30'
15' 60'

SCALE: 1" = 30'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

PROJECT INFORMATION

EXHIBIT
A1

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



EXISTING STREET FRONT- VIEW FROM VIA REAL



EXISTING SITE- VIEW LOOKING SOUTH



EXISTING SITE- VIEW LOOKING NORTH



AERIAL MAP- SITE SURROUNDING

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

EXISTING
SITE PHOTOGRAPHS

EXHIBIT
A2

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



SCALE: 1" = 20'-0"



SCALE: 1" = 30'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT
NKLOSURES, INC. ARCHITECTS
Tel: 323 309 7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

OVERALL SITE SECTION AND SURROUNDING

EXHIBIT
A3

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



NOTE:

SEE SHEET LP-1 FOR PLANTING PLAN INFORMATION AND SHEET LI-1 FOR IRRIGATION PLAN INFORMATION

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323 309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

0' 20'
10' 40'
SCALE: 1" = 20'-0"

PROPOSED LANDSCAPE PLAN-COLOR

EXHIBIT
A4

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

0' 20' 10' 40'
SCALE: 1" = 20'-0"

PROPOSED
LEVEL 01 PLAN

EXHIBIT
A5

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



ARCHITECT
NKLOSURES, INC. ARCHITECTS
Tel: 323 309 7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

0' 20'
10' 40'
SCALE: 1" = 20'-0"

PROPOSED
LEVEL 02 PLAN

EXHIBIT
A6

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



EAST ELEVATION (2)
1/8" = 1'-0"



SOUTH ELEVATION (FROM VIA REAL) (1)
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

PROPOSED EXTERIOR ELEVATIONS

EXHIBIT
A7

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



WEST ELEVATION (2)
1/8" = 1'-0"



NORTH ELEVATION (MAIN ENTRY) (1)
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:Info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

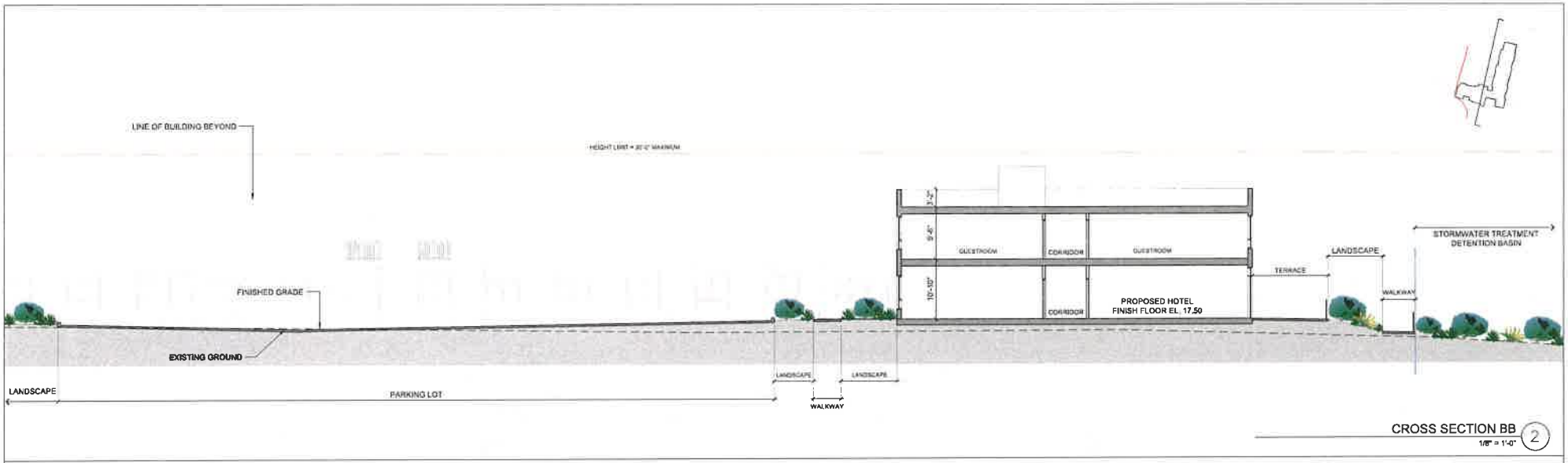
VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

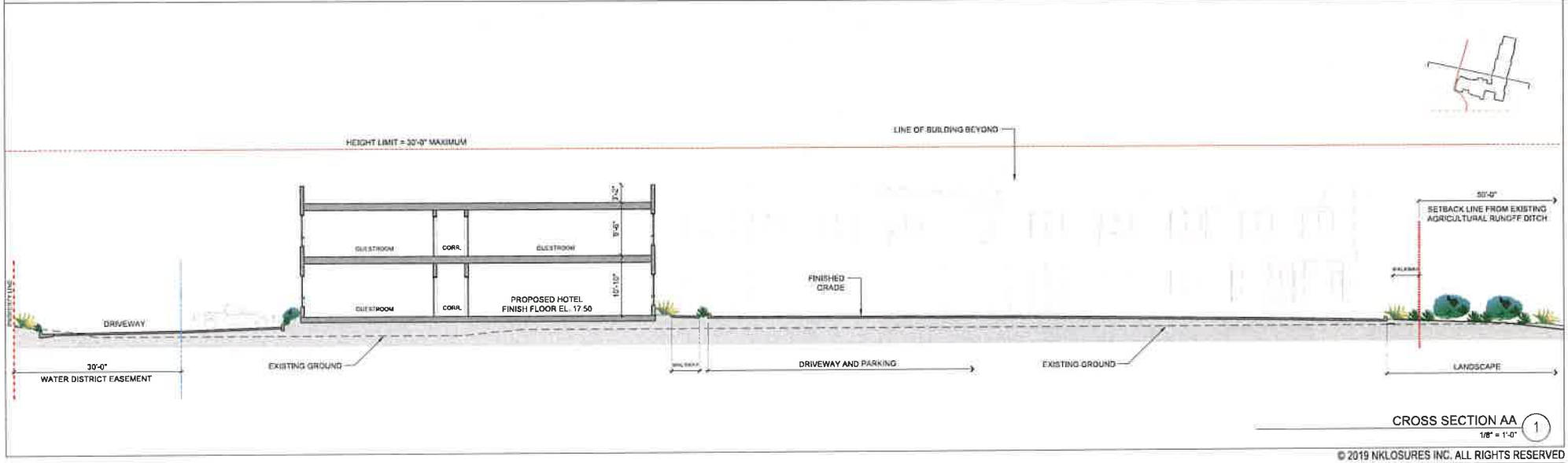
EXTERIOR ELEVATIONS

EXHIBIT
A8

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



CROSS SECTION BB 2
1/8" = 1'-0"



CROSS SECTION AA 1
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

BUILDING AND SITE SECTIONS

EXHIBIT
A9

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF BUILDING FROM VIA REAL (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
A10

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF MAIN ENTRANCE (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

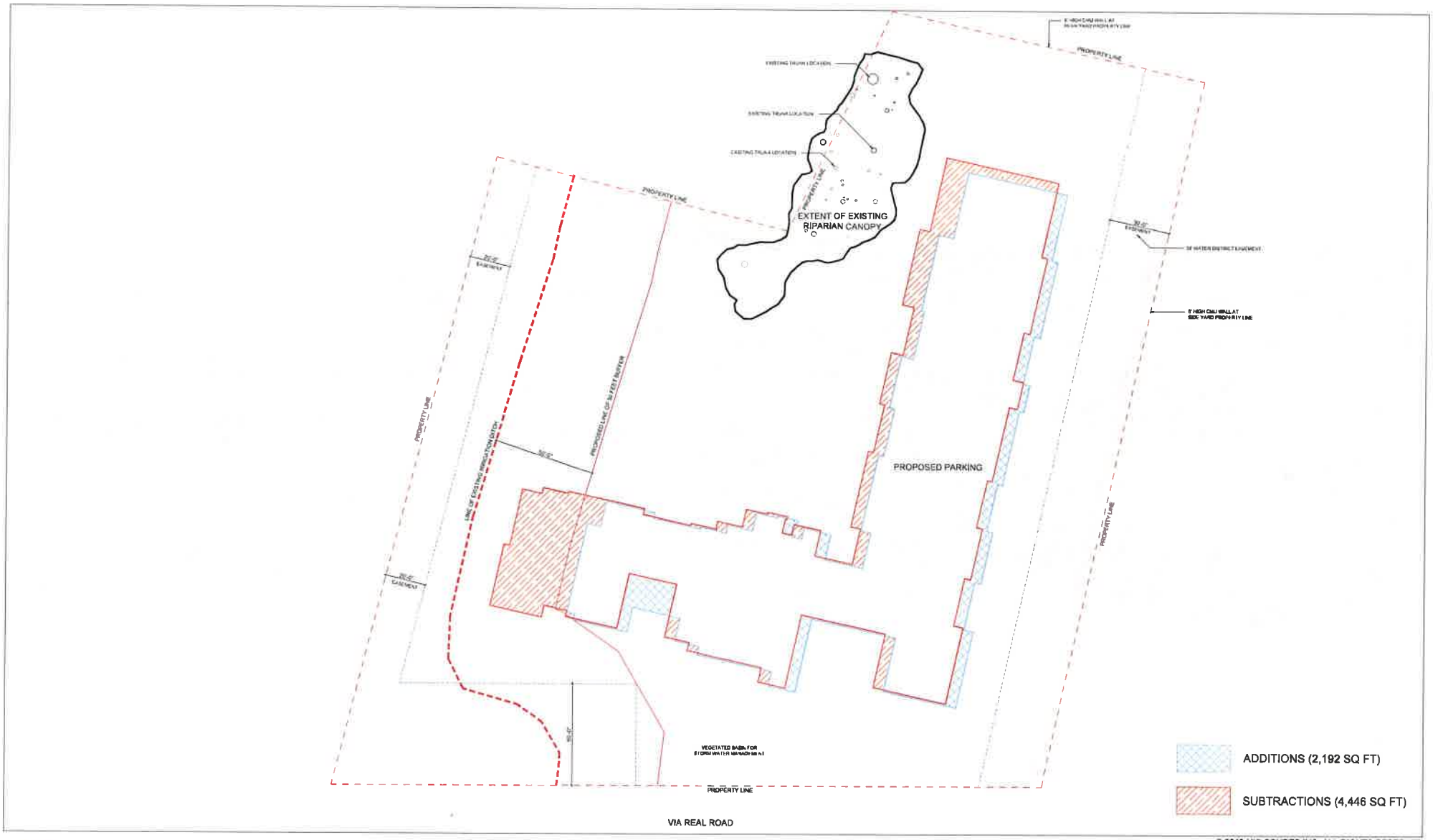
RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
A11

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323 309 7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

N

0' 10' 20' 40'

SCALE: 1" = 20'-0"

DESIGN COMPARISON

EXHIBIT
A12

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



APPROVED ELEVATION LEVEL 01 FINISH FLOOR EL. 17.50

SOUTH ELEVATION (FROM VIA REAL) 2



PROPOSED LEVEL 01 FINISH FLOOR EL. 17.50

SOUTH ELEVATION (FROM VIA REAL) 1

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8' 4' 16'
SCALE: 1/8" = 1'-0"

ELEVATIONS COMPARISON

EXHIBIT
A13

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



cta

ARCHITECT:
nKLOSURES, Inc. ARCHITECTS
Tel: 323 309 7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 6, 2019

N

0' 20'
10' 40'
SCALE: 1" = 20'-0"

CONCEPTUAL LANDSCAPE PLAN

EXHIBIT
L1

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc

PLANTING NOTES

1. LANDSCAPE CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID AND PERFORM SITE ANALYSIS AS NECESSARY TO ENSURE THAT PLANTS SHOWN ON THE PLANS WILL SURVIVE IN THE LOCATIONS AS DESIGNED. IF ANY CONFLICTS ARE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
2. LANDSCAPE CONTRACTOR SHALL HOLD A CURRENT BUSINESS LICENSE WITH THE CITY OF COUNTY THAT HAS JURISDICTION OVER THE PROJECT.
3. LANDSCAPE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF PLANT MATERIALS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.
4. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING WITH EITHER SITE IMPROVEMENTS OR UNDERGROUND UTILITIES. STRUCTURAL IMPROVEMENTS SHALL BE INSTALLED PRIOR TO PLANTING OPERATIONS.
5. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND STAKING PLANTING BEDS AND LIMITS OF WORK AREAS FOR REVIEW BY OWNER AND LANDSCAPE ARCHITECT PRIOR TO PLANTING OPERATIONS. ANY DAMAGE OCCURRING AS A RESULT OF PLANTING OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. DO NOT INSTALL PLANT MATERIALS UNTIL FINAL GRADES, IRRIGATION, AND HARDSCAPE IMPROVEMENTS ARE COMPLETED AND APPROVED BY THE LANDSCAPE ARCHITECT. ANY PLANTS INSTALLED PRIOR TO THIS APPROVAL SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
7. PERFORM ALL CONTRACTOR'S WORK IN A MANNER THAT WILL MINIMIZE DISTURBANCE TO EXISTING VEGETATION AND IMPROVEMENTS. PROTECT ALL EXISTING TREES AND SHRUBS NOT DESIGNATED FOR REMOVAL. ANY DAMAGE TO EXISTING VEGETATION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
8. ALL PLANTING DESIGNATED ADJACENT TO PAVED AREAS SHALL BE PROTECTED FROM DAMAGE BY VEHICLES AND PEDESTRIANS DURING AND AFTER PLANTING OPERATIONS. PROVIDE TEMPORARY BARRICADES AS NECESSARY.
9. COORDINATE INSTALLATION OF PLANTING TO AVOID CONFLICTS WITH UTILITY OR WORK BY OTHER TRADES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR WORK BY OTHER TRADES CAUSED BY LANDSCAPE WORK.
10. APPLY ALL FERTILIZER, SOIL AMENDMENTS AND HERBICIDES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND LOCAL REGULATIONS. USE ORGANIC FERTILIZERS WHERE POSSIBLE.
11. ALL PLANTING AREAS SHALL BE MULCHED WITH A MINIMUM 3" LAYER OF SHREDDED BARK MULCH. DO NOT PLACE MULCH WITHIN 6" OF TREE TRUNKS OR SHRUB STEMS.
12. ALL PLANTING AREAS SHALL BE IRRIGATED WITH A FULLY AUTOMATIC, WATER-CONSERVING IRRIGATION SYSTEM. SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE WITH HEAD-TO-HEAD SPACING. USE DRIP IRRIGATION FOR SHRUB AND GROUNDCOVER AREAS.
13. ALL TREES SHALL BE STAKED AND GUYED AS SHOWN IN THE PLANTING DETAILS. REMOVE STAKES AND GUYS AFTER ONE GROWING SEASON.
14. ALL LAWN AREAS SHALL BE SOD. SEED MIXES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
15. ALL PLANTING AREAS SHALL BE MAINTAINED FREE OF WEEDS, TRASH, AND DEBRIS. REMOVE ALL WEEDS BY HAND OR WITH APPROVED HERBICIDES. DO NOT USE HERBICIDES NEAR WATER BODIES OR DRAINAGE COURSES.
16. ALL PLANTING AREAS SHALL BE MAINTAINED FOR A MINIMUM OF 90 DAYS AFTER FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, MULCHING, FERTILIZING, PRUNING, AND REPLACEMENT OF DEAD OR DISEASED PLANTS.
17. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IN WRITING AT LEAST 48 HOURS PRIOR TO THE FINAL INSPECTION. ALL PUNCH LIST ITEMS SHALL BE COMPLETED BEFORE FINAL ACCEPTANCE IS GRANTED.
18. THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A COPY OF AN AS-BUILT PLAN SHOWING ANY CHANGES OR DEVIATIONS FROM THE APPROVED PLANS. THIS PLAN SHALL BE SUBMITTED PRIOR TO FINAL ACCEPTANCE.
19. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. ANY PLANTS THAT DIE OR ARE IN POOR CONDITION DURING THIS PERIOD SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
20. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK. COPIES OF PERMITS SHALL BE PROVIDED TO THE OWNER.
21. THE LANDSCAPE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS, CODES, AND REGULATIONS. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE CONSTRUED AS REQUIRING OR PERMITTING ANY VIOLATION OF LAW.
22. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC AND WORKERS FROM INJURY AND PROPERTY FROM DAMAGE.
23. THE LANDSCAPE CONTRACTOR SHALL KEEP THE PREMISES REASONABLY CLEAN AND ORDERLY DURING THE COURSE OF THE WORK. ALL DEBRIS, RUBBISH, AND EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE DAILY.
24. THE LANDSCAPE CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS, INCLUDING BUILDINGS, PAVING, UTILITIES, AND VEGETATION, FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
25. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND LANDSCAPE ARCHITECT REGARDING THE LOCATION OF ALL UTILITIES, INCLUDING UNDERGROUND AND OVERHEAD LINES, PRIOR TO BEGINNING ANY EXCAVATION.
26. THE LANDSCAPE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING TREES TO REMAIN. NO EXCAVATION, GRADING, OR STORAGE OF MATERIALS SHALL OCCUR WITHIN THE DRIP LINE OF ANY TREE TO REMAIN.
27. ALL PLANTING AREAS SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. NO PONDING OF WATER SHALL BE PERMITTED.
28. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND LANDSCAPE ARCHITECT REGARDING THE LOCATION AND INSTALLATION OF ANY SIGNAGE, LIGHTING, OR OTHER SITE FURNISHINGS.
29. ALL PLANTING AREAS SHALL BE EDGED WITH A CLEAN, VERTICAL CUT TO PROVIDE A NEAT APPEARANCE. EDGING SHALL BE PERFORMED AT THE TIME OF INSTALLATION AND AS NECESSARY DURING THE MAINTENANCE PERIOD.
30. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A SAMPLE OF EACH TYPE OF MULCH, SOIL AMENDMENT, AND FERTILIZER TO THE OWNER AND LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

POTTED PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
TREES			
	[illegible]	[illegible]	[illegible]
SHRUBS			
	AGAVE [illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]

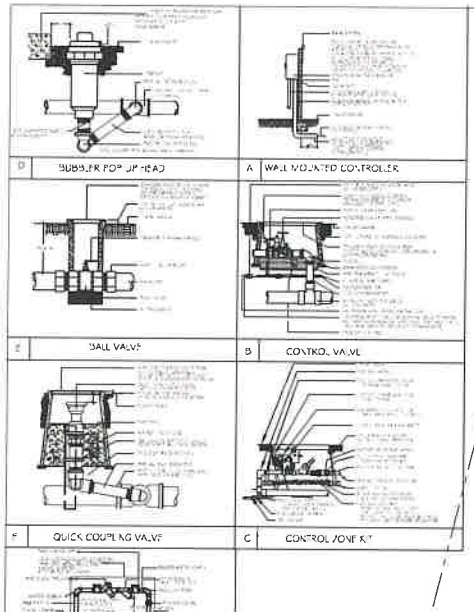
NOTE: GUIDE ROSE - SIMILAR TO CONCEPT AS DETERMINED BY ARCHITECT

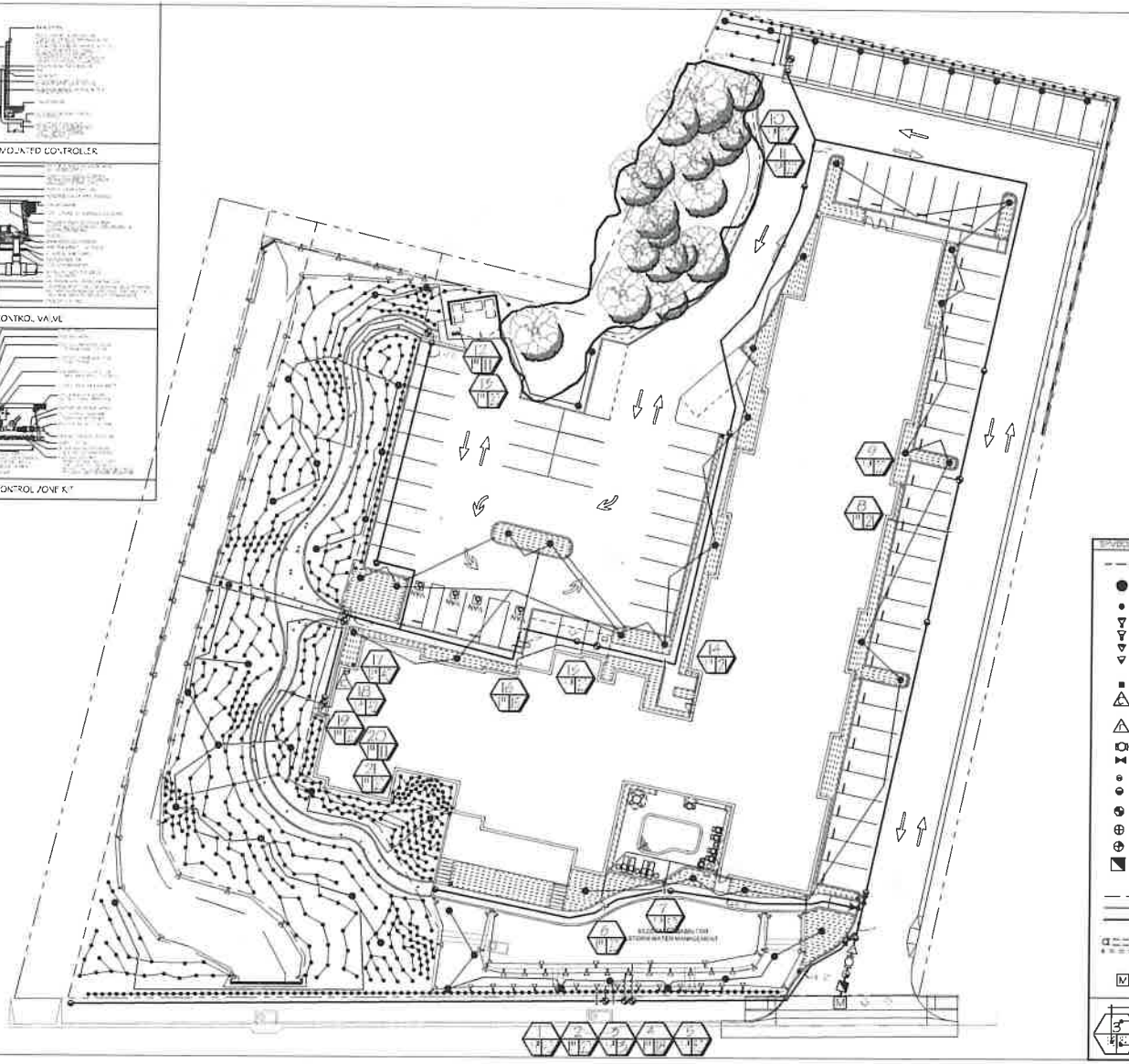
B SHRUB PLANTING

A TREE PLANTING - VERT. STAKES

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
TREES			
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
	[illegible]	[illegible]	24" BOX
SHRUBS			
	[illegible]	[illegible]	5 GAL
	[illegible]	[illegible]	5 GAL
	[illegible]	[illegible]	5 GAL





NOTES

1. DRAWINGS ARE DIAGRAMMATIC. EQUIPMENT SHOWN IN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WITHIN PLANTING AREAS.
2. DO NOT INSTALLY INSTALL THE SYSTEM AS SHOWN WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN CASE THIS NOTIFICATION IS NOT GIVEN, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
3. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL, CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
4. INSTALL ELECTRICAL HOOK UP FOR CONTROLLER. INSTALL NO. 14 UF DIRECT BURIAL IRRIGATION WIRE (WHITE COMMON, DIFFERENT COLOR PILOT FOR EACH CONTROLLER) USE SPLIT CONNECTORS AND RUN WIRE A MINIMUM OF 12 INCHES (18 INCHES IN DEPTH), BUNDLE AND TAPE EVERY TWENTY FEET (100 FEET). FORM EXPANSION COILS AT EACH VALVE AND CHANGE OF DIRECTION. INSTALL WIRING IN PVC SCH 40 SLEEVES UNDER PAVING.
5. PRESSURE MAINLINE TWO (2) INCHES AND LARGER SHALL BE PVC CLASS 315 WITH SCHEDULE 40 FITTINGS. PRESSURE MAINLINE AND FITTINGS LESS THAN TWO (2) INCHES SHALL BE PVC SCHEDULE 80.
6. NON PRESSURE LATERAL SHALL BE PVC SCH 40 WITH SCHEDULE 40 FITTINGS.
7. FLUSH ALL LINES AND ADJUST ALL HEADS FOR MAXIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO EXISTING WALLS, DRIVES AND BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE OF ARC IN FIT EXISTING SITE CONDITIONS.
8. GATE VALVE SHALL BE LINE SIZED AND LOCATED IN PURPLE VALVE BOXES, PER SPECIFICATIONS.
9. CONTROL VALVES SHALL BE SIZED AS NOTED ON DRAWING AND LOCATED IN PURPLE VALVE BOXES PER SPECIFICATIONS.
10. ELIMINATE ALL EXPOSED DRAINAGE AS NECESSARY.
11. CONTRACTOR SHALL MAKE ALL NECESSARY ADJUSTMENTS TO PRESSURE SYSTEM AS REQUIRED TO BALANCE AS OPTIMAL SYSTEM FOR THREE CONCERNS WITH 50% OVERLAP OF HEADS IN ALL PLANTED AREAS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING POSITIVE DRAINAGE IN ALL NON-HARDSCAPE / PLANTED AREAS.
13. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THE WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE OBSERVED.
14. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL UTILITIES, STRUCTURES AND SERVICES WITHIN, CONNECTIONS WITH, OR ADJACENT TO UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE GENERALLY APPROXIMATE ONLY, AND DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
15. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
16. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTOR AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
17. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN A SLEEVE TWICE THE DIAMETER OF THE PIPE CARRIED. ALL WIRE UNDER PAVING TO BE INSTALLED IN A SCH. 40 SLEEVE OF THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
18. ALL QUICK COUPLER VALVES TO BE ASSEMBLED AS SHOWN ON THE INSTALLATION DETAILS.
19. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND VANES SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDING, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES ADJUSTMENT OF HEADS AT THE TIME OF INSTALLATION AND ONE (1) ADJUSTMENT DURING THE GUARANTEE PERIOD. UNDERSIZING NOZZLES, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE SIZES AND THE REPLACEMENT OF NOZZLES WITH INCOMPATIBLE UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
20. ALL IRRIGATION SYSTEM SHALL BE INSTALLED PER GOVERNING WATER AGENCY STANDARDS, REGULATIONS AND SPECIFICATIONS. IF A DISCREPANCY EXISTS BETWEEN THE GOVERNING WATER AGENCY STANDARDS, REQUIREMENTS AND SPECIFICATIONS AND THESE PLANS, THE MORE STRINGENT STANDARDS, REQUIREMENTS AND SPECIFICATIONS SHALL BE IMPLEMENTED.

IRRIGATION LEGEND

SYMBOL	MFG	MODEL NUMBER	DESCRIPTION	GPM	RAD	PSI
	RAINBIRD	XFD-06-18-R DRIPLINE W/ CHECK/PRESS REG	LANDSCAPE DRIP LINE 12" O.C. @ 0.6 GPH, 18" O.C. @ 1.0 GPH	0.60 GPH 1.0 GPH		20
	RAINBIRD	XBT-2-ECO	SINGLE PORT EMITTER 2 EACH TREE	0.5 GPH 1.0 GPH		30
	RAINBIRD	XBT-2-CV (GALL 5 GAL) PC	SINGLE PORT EMITTER	2.0 & 5.0 GPH		30
	RAINBIRD	RD-5H-04-R24-VAN-90	POP-UP ROTARY	1.03	24'	30
	RAINBIRD	RD-5H-04-R24-VAN-180	POP-UP ROTARY	1.58	24'	30
	RAINBIRD	RD-5-R24-VAN-90	ROTARY ON RISER	1.03	24'	30
	RAINBIRD	RD-5-R24-VAN-180	ROTARY ON RISER	1.58	24'	30
	NETAFIM	TLOSOMFV-1	FLUSH VALVE			
	RAINBIRD	ESP-LXME-SS 30 STATIONS W/ LNK2 UPGRADE	AUTOMATIC CONTROLLER - INSTALL ON BACK OF WALL INSTALL IN VANDAL RESISTANT - LOCKER STAINLESS STEEL ENCLOSURE OR APPROVED EQUAL			
	NETAFIM	DF-150S - 40 - 1 1/2" FILTER	MANUAL DISC WATER FILTER W/ 40 FILTER			
	RAINBIRD	FS-150 FLOW	FLOW SENSOR			
	WATTS	909 SERIES WITH POST IND BRASS OS & Y WITH GATE VALVE	SIZE VALVE LINE SIZED			
	RAINBIRD	RSD-BCK - RAIN CHECK	AUTOMATIC RAIN SHUT OFF DEVICE - INSTALL PER MFG SPECS. LOCATION TO BE APPROVED BY OWNER			
	RAINBIRD	3300 LINE MOVE THREAD	QUICK COUPLER - INSTALL VALVE IN PLASTIC VALVE BOX EXPANSION OR APPROVED EQUAL @ 0.5 @ 150 O.C.			
	RAINBIRD	PRS-D-MED-B SERIES	AUTOMATIC REMOTE CONTROL VALVE - SIZE PER PLAN			
	RAINBIRD	XCZ-150-COM - PRS	AUTOMATIC CONTROL ZONE KIT			
	HUNTROL	MASTER VALVE - MODEL 150PRS	AUTOMATIC REMOTE CONTROL VALVE - SIZE PER PLAN			
	FEBCO	825 Y - LINE SIZE	REDUCED PRESSURE BACKFLOW PREVENTER			
	LATERAL LINE	SCH. 40 PVC SIZE AS NOTED - UV RESISTANT - ON GRADE				
	LATERAL LINE	SCH. 40 PVC SIZE AS NOTED - 12" MINIMUM COVER				
	MAIN LINE	CLASS 315 PVC 2" AND LARGER, SCH 40 PVC 1 1/2" AND SMALLER SIZE AS NOTED - 24" MINIMUM COVER				
	SLEEVE ELECTRICAL CONTROL WIRE SLEEVE	SCH. 40 PVC SIZE = TWICE DIAMETER OF PIPE - 24" MINIMUM COVER SCH. 40 PVC - 2" DIA. 24" COVER MIN., SIZE AS NECESSARY				
M	WATER METER	VERIFY SIZE REQUIRED FLOW FOR EXISTING 2" METER LOCATION AND SIZE NEW WATER METER AND EQUIPMENT SHALL BE FOR LANDSCAPE IRRIGATION USE ONLY				

NOTES: INSTALL ANTI DRAIN DEVICE ON ALL ROTARY HEADS
INSTALL FLUSH VALVES & AIR RELIEF VALVES AS NECESSARY W/ MIN. ONE EA. SYSTEM
ALL IRRIGATION EQUIPMENT, PRESSURE & NONE PRESSURE IRRIGATION LINES TO MEET ALL IRRIGATION WATER DISTRICT AND CITY REQUIREMENTS

ARCHITECT:
nKLOSURES, Inc. ARCHITECTS
Tel: 323.309.7334
Email:Info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 5, 2019

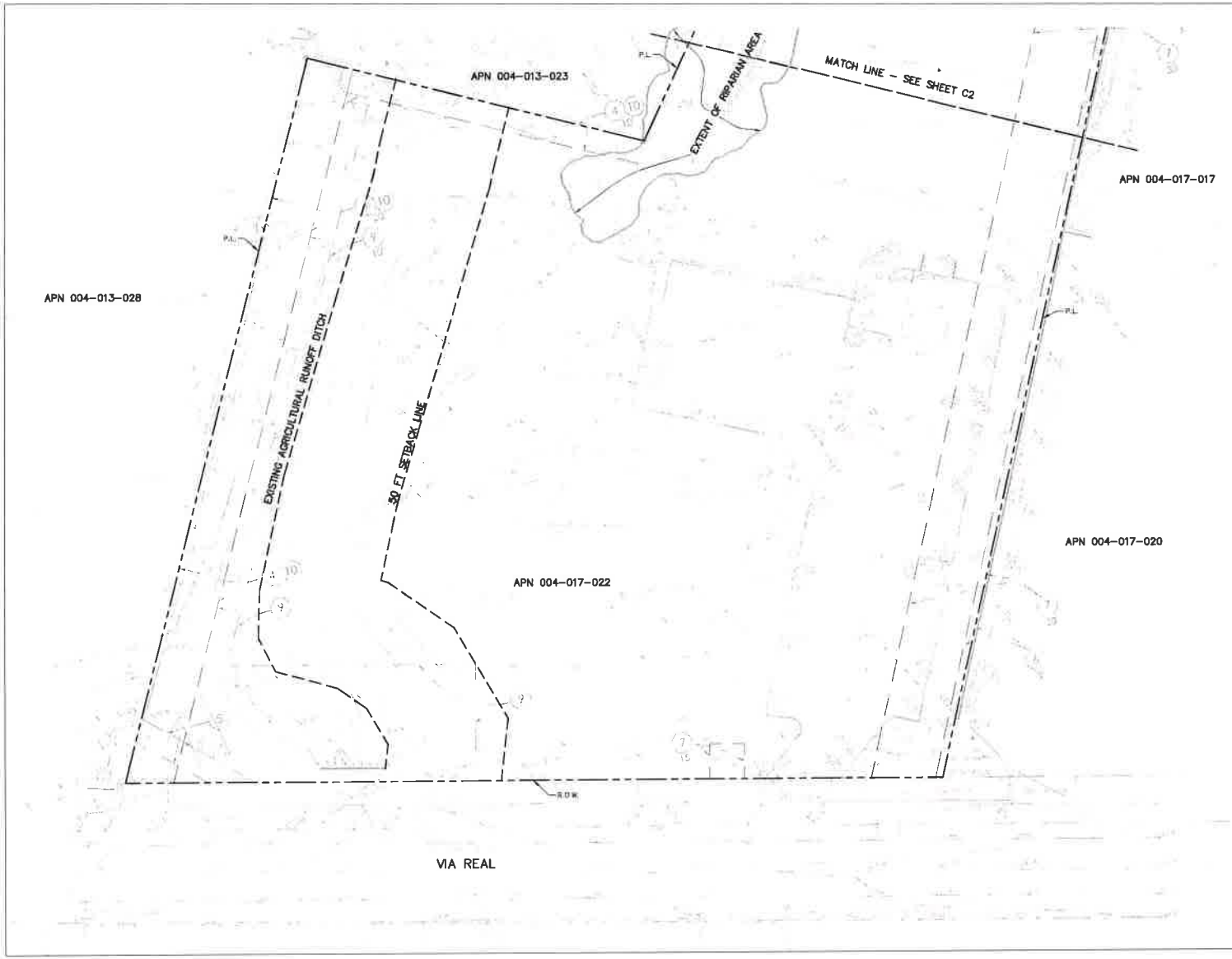
N

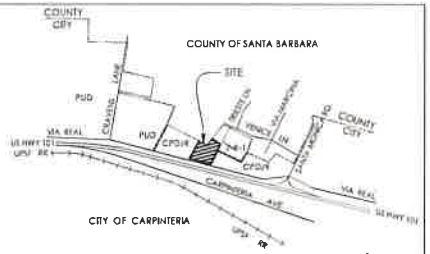
0' 20'
10' 40'
SCALE: 1" = 20'-0"

IRRIGATION PLAN

EXHIBIT
LI-1

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc





VICINITY MAP
NOT TO SCALE

SURVEYORS NOTES:

THIS SURVEY WAS PERFORMED IN APRIL 2013 AT THE REQUEST OF LISA PLOWMAN OF PISKERT GROUP AT A SCALE OF 1" = 20'. THE BOUNDARY SHOWN HEREON IS NOT A COMPLETE BOUNDARY SURVEY AND IS BASED ON THE RECORD DATA ONLY BASE ON MINIMAL TIES TO THE BOUNDARY. IN ORDER TO MAXIMIZE THE SETBACKS OR BUILDABLE AREA A COMPLETE BOUNDARY SURVEY SHOULD BE COMPLETED. THE RIGHT OF WAY OF THE NORTHERLY SIDE OF THE 101 FREEWAY IS BASED UPON THE RETRACED PARCEL MAP AND NO RIGHT OF WAY MONUMENTS WERE TIED OUT. THE RIGHT OF WAY WAS NOT RETRACED OR CONFIRMED DURING THIS SURVEY.

NO OPINIONS OF UNWRITTEN RIGHTS HAVE BEEN SHOWN OR EXPRESSED HEREON.

BASE OF BEARINGS: THE BASIS OF BEARINGS FOR THIS SURVEY ARE THE FOUND MONUMENTS ALONG THE NORTHERLY PROPERTY LINE OF SOUTH 64°35'58" EAST AS SHOWN ON A PARCEL MAP NO. 25114 RECORDED IN BOOK 39, PAGES 15 THRU 16 OF PARCEL MAPS

VERTICAL DATUM AND PROJECT BENCHMARK: THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88 BASED UPON GPS TIES TO NGS BENCHMARK WITH A PID OF "EW8491" BEING A STEEL ROD SET INSIDE A HANDHOLE, HAVING AN ELEVATION OF 13.45' (U.S. SURVEY FEET)

ALL ELEVATIONS AND DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET.

PARCEL INFORMATION

ADDRESS	4110 VIA REAL, CARPENTERIA 93013
APN	004-017-022
AREA:	3.62 ACRES GROSS & NET
ZONING:	CPD/R (COMMERCIAL PLANNED DEVELOPMENT / RESIDENTIAL OVERLAY

LEGAL DESCRIPTION:

PARCEL C OF PARCEL MAP NO. 25114 IN THE CITY OF CARPINTERIA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, AS SHOWN ON MAP FILED IN BOOK 39, PAGES 15 THROUGH 16 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

UTILITY COMPANIES:

PHONE	VERIZON TELEPHONE COMPANY
WATER	CARPINTERIA VALLEY WATER DISTRICT
ELECTRIC	SCE
GAS	SOUTHERN CALIFORNIA GAS COMPANY (SCG)
CABLE	COX CABLE/VERIZON
SEWER	CARPINTERIA VALLEY WATER DISTRICT

REFERENCES

R1 = PARCEL MAP NO. 25114 BOOK 39, PAGES 15 and 16
R2 = TRACT MAP NO. 25070 BOOK 97, PAGES 72

EASEMENT NOTES:

EASEMENT NOTES SHOWN ON SHEET C2.

NOTE:
NO NEW EASEMENTS ARE PROPOSED FOR THIS PROJECT.

AGRICULTURAL RUNOFF DITCH NOTE:

THE LINE OF EXISTING AGRICULTURAL RUNOFF DITCH SHOWN ALONG THE WESTERLY SITE AREA IN THE NORTH SOUTH DIRECTION AND THE 50 FT SETBACK LINE WERE DEFINED BY MR. MANJUNATH VENKAT, A CONSULTING BIOLOGIST IN A LETTER FROM MR. VENKAT TO MR. KUSHNATHU SUBJECT: TECHNICAL MEMO - CREEK SETBACK, VIA REAL HOTEL DEVELOPMENT PROJECT, DATED MARCH 28, 2016.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

ARCHITECT: **nKLOSURES, Inc.** Tel: 323.309.7334 Email:info@nKLOSURES.com	RAM HOTELS P.O.BOX 52098 AMARILLO, TX 79159	VIA REAL HOTELS 4110 VIA REAL, CARPINTERIA SEPTEMBER 6, 2016	NO 81080 CIVIL	**SITE TOPOGRAPHIC MAP**	C1

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.

V:\2064\ACTIVE\2064281047\2281047-ACAD\CIVIL\2064281047C_TP.DWG
7/18/2019 10:28 AM



Page 1 of 2 | Date: June 12, 2018 | Case No.: 18-09-1415A

Federal Emergency Management Agency
Washington, DC 20472

LETTER OF MAP REVISION BASED ON FILL DETERMINATION DOCUMENT (REMOVAL)

COMMUNITY AND MAP PANEL INFORMATION		LEGAL PROPERTY DESCRIPTION
COMMUNITY	CITY OF CARPINTERIA, SANTA BARBARA COUNTY, CALIFORNIA	Lot 20, Tract 25,070, as shown on the Plat recorded in Book 97, Pages 71 through 73, in the Office of the Recorder, Santa Barbara County, California
	COMMUNITY NO.: 060332	
AFFECTED MAP PANEL	NUMBER: 06083C0018	
	DATE: 6/20/2018	
FLOODING SOURCE: EL ESTERO LAGOON TRIBUTARY	APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY IN MDSS: 34.403978, -119.533978 SOURCE OF LAT & LONG: LOMA LODC	DATUM: NAD 83

DETERMINATION

LOT	BLOCK/SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	PRELIMINARY BFE	LOWEST ADJACENT GRADE (LAG) ELEVATION (NAVD 88)	LOWEST LOT ELEVATION (NAVD 88)
20		Tract 25,070	4140 Via Real	Structure (Bldg ID)	X (unshaded)		10.1 feet	

Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).

ADDITIONAL DOCUMENTS (IF NOTED) - Please refer to the appropriate section on Page 2 for the additional comments and documents listed below.

DETERMINATION TABLE CONTINUED
PORTIONS REMAIN IN THE SFHA
ZONE A

This document provides the Federal Emergency Management Agency's determination regarding a request for a Letter of Map Revision based on fill for the property described above. Using the information submitted and the effective National Flood Insurance Program (NFIP) map, we have determined that the structure or the property(ies) were not located in the SFHA, as were delineated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood). This document revises the effective NFIP map to remove the subject property from the SFHA located on the effective NFIP map; therefore, the Federal mandatory flood insurance requirement does not apply. However, the lender has the option to continue the flood insurance requirement to protect its financial risk on the loan. A Preferred Risk Policy (PRP) is available for buildings located outside the SFHA. Information about the PRP and how one can apply is enclosed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Engineering Library, 3601 Eisenhower Ave, Ste 500, Alexandria, VA 22304-6426.

Luis Rodriguez, P.E., Chief
Engineering and Modeling Division
Federal Insurance and Mitigation Administration

Page 2 of 2 | Date: June 12, 2018 | Case No.: 18-09-1415A

Federal Emergency Management Agency
Washington, DC 20472

LETTER OF MAP REVISION BASED ON FILL DETERMINATION DOCUMENT (REMOVAL)

ATTACHMENT 1 (ADDITIONAL CONSIDERATIONS)

DETERMINATION TABLE (CONTINUED)

LOT	BLOCK/SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	PRELIMINARY BFE (NAVD 88)	LOWEST ADJACENT GRADE (LAG) ELEVATION (NAVD 88)	LOWEST LOT ELEVATION (NAVD 88)
20		Tract 25,070	4140 Via Real	Structure (Bldg ID)	X (unshaded)		10.1 feet	
20		Tract 25,070	4140 Via Real	Structure (Bldg ID)	X (unshaded)		10.2 feet	

PORTIONS OF THE PROPERTY REMAIN IN THE SFHA (This Additional Consideration applies to the preceding 2 Properties.)

Portions of this property, but not the subject of the Determination/Comment document, may remain in the Special Flood Hazard Area. Therefore, any future construction or substantial improvement on the property remains subject to Federal, State/Commonwealth, and local regulations for floodplain management.

ZONE A (This Additional Consideration Applies to the preceding 3 Properties.)

The National Flood Insurance Program map affecting this property depicts a Special Flood Hazard Area that was determined using the best flood hazard data available to FEMA, but without performing a detailed engineering analysis. The flood elevation used to make this determination is based on approximate methods and has not been formalized through the standard process for establishing base flood elevations published in the Flood Insurance Study. This flood elevation is subject to change.

For additional process information regarding this request, if you have any questions about this determination, please contact the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (1-877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Engineering Library, 3601 Eisenhower Ave, Ste 500, Alexandria, VA 22304-6426.

Luis Rodriguez, P.E., Chief
Engineering and Modeling Division
Federal Insurance and Mitigation Administration

EASEMENT NOTES:

1. THE EASEMENTS SHOWN HEREON ARE BASED ON A TITLE REPORT POLICY NO. 1908532-AD DATED MARCH 3, 2013. CHOMA/RICHARD SURVEYING CANNOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF SAID REPORT.
2. A 25 FOOT WIDE EASEMENT FOR COUNTY ROAD PURPOSES RECORDED DECEMBER 30 1927 AS INST. NO. 17614 IN BK 31 PG 166 OF OFFICIAL RECORDS (ITEM 2) (NOT LOCATABLE)
3. A EASEMENT FOR INGRESS EGRESS PURPOSES IN FAVOR OF WALTER S. WOODWARD AS RECORDED DECEMBER 24, 1937 OF OFFICIAL RECORDS. (ITEM 3) (NOT LOCATABLE)
4. A 10 AND 20 FOOT WIDE EASEMENT FOR ROAD PURPOSES IN FAVOR OF A E PFAFF, RECORDED OCTOBER 7, 1960 IN BK 1786, PG 516 OF OFFICIAL RECORDS. (ITEM 4)
5. A 10 FOOT WIDE EASEMENT FOR SEWER PURPOSES AS DISCLOSED IN AN EASEMENT MAINTENANCE AGREEMENT RECORDED SEPTEMBER 21, 1967 IN BK 2265 PG 761 OF OFFICIAL RECORDS. (ITEM 5)
6. A 3 FOOT WIDE EASEMENT FOR PUBLIC UTILITY PURPOSES IN FAVOR OF GENERAL TELEPHONE COMPANY RECORDED MAY 29, 1980 AS INSTRUMENT NO. 80-21343 OF OFFICIAL RECORDS. (ITEM 6)
7. EASEMENTS OF WATER PIPELINE PURPOSES IN FAVOR OF CARPINTERIA COUNTY WATER DISTRICT RECORDED SEPTEMBER 16, 1980 AS INSTRUMENT NO. 80-36603 OF OFFICIAL RECORDS. (ITEM 7)
8. DEDICATION OF RIGHTS OF ACCESS TO HIGHWAY OR FREEWAY PER PARCEL MAP 23114 RECORDED IN BOOK 39, PAGE 15 AND 16 OF PARCEL MAPS. (ITEM 8)
9. A 10 FOOT WIDE EASEMENT FOR DRAINAGE AND FLOOD CONTROL PURPOSES PER PARCEL MAP 23114 RECORDED IN BOOK 39, PAGE 15 AND 16 OF PARCEL MAPS. (ITEM 9)
10. A 10 AND 20 FOOT WIDE EASEMENT FOR ROAD PURPOSES IN FAVOR OF STEPHEN D. BUNTING AND LYNN H. BUNTING RECORDED JULY 12, 1988 AS INSTRUMENT NO. 88-047180 OF OFFICIAL RECORDS. (ITEM 10)
11. AN EASEMENT OR VARIABLE WIDTH FOR PUBLIC UTILITY PURPOSES GRANTED TO SOUTHERN CALIFORNIA EDISON COMPANY RECORDED ON MARCH 8, 1962 AS INSTRUMENT No. 8915, IN BOOK 1908, PAGE 490 OF OFFICIAL RECORDS.

NOTE:
NO NEW EASEMENTS ARE PROPOSED FOR THIS PROJECT.

FLOOD ELEVATION NOTES:

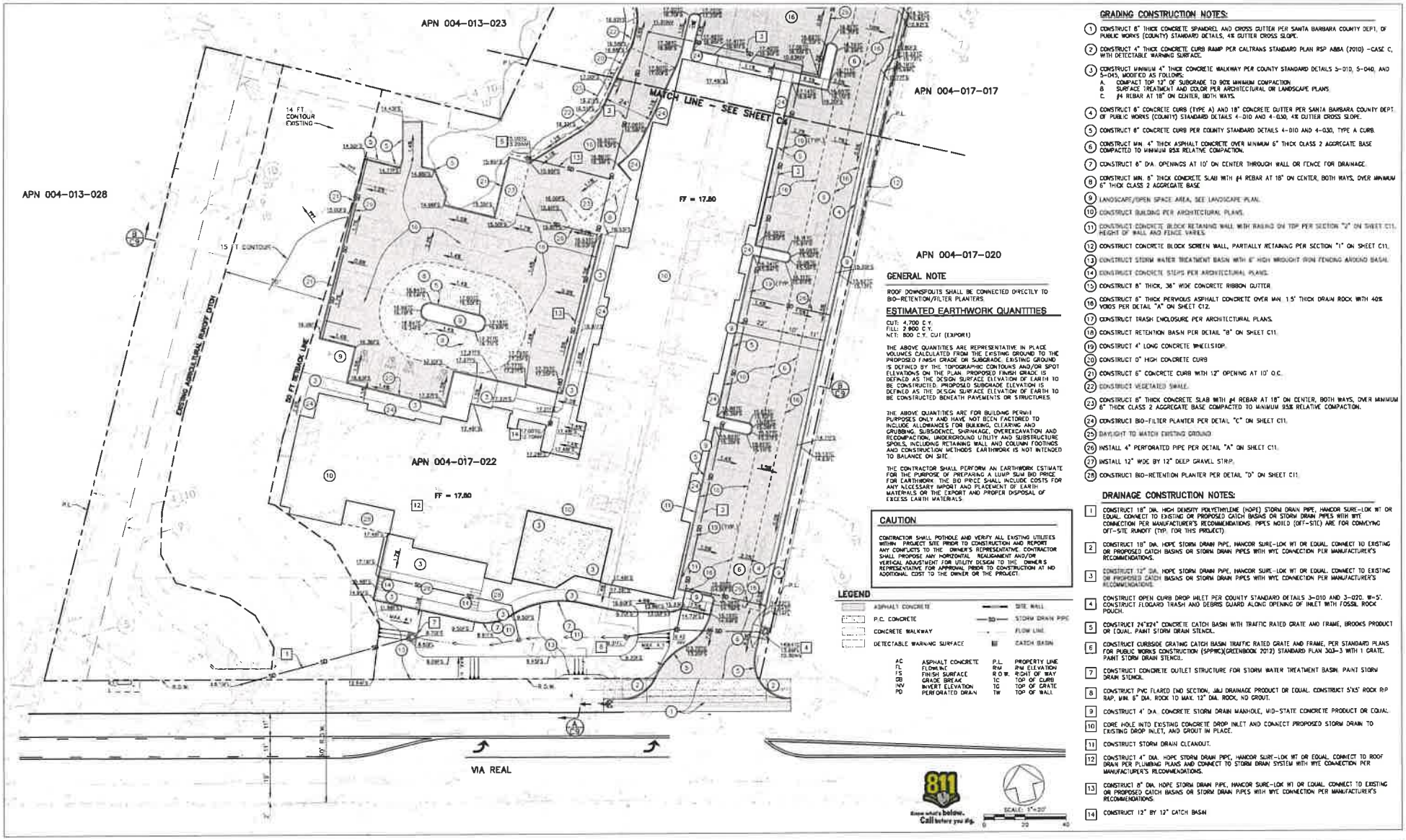
1. THE LOWEST ADJACENT FLOOD ELEVATION IS 10.1 FEET.
2. THE FINISHED FLOOR ELEVATION IS 10.5 FEET.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

ARCHITECT				
nKLOSURES, Inc. Tel: 323.309.7334 Email:info@nKLOSURES.com	RAM HOTELS P.O.BOX 52098 AMARILLO, TX 79159	VIA REAL HOTELS 4110 VIA REAL, CARPINTERIA SEPTEMBER 6, 2016	CALIFORNIA REGISTERED CIVIL ENGINEER DANIEL DOMENICO NO. 81080 CIVIL	SITE TOPOGRAPHIC MAP	C2

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



GENERAL NOTE

ROOF DOWNSPOUTS SHALL BE CONNECTED DIRECTLY TO BIO-RETENTION/FILTER PLANTERS.

ESTIMATED EARTHWORK QUANTITIES

CUT: 4,700 C.Y.
FILL: 2,900 C.Y.
NET: 800 C.Y. CUT (EXPORT)

THE ABOVE QUANTITIES ARE REPRESENTATIVE IN PLACE VOLUMES CALCULATED FROM THE EXISTING GROUND TO THE PROPOSED FINISH GRADE OR SUBGRADE. EXISTING GROUND IS DEFINED BY THE TOPOGRAPHIC CONTOURS AND/OR SPOT ELEVATIONS ON THE PLAN. PROPOSED FINISH GRADE IS DEFINED AS THE DESIGN SURFACE ELEVATION OF EARTH TO BE CONSTRUCTED. PROPOSED SUBGRADE ELEVATION IS DEFINED AS THE DESIGN SURFACE ELEVATION OF EARTH TO BE CONSTRUCTED BENEATH PAVEMENTS OR STRUCTURES.

THE ABOVE QUANTITIES ARE FOR BUILDING PERMIT PURPOSES ONLY AND HAVE NOT BEEN FACTORED TO INCLUDE ALLOWANCES FOR BULKING, CLEARING AND GRUBBING, SUBSIDENCE, SHRINKAGE, OVEREXCAVATION AND RECOMPACTION, UNDERGROUND UTILITY AND SUBSTRUCTURE SPOILS, INCLUDING RETAINING WALL AND COLUMN FOOTINGS AND CONSTRUCTION METHODS. EARTHWORK IS NOT INTENDED TO BALANCE ON SITE.

THE CONTRACTOR SHALL PERFORM AN EARTHWORK ESTIMATE FOR THE PURPOSE OF PREPARING A LUMP SUM BID PRICE FOR EARTHWORK. THE BID PRICE SHALL INCLUDE COSTS FOR ANY NECESSARY IMPORT AND PLACEMENT OF EARTH MATERIALS OR THE EXPORT AND PROPER DISPOSAL OF EXCESS EARTH MATERIALS.

CAUTION

CONTRACTOR SHALL POTHOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

LEGEND

	ASPHALT CONCRETE		SITE WALL
	P.C. CONCRETE	SD	STORM DRAIN PIPE
	CONCRETE WALKWAY		FLOW LINE
	DETECTABLE WARNING SURFACE		CATCH BASIN

AC	ASPHALT CONCRETE	P.L.	PROPERTY LINE
FL	FLOWLINE	RIM	RIM ELEVATION
FS	FINISH SURFACE	R.O.W.	RIGHT OF WAY
GB	GRADE BREAK	TC	TOP OF CURB
INV	INVERT ELEVATION	TG	TOP OF GRATE
PD	PERFORATED DRAIN	TW	TOP OF WALL

811 Know what's below. Call before you dig.

SCALE: 1"=20'

GRADING CONSTRUCTION NOTES:

1. CONSTRUCT 8" THICK CONCRETE SPANDREL AND CROSS GUTTER PER SANTA BARBARA COUNTY DEPT. OF PUBLIC WORKS (COUNTY) STANDARD DETAILS, 4% GUTTER CROSS SLOPE.
2. CONSTRUCT 4" THICK CONCRETE CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A (2010) - CASE C, WITH DETECTABLE WARNING SURFACE.
3. CONSTRUCT MINIMUM 4" THICK CONCRETE WALKWAY PER COUNTY STANDARD DETAILS 5-010, 5-040, AND 5-045, MODIFIED AS FOLLOWS:
   A. COMPACT TOP 12" OF SUBGRADE TO 90% MINIMUM COMPACTION
   B. SURFACE TREATMENT AND COLOR PER ARCHITECTURAL OR LANDSCAPE PLANS.
   C. #4 REBAR AT 18" ON CENTER, BOTH WAYS.
4. CONSTRUCT 6" CONCRETE CURB (TYPE A) AND 18" CONCRETE GUTTER PER SANTA BARBARA COUNTY DEPT. OF PUBLIC WORKS (COUNTY) STANDARD DETAILS 4-010 AND 4-030, 4% GUTTER CROSS SLOPE.
5. CONSTRUCT 6" CONCRETE CURB PER COUNTY STANDARD DETAILS 4-010 AND 4-030, TYPE A CURB.
6. CONSTRUCT MIN. 4" THICK ASPHALT CONCRETE OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE COMPACTED TO MINIMUM 95% RELATIVE COMPACTION.
7. CONSTRUCT 6" DIA. OPENINGS AT 10' ON CENTER THROUGH WALL OR FENCE FOR DRAINAGE.
8. CONSTRUCT MIN. 6" THICK CONCRETE SLAB WITH #4 REBAR AT 18" ON CENTER, BOTH WAYS, OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE
9. LANDSCAPE/OPEN SPACE AREA, SEE LANDSCAPE PLAN.
10. CONSTRUCT BUILDING PER ARCHITECTURAL PLANS.
11. CONSTRUCT CONCRETE BLOCK RETAINING WALL WITH RAILING ON TOP PER SECTION "J" ON SHEET C11. HEIGHT OF WALL AND FENCE VARIES.
12. CONSTRUCT CONCRETE BLOCK SCREEN WALL, PARTIALLY RETAINING PER SECTION "I" ON SHEET C11.
13. CONSTRUCT STORM WATER TREATMENT BASIN WITH 6' HIGH WROUGHT IRON FENCING AROUND BASIN.
14. CONSTRUCT CONCRETE STEPS PER ARCHITECTURAL PLANS.
15. CONSTRUCT 8" THICK, 36" WIDE CONCRETE RIBBON GUTTER.
16. CONSTRUCT 6" THICK PERVIOUS ASPHALT CONCRETE OVER MIN. 1.5" THICK DRAIN ROCK WITH 40% VOIDS PER DETAIL "A" ON SHEET C12.
17. CONSTRUCT TRASH ENCLOSURE PER ARCHITECTURAL PLANS.
18. CONSTRUCT RETENTION BASIN PER DETAIL "B" ON SHEET C11.
19. CONSTRUCT 4' LONG CONCRETE WHEELSTOP.
20. CONSTRUCT 6" HIGH CONCRETE CURB
21. CONSTRUCT 6" CONCRETE CURB WITH 12" OPENING AT 10' O.C.
22. CONSTRUCT VEGETATED SWALE.
23. CONSTRUCT 6" THICK CONCRETE SLAB WITH #4 REBAR AT 18" ON CENTER, BOTH WAYS, OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE COMPACTED TO MINIMUM 95% RELATIVE COMPACTION.
24. CONSTRUCT BIO-FILTER PLANTER PER DETAIL "C" ON SHEET C11.
25. DAYLIGHT TO MATCH EXISTING GROUND
26. INSTALL 4" PERFORATED PIPE PER DETAIL "A" ON SHEET C11.
27. INSTALL 12" WIDE BY 12" DEEP GRAVEL STRIP.
28. CONSTRUCT BIO-RETENTION PLANTER PER DETAIL "D" ON SHEET C11.

DRAINAGE CONSTRUCTION NOTES:

1. CONSTRUCT 18" DIA. HIGH DENSITY POLYETHYLENE (HDPE) STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS. PIPES NOTED (OFF-SITE) ARE FOR CONVEYING OFF-SITE RUNOFF (TYP. FOR THIS PROJECT).
2. CONSTRUCT 18" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
3. CONSTRUCT 12" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
4. CONSTRUCT OPEN CURB DROP INLET PER COUNTY STANDARD DETAILS 3-010 AND 3-020, W=5'. CONSTRUCT FLOGARD TRASH AND DEBRIS GUARD ALONG OPENING OF INLET WITH FOSSIL ROCK POUCH.
5. CONSTRUCT 24"X24" CONCRETE CATCH BASIN WITH TRAFFIC RATED GRATE AND FRAME, BROOKS PRODUCT OR EQUAL. PAINT STORM DRAIN STENCIL.
6. CONSTRUCT CURBSIDE GRATING CATCH BASIN TRAFFIC RATED GRATE AND FRAME, PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SSPWC)(GREENBOOK 2012) STANDARD PLAN 303-3 WITH 1 GRATE. PAINT STORM DRAIN STENCIL.
7. CONSTRUCT CONCRETE OUTLET STRUCTURE FOR STORM WATER TREATMENT BASIN. PAINT STORM DRAIN STENCIL.
8. CONSTRUCT PVC FLARED END SECTION, ABJ DRAINAGE PRODUCT OR EQUAL. CONSTRUCT 5'X5' ROCK RIP RAP, MIN. 6" DIA. ROCK TO MAX. 12" DIA. ROCK, NO GROUT.
9. CONSTRUCT 4' DIA. CONCRETE STORM DRAIN MANHOLE, MID-STATE CONCRETE PRODUCT OR EQUAL.
10. CORE HOLE INTO EXISTING CONCRETE DROP INLET AND CONNECT PROPOSED STORM DRAIN TO EXISTING DROP INLET, AND GROUT IN PLACE.
11. CONSTRUCT STORM DRAIN CLEANOUT.
12. CONSTRUCT 4" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO ROOF DRAIN PER PLUMBING PLANS AND CONNECT TO STORM DRAIN SYSTEM WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
13. CONSTRUCT 8" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
14. CONSTRUCT 12" BY 12" CATCH BASIN

ARCHITECT
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

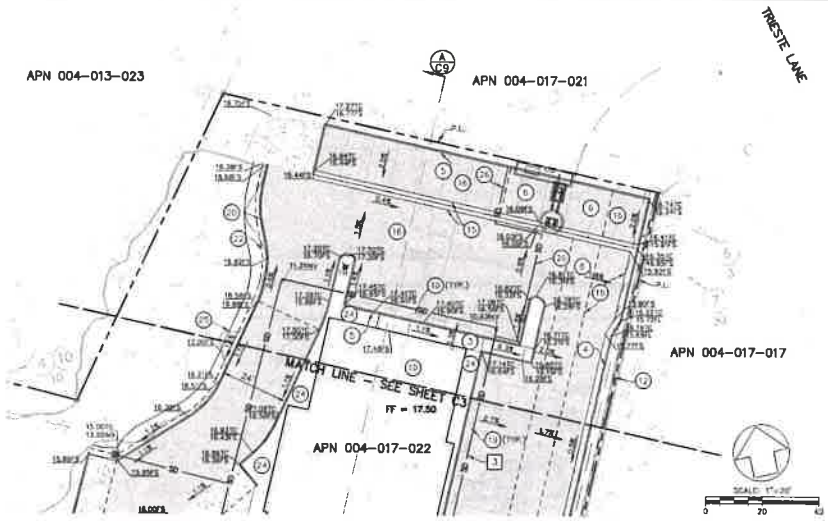
Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

PRELIMINARY GRADING AND DRAINAGE PLAN

C3

V:\2064\ACTIVE\2064521047\ACAD\CIVIL\2064521047C_DR.DWG
7/18/2019 1:27 PM

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



GRADING CONSTRUCTION NOTES:

1. CONSTRUCT 8" THICK CONCRETE SPANDREL AND CROSS GUTTER PER SANTA BARBARA COUNTY DEPT. OF PUBLIC WORKS (COUNTY) STANDARD DETAILS, 4% GUTTER CROSS SLOPE.
2. CONSTRUCT 4" THICK CONCRETE CURB RAMP PER CALTRANS STANDARD PLAN RSP A88A (2010) - CASE C, WITH DETECTABLE WARNING SURFACE.
3. CONSTRUCT MINIMUM 4" THICK CONCRETE WALKWAY PER COUNTY STANDARD DETAILS S-010, S-040, AND S-045, MODIFIED AS FOLLOWS:
   A. COMPACT TOP 12" OF SUBGRADE TO 90% MINIMUM COMPACTION.
   B. SURFACE TREATMENT AND COLOR PER ARCHITECTURAL OR LANDSCAPE PLANS.
   C. #4 REBAR AT 18" ON CENTER, BOTH WAYS.
4. CONSTRUCT 6" CONCRETE CURB (TYPE A) AND 18" CONCRETE GUTTER PER SANTA BARBARA COUNTY DEPT. OF PUBLIC WORKS (COUNTY) STANDARD DETAILS 4-010 AND 4-030, 4% GUTTER CROSS SLOPE.
5. CONSTRUCT 6" CONCRETE CURB PER COUNTY STANDARD DETAILS 4-010 AND 4-030, TYPE A CURB
6. CONSTRUCT MIN. 4" THICK ASPHALT CONCRETE OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE COMPACTED TO MINIMUM 95% RELATIVE COMPACTION.
7. CONSTRUCT 6" DIA. OPENINGS AT 10' ON CENTER THROUGH WALL OR FENCE FOR DRAINAGE.
8. CONSTRUCT MIN. 6" THICK CONCRETE SLAB WITH #4 REBAR AT 18" ON CENTER, BOTH WAYS, OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE.
9. LANDSCAPE/OPEN SPACE AREA, SEE LANDSCAPE PLAN.
10. CONSTRUCT BUILDING PER ARCHITECTURAL PLANS.
11. CONSTRUCT CONCRETE BLOCK RETAINING WALL WITH RAILING ON TOP PER SECTION "2" ON SHEET C11. HEIGHT OF WALL AND FENCE VARIES.
12. CONSTRUCT CONCRETE BLOCK SCREEN WALL, PARTIALLY RETAINING PER SECTION "1" ON SHEET C11.
13. CONSTRUCT STORM WATER TREATMENT BASIN WITH 6' HIGH WROUGHT IRON FENCING AROUND BASIN.
14. CONSTRUCT CONCRETE STEPS PER ARCHITECTURAL PLANS.
15. CONSTRUCT 8" THICK, 36" WIDE CONCRETE RIBBON GUTTER.
16. CONSTRUCT 6" THICK PERVIOUS ASPHALT CONCRETE OVER MIN. 1.5' THICK DRAIN ROCK WITH 40% VOIDS PER DETAIL "A" ON SHEET C12.
17. CONSTRUCT TRASH ENCLOSURE PER ARCHITECTURAL PLANS.
18. CONSTRUCT RETENTION BASIN PER DETAIL "B" ON SHEET C11.
19. CONSTRUCT 4" LONG CONCRETE WHEELSTOP.
20. CONSTRUCT 0" HIGH CONCRETE CURB
21. CONSTRUCT 6" CONCRETE CURB WITH 12" OPENING AT 10' O.C.
22. CONSTRUCT VEGETATED SWALE.
23. CONSTRUCT 8" THICK CONCRETE SLAB WITH #4 REBAR AT 18" ON CENTER, BOTH WAYS, OVER MINIMUM 6" THICK CLASS 2 AGGREGATE BASE COMPACTED TO MINIMUM 95% RELATIVE COMPACTION.
24. CONSTRUCT BIO-FILTER PLANTER PER DETAIL "C" ON SHEET C11.
25. DAYLIGHT TO MATCH EXISTING GROUND
26. INSTALL 4" PERFORATED PIPE PER DETAIL "A" ON SHEET C11.
27. INSTALL 12" WIDE BY 12" DEEP GRAVEL STRIP.
28. CONSTRUCT BIO-RETENTION PLANTER PER DETAIL "D" ON SHEET C11.

DRAINAGE CONSTRUCTION NOTES:

1. CONSTRUCT 18" DIA. HIGH DENSITY POLYETHYLENE (HDPE) STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS. PIPES NOTED (OFF-SITE) ARE FOR CONVEYING OFF-SITE RUNOFF (TYP. FOR THIS PROJECT).
2. CONSTRUCT 18" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
3. CONSTRUCT 12" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
4. CONSTRUCT OPEN CURB DROP INLET PER COUNTY STANDARD DETAILS 3-010 AND 3-020, W=5'. CONSTRUCT FLOGARD TRASH AND DEBRIS GUARD ALONG OPENING OF INLET WITH FOSSIL ROCK POUCH.
5. CONSTRUCT 24"X24" CONCRETE CATCH BASIN WITH TRAFFIC RATED GRATE AND FRAME, BROOKS PRODUCT OR EQUAL. PAINT STORM DRAIN STENCIL.
6. CONSTRUCT CURBSIDE GRATING CATCH BASIN TRAFFIC RATED GRATE AND FRAME, PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)(GREENBOOK 2012) STANDARD PLAN 303-3 WITH 1 GRATE. PAINT STORM DRAIN STENCIL.
7. CONSTRUCT CONCRETE OUTLET STRUCTURE FOR STORM WATER TREATMENT BASIN. PAINT STORM DRAIN STENCIL.
8. CONSTRUCT PVC FLARED END SECTION, J&J DRAINAGE PRODUCT OR EQUAL. CONSTRUCT 5'X5' ROCK RIP RAP, MIN. 6" DIA. ROCK TO MAX. 12" DIA. ROCK, NO GROUT.
9. CONSTRUCT 4' DIA. CONCRETE STORM DRAIN MANHOLE, MID-STATE CONCRETE PRODUCT OR EQUAL.
10. CORE HOLE INTO EXISTING CONCRETE DROP INLET AND CONNECT PROPOSED STORM DRAIN TO EXISTING DROP INLET, AND GROUT IN PLACE.
11. CONSTRUCT STORM DRAIN CLEANOUT.
12. CONSTRUCT 4" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO ROOF DRAIN PER PLUMBING PLANS AND CONNECT TO STORM DRAIN SYSTEM WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
13. CONSTRUCT 8" DIA. HDPE STORM DRAIN PIPE, HANCOR SURE-LOK WT OR EQUAL. CONNECT TO EXISTING OR PROPOSED CATCH BASINS OR STORM DRAIN PIPES WITH WYE CONNECTION PER MANUFACTURER'S RECOMMENDATIONS.
14. CONSTRUCT 12" BY 12" CATCH BASIN.

GENERAL NOTE

ROOF DOWNSPOUTS SHALL BE CONNECTED DIRECTLY TO BIO-RETENTION/FILTER PLANTERS.

LEGEND

	ASPHALT CONCRETE		SITE WALL
	P.C. CONCRETE	SD	STORM DRAIN PIPE
	CONCRETE WALKWAY		FLOW LINE
	DETECTABLE WARNING SURFACE		CATCH BASIN

AC	ASPHALT CONCRETE	P.L.	PROPERTY LINE
FL	FLOWLINE	RIM	RIM ELEVATION
FS	FINISH SURFACE	R.O.W.	RIGHT OF WAY
GB	GRADE BREAK	TC	TOP OF CURB
INV	INVERT ELEVATION	TG	TOP OF GRATE
PD	PERFORATED DRAIN	TW	TOP OF WALL

CAUTION

CONTRACTOR SHALL POTHOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

811 Know what's below. Call before you dig.

ARCHITECT
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

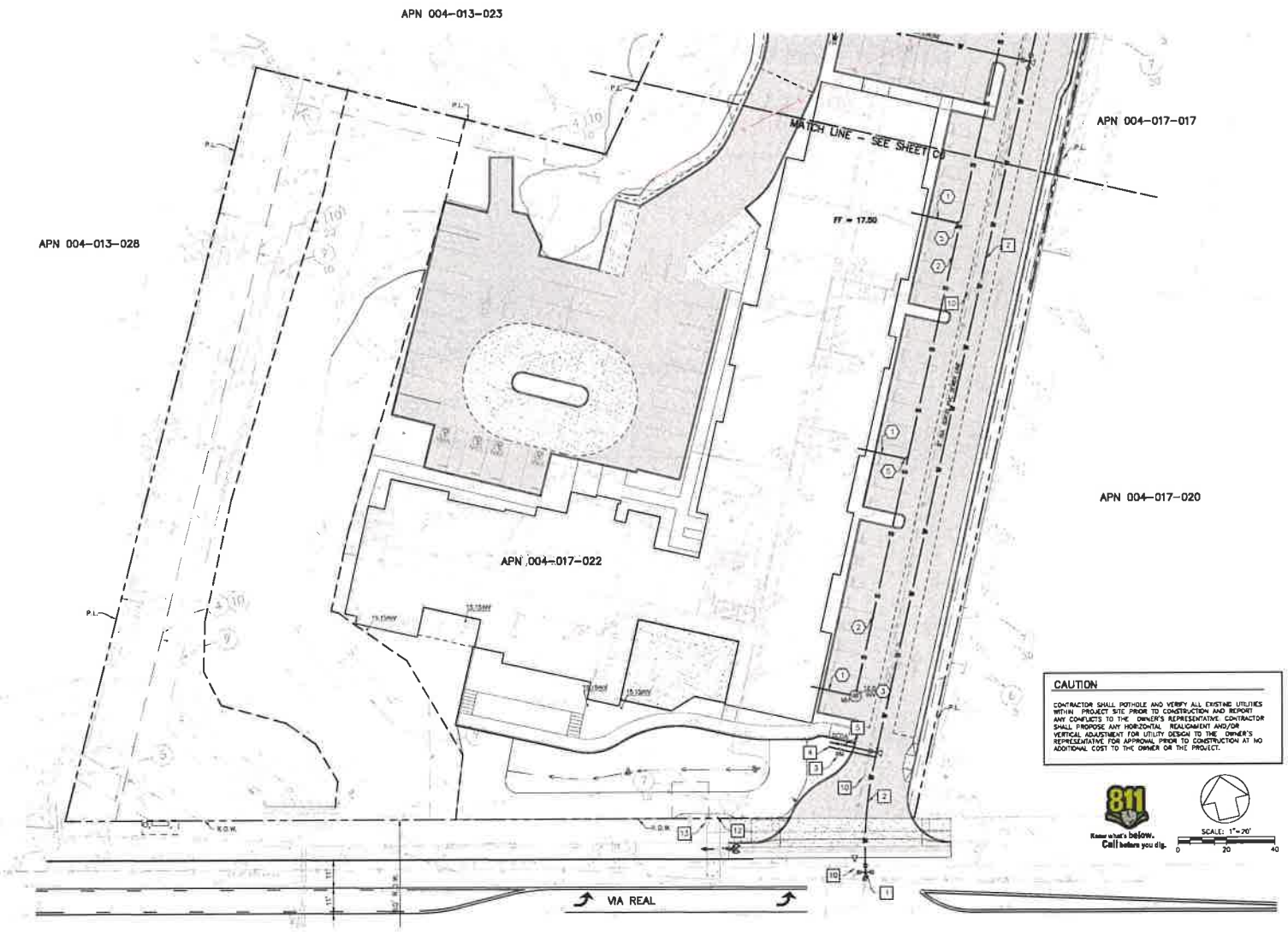
VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-8532 Fax: (805) 966-9801

PRELIMINARY GRADING AND DRAINAGE PLAN

C4

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



SANITARY SEWER CONSTRUCTION NOTES:

1. CONSTRUCT 6" DIA. SDR35 PVC SEWER LINE. CONNECT TO BUILDING SANITARY SERVICE PER PLUMBING PLANS.
2. CONSTRUCT 8" DIA. SDR35 PVC SEWER LINE.
3. CONSTRUCT 4' DIA. SEWER MANHOLE PER CARPINTERIA SANITARY DISTRICT STANDARD PLATE 101.
4. CONSTRUCT 4' DIA. SEWER MANHOLE PER CARPINTERIA SANITARY DISTRICT STANDARD PLATE 101. CONNECT TO EXISTING SEWER MAIN. VERIFY PIPE SIZE AND INVERT ELEVATION PRIOR TO CONSTRUCTION.
5. CONSTRUCT WYE CONNECTION PER MANUFACTURER'S SPECIFICATIONS.
6. CONSTRUCT SEWER PUMP STATION WITH PUMP VAULT, WET WELL, ELECTRICAL PANEL AND BACKUP GENERATOR. DESIGN AND CONSTRUCT BY ROMTEC UTILITIES COMPANY (541-496-9687) OR EQUAL
7. CONSTRUCT 4" DIA. SEWER FORCE MAIN FROM PUMP STATION TO SEWER MANHOLE.
8. REMOVE EXISTING PUMP HOUSE, 3" SEWER FORCE MAIN, AND SEWER JUNCTION BOX COMPLETE, LEGALLY DISPOSE OF OFF-SITE, AND BACKFILL WITH NATIVE MATERIAL AND COMPACT TO MIN 90% COMPACTION.
9. CONSTRUCT SEWER CLEANOUT.
10. CONSTRUCT 4" DIA. SDR35 PVC SEWER LINE.
11. CONSTRUCT 6" DIA. DRAINAGE INLET WITH TRAFFIC RATED GRATE, NYLOPLAST PRODUCT OR EQUAL, AND CONNECT TO 4" DIA. SEWER PIPE.

WATER LINE CONSTRUCTION NOTES:

1. REMOVE EXISTING 8" TEE AND CONCRETE THRUST BLOCK IN VIA REAL AND CONSTRUCT 8" FLG. CROSS AND CONNECT EXISTING WATER MAINS PER CARPINTERIA VALLEY WATER DISTRICT STANDARDS. CONSTRUCT (4)-8" GATE VALVES AND VALVE CANS PER CARPINTERIA VALLEY WATER DISTRICT STANDARDS. CONSTRUCT GATE VALVES PER CVWD STD. DETAIL C-108 WITH PARKSON NO. 114 VALVE BOX (TYP.) PLACE VALVES AT LOCATIONS SHOWN PER PLAN. CONNECTION TO EXISTING 8" WATER MAIN IN VIA REAL TO BE CONSTRUCTED BY CVWD AFTER CONTRACTOR COMPLETES AWWA WATERLINE DISINFECTION AND PRESSURE TESTING, OBSERVED BY CVWD.
2. CONSTRUCT 8" DIA. CL. 305 C905 PVC WATERLINE PER CARPINTERIA VALLEY WATER DISTRICT (CVWD) STANDARD DETAILS C-101 AND C-101-A.
3. CONSTRUCT 3" WATER SERVICE PER CVWD STANDARD DETAILS, INCLUDING WATER METER AND METER BOX.
4. CONSTRUCT 3" WATER SERVICE PER CVWD STANDARD DETAILS TO BUILDING SERVICE PER PLUMBING PLANS.
5. CONSTRUCT 6" DIA. CL. 305 C905 PVC FIRE WATERLINE PER CVWD STD. DETAILS C-101, C101-A, AND CM-102, TO SERVE BUILDING SPRINKLER SYSTEM, INCLUDING 8" DOUBLE DETECTOR CHECK VALVE BACKFLOW ASSEMBLY WITH OS&Y, WILKINS MODEL 350DA, AND SIAMESE FIRE DEPARTMENT CONNECTION ON BUILDING SIDE OF BACKFLOW ASSEMBLY. (NOTE: OWNER TO SUPPLY CVWD WITH CALCULATIONS FROM FIRE SPRINKLER ENGINEER TO VERIFY DCCV SIZE)
6. CONSTRUCT (1)-6" DIA. GATE VALVE, (2)-8" GATE VALVES, 8"X8"X6" TEE, AND CONCRETE THRUST BLOCK. CONSTRUCT GATE VALVE PER CVWD STANDARD DETAIL C-108 WITH PARKSON NO. 114 VALVE BOXES (TYP.)
7. CONSTRUCT 6" DIA. CL. 305 C905 PVC FIRE WATERLINE PER CVWD STD. DETAILS C-101, C101-A, AND CM-102
8. CONSTRUCT FIRE HYDRANT ASSEMBLY COMPLETE PER CVWD STD. DETAIL C-104.
9. REMOVE PORTION OF EXISTING 8" DIA. WATER MAIN AND CONSTRUCT 8"X8"X6" FLG. TEE, (3)-8" FLAN/U GATE VALVES, AND CONCRETE THRUST BLOCK. CONSTRUCT GATE VALVE PER CVWD STD. DETAIL C-108 WITH PARKSON NO. 114 VALVE BOX (TYP.) PLACE VALVES AT LOCATIONS SHOWN PER PLAN
10. CAP AND ABANDON EXISTING 6" DIA. WATER MAIN IN PLACE.
11. CONSTRUCT 5/8" WATER METER SERVICE TO EXISTING BUILDING AND CONNECT TO EXISTING WATER MAIN.
12. PROTECT EXISTING FIRE HYDRANT IN PLACE.
13. REMOVE AND REPLACE EXISTING 2" WATER METER WITH 1" IRRIGATION WATER METER.

CAUTION

CONTRACTOR SHALL POTHOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

LEGEND

	ASPHALT CONCRETE		BACKFLOW PREVENTER
	P.C. CONCRETE	SD	STORM DRAIN PIPE
	WATER VALVE	W	WATER LINE
	CONCRETE THRUST BLOCK	FW	FIRE WATER LINE
MH	CONCRETE MANHOLE	S	SEWER LINE

AC	ASPHALT CONCRETE	P.L.	PROPERTY LINE
FL	FLOWLINE	RIM	RIM ELEVATION
FS	FINISH SURFACE	R.O.W.	RIGHT OF WAY
GB	GRADE BREAK	TC	TOP OF CURB
INV	INVERT ELEVATION	TG	TOP OF GRATE
PD	PERFORATED DRAIN		

ARCHITECT
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

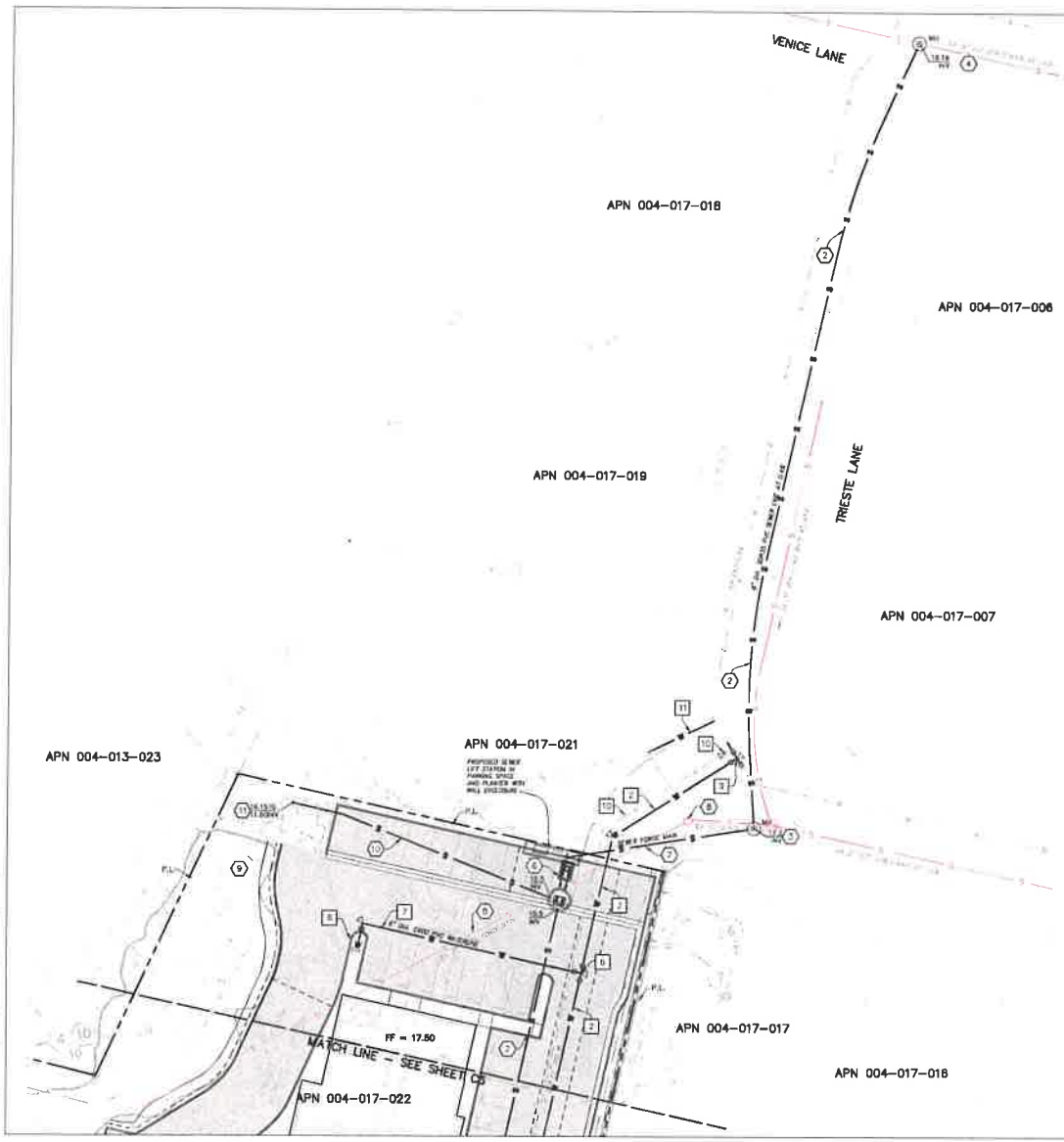
DANIEL DO-HASSOD NO. 81090 CIVIL

Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

PRELIMINARY WATER AND SEWER PLAN

C5

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



SANITARY SEWER CONSTRUCTION NOTES:

1. CONSTRUCT 6" DIA. SDR35 PVC SEWER LINE. CONNECT TO BUILDING SANITARY SERVICE PER PLUMBING PLANS.
2. CONSTRUCT 8" DIA. SDR35 PVC SEWER LINE.
3. CONSTRUCT 4' DIA. SEWER MANHOLE PER CARPINTERIA SANITARY DISTRICT STANDARD PLATE 101.
4. CONSTRUCT 4' DIA. SEWER MANHOLE PER CARPINTERIA SANITARY DISTRICT STANDARD PLATE 101. CONNECT TO EXISTING SEWER MAIN. VERIFY PIPE SIZE AND INVERT ELEVATION PRIOR TO CONSTRUCTION.
5. CONSTRUCT WYE CONNECTION PER MANUFACTURER'S SPECIFICATIONS.
6. CONSTRUCT SEWER PUMP STATION WITH PUMP VAULT, WET WELL, ELECTRICAL PANEL AND BACKUP GENERATOR. DESIGN AND CONSTRUCT BY ROMTEC UTILITIES COMPANY (541-496-9687) OR EQUAL.
7. CONSTRUCT 4" DIA. SEWER FORCE MAIN FROM PUMP STATION TO SEWER MANHOLE.
8. REMOVE EXISTING PUMP HOUSE, 3" SEWER FORCE MAIN, AND SEWER JUNCTION BOX COMPLETE. LEGALLY DISPOSE OF OFF-SITE, AND BACKFILL WITH NATIVE MATERIAL AND COMPACT TO MIN. 90% COMPACTION.
9. CONSTRUCT SEWER CLEANOUT.
10. CONSTRUCT 4" DIA. SDR35 PVC SEWER LINE.
11. CONSTRUCT 6" DIA. DRAINAGE INLET WITH TRAFFIC RATED GRATE, NYLOPLAST PRODUCT OR EQUAL, AND CONNECT TO 4" DIA. SEWER PIPE.

WATER LINE CONSTRUCTION NOTES:

1. REMOVE EXISTING 8" TEE AND CONCRETE THRUST BLOCK IN VIA REAL AND CONSTRUCT 8" FLG. CROSS AND CONNECT EXISTING WATER MAINS PER CARPINTERIA VALLEY WATER DISTRICT STANDARDS. CONSTRUCT (4)-8" GATE VALVES AND VALVE CANS PER CARPINTERIA VALLEY WATER DISTRICT STANDARDS. CONSTRUCT GATE VALVES PER CVWD STD. DETAIL C-106 WITH PARKSON NO. 114 VALVE BOX (TYP.) PLACE VALVES AT LOCATIONS SHOWN PER PLAN. CONNECTION TO EXISTING 8" WATER MAIN IN VIA REAL TO BE CONSTRUCTED BY CVWD AFTER CONTRACTOR COMPLETES AWWA WATERLINE DISINFECTION AND PRESSURE TESTING, OBSERVED BY CVWD.
2. CONSTRUCT 8" DIA. CL. 305 C905 PVC WATERLINE PER CARPINTERIA VALLEY WATER DISTRICT (CVWD) STANDARD DETAILS C-101 AND C-101-A.
3. CONSTRUCT 3" WATER SERVICE PER CVWD STANDARD DETAILS, INCLUDING WATER METER AND METER BOX.
4. CONSTRUCT 3" WATER SERVICE PER CVWD STANDARD DETAILS TO BUILDING SERVICE PER PLUMBING PLANS.
5. CONSTRUCT 8" DIA. CL. 305 C905 PVC FIRE WATERLINE PER CVWD STD. DETAILS C-101, C101-A, AND CM-102, TO SERVE BUILDING SPRINKLER SYSTEM, INCLUDING 8" DOUBLE DETECTOR CHECK VALVE BACKFLOW ASSEMBLY WITH OS&Y, WILKINS MODEL 350DA, AND SIAMESE FIRE DEPARTMENT CONNECTION ON BUILDING SIDE OF BACKFLOW ASSEMBLY. (NOTE: OWNER TO SUPPLY CVWD WITH CALCULATIONS FROM FIRE SPRINKLER ENGINEER TO VERIFY DDCV SIZE)
6. CONSTRUCT (1)-6" DIA. GATE VALVE, (2)-8" GATE VALVES, 8"x8"x8" TEE, AND CONCRETE THRUST BLOCK. CONSTRUCT GATE VALVE PER CVWD STANDARD DETAIL C-106 WITH PARKSON NO. 114 VALVE BOXES (TYP.).
7. CONSTRUCT 8" DIA. CL. 305 C905 PVC FIRE WATERLINE PER CVWD STD. DETAILS C-101, C101-A, AND CM-102
8. CONSTRUCT FIRE HYDRANT ASSEMBLY COMPLETE PER CVWD STD. DETAIL C-104.
9. REMOVE PORTION OF EXISTING 8" DIA. WATER MAIN AND CONSTRUCT 8"x8"x8" FLG. TEE, (3)-8" FLxM/J GATE VALVES, AND CONCRETE THRUST BLOCK. CONSTRUCT GATE VALVE PER CVWD STD. DETAIL C-106 WITH PARKSON NO. 114 VALVE BOX (TYP.) PLACE VALVES AT LOCATIONS SHOWN PER PLAN.
10. CAP AND ABANDON EXISTING 6" DIA. WATER MAIN IN PLACE.
11. CONSTRUCT 5/8" WATER METER SERVICE TO EXISTING BUILDING AND CONNECT TO EXISTING WATER MAIN.
12. PROTECT EXISTING FIRE HYDRANT IN PLACE.
13. REMOVE AND REPLACE EXISTING 2" WATER METER WITH 1" IRRIGATION WATER METER.

CAUTION

CONTRACTOR SHALL POTHOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

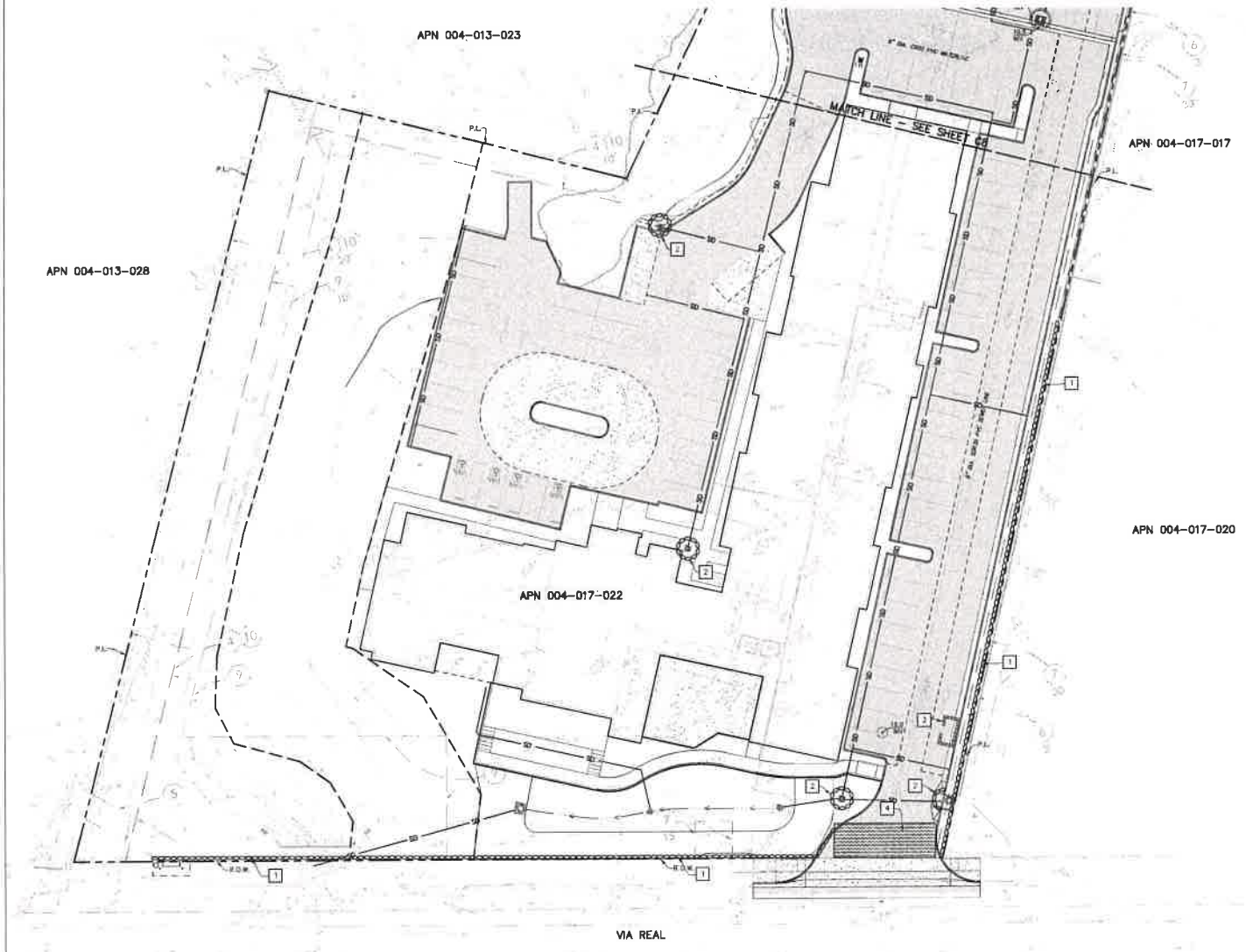
LEGEND

- ASPHALT CONCRETE
- P.C. CONCRETE
- WATER VALVE
- CONCRETE THRUST BLOCK
- CONCRETE MANHOLE
- BACKFLOW PREVENTER
- STORM DRAIN PIPE
- WATER LINE
- FIRE WATER LINE
- SEWER LINE

AC	ASPHALT CONCRETE	P.L.	PROPERTY LINE
FL	FLOWLINE	RIM	RIM ELEVATION
FS	FINISH SURFACE	R.O.W.	RIGHT OF WAY
GB	GRADE BREAK	TC	TOP OF CURB
INV	INVERT ELEVATION	TG	TOP OF GRATE
PD	PERFORATED DRAIN		

ARCHITECT **nKLOSURES, Inc.** Tel: 323.309.7334 Email:info@nKLOSURES.com	**RAM HOTELS** P.O.BOX 52098 AMARILLO, TX 79159	**VIA REAL HOTELS** 4110 VIA REAL, CARPINTERIA SEPTEMBER 6, 2016	Stantec 111 East Victoria Street, Santa Barbara, CA 93101 Phone: (805) 963-9532 Fax: (805) 966-9801	**PRELIMINARY WATER AND SEWER PLAN**	C6

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



LEGEND

- ROCK BAG PROTECTION
- FIBER ROLL
- CONCRETE WASH-OFF AREA
- STABILIZED ENTRANCE

GENERAL NOTES

1. THE CONTRACTOR SHALL UTILIZE THIS PLAN ONLY AS A GUIDE TO FULFILL ALL REGULATORY AND PRACTICAL REQUIREMENTS RELATED TO EROSION CONTROL AND STORM WATER POLLUTION PREVENTION.
2. CONTRACTOR SHALL REVIEW AND PERFORM ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS, WHICH MAY NOT BE LIMITED TO THE FEATURES DEPICTED ON THIS SHEET.
3. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
4. EROSION CONTROL DEVICES MAY BE REMOVED WHEN APPROVED BY THE OWNER'S REPRESENTATIVE IF THE GRADING OPERATIONS HAVE PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
5. EARTHEN AREAS ADJACENT TO THE PUBLIC RIGHT OF WAY SHALL DRAIN AWAY FROM THE PUBLIC RIGHT OF WAY AT THE CONCLUSION OF EACH WORKING DAY.
6. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM
7. EXCEPT AS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE, ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY OR WEEKENDS WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%
8. ALL LOOSE SOIL AND DEBRIS, WHICH MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY, SHALL BE REMOVED FROM THE SITE AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
9. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION AND/OR RUNOFF DAMAGE WITHIN THE SITE SHALL BE AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE.
10. EROSION CONTROL DEVICES SHALL NOT BE MODIFIED WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE. REVISED PLANS SHALL BE SUBMITTED FOR APPROVAL.
11. THE CONTRACTOR SHALL HIRE A CERTIFIED QUALIFIED SWPPP PRACTITIONER (QSP) TO MONITOR EROSION CONTROL WORK IN ACCORDANCE WITH THE APPROVED PLANS. THE WORK ALSO INCLUDES, BUT IS NOT LIMITED TO, INSPECTION OF EROSION CONTROL MEASURES BEFORE EACH RAINSTORM AND 3-DAY PROBABILITY RAIN FORECAST, AS WELL AS WEEKLY AND QUARTERLY MONITORING, AND FILE ANNUAL REPORTS AND NOTICE OF TERMINATION AFTER THE PROJECT COMPLETION.
12. IF RAIN IS FORECAST OR THREATENING, ALL STOCKPILED MATERIALS SHALL BE TARPED TO PREVENT EROSION. TARP SHALL BE ANCHORED WITH GRAVEL FILLED BAGS AT 8' INTERVALS.
13. WHENEVER SEDIMENT-LADEN WATER MUST BE REMOVED FROM THE CONSTRUCTION SITE, A DEWATERING PUMP, A FILTER BOX, PORTABLE SEDIMENT TANK, OR SOME FORM OF FILTERING MEDIA IS TO BE USED PRIOR TO OR DURING DISCHARGE.

EROSION CONTROL CONSTRUCTION NOTES

1. CONSTRUCT FIBER ROLL. FIBER ROLL SPACING SHALL NOT EXCEED 20' SPACING FOR SLOPES 4:1 AND FLATTER, 15' FOR SLOPES BETWEEN 2:1 AND 4:1, AND 10' FOR SLOPES 2:1 AND GREATER (U.N.O.)
2. CONSTRUCT DRAIN INLET PROTECTION FOR USE DURING PROJECT CONSTRUCTION.
3. CONSTRUCT CONCRETE WASH-OUT AREA.
4. CONSTRUCT STABILIZED ENTRANCE TO FULL WIDTH OF DRIVEWAY (A MINIMUM 20 FEET LONG BY FULL CONSTRUCTION ENTRANCE ROADWAY WIDTH METAL RUMBLE STRIP) AT ALL ACCESS POINTS FROM THE JOB SITE TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADS, UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.

CAUTION

CONTRACTOR SHALL POT-HOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

ARCHITECT:
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

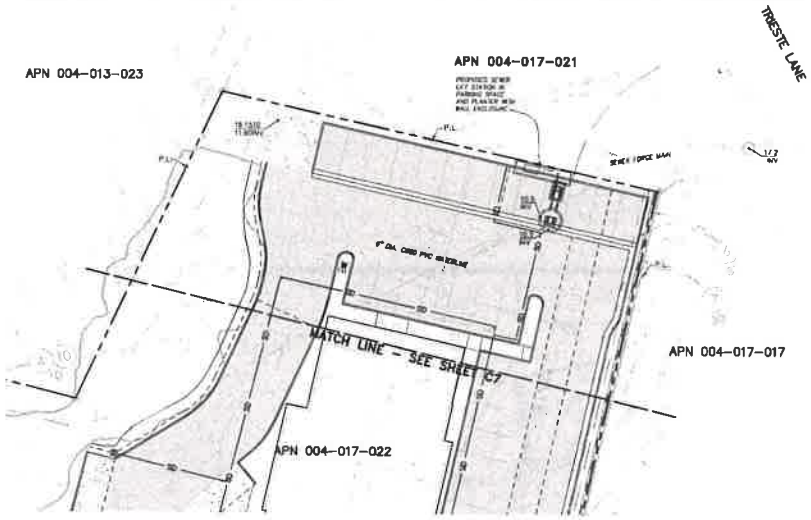
Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

PRELIMINARY EROSION CONTROL PLAN

C7

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.

V:\2964\ACTIVE\296402151471215147-ACAD\CIVIL\296402151470_EE.DWG
7/18/2019 10:28 AM



LEGEND

- ROCK BAG PROTECTION
- FIBER ROLL
- CONCRETE WASH-OFF AREA
- STABILIZED ENTRANCE

GENERAL NOTES

1. THE CONTRACTOR SHALL UTILIZE THIS PLAN ONLY AS A GUIDE TO FULFILL ALL REGULATORY AND PRACTICAL REQUIREMENTS RELATED TO EROSION CONTROL AND STORM WATER POLLUTION PREVENTION.
2. CONTRACTOR SHALL REVIEW AND PERFORM ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS, WHICH MAY NOT BE LIMITED TO THE FEATURES DEPICTED ON THIS SHEET.
3. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
4. EROSION CONTROL DEVICES MAY BE REMOVED WHEN APPROVED BY THE OWNER'S REPRESENTATIVE IF THE GRADING OPERATIONS HAVE PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
5. EARTHEN AREAS ADJACENT TO THE PUBLIC RIGHT OF WAY SHALL DRAIN AWAY FROM THE PUBLIC RIGHT OF WAY AT THE CONCLUSION OF EACH WORKING DAY.
6. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM.
7. EXCEPT AS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE, ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY ON WEEKENDS WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
8. ALL LOOSE SOIL AND DEBRIS, WHICH MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY, SHALL BE REMOVED FROM THE SITE AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
9. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION AND/OR RUNOFF DAMAGE WITHIN THE SITE SHALL BE AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE.
10. EROSION CONTROL DEVICES SHALL NOT BE MODIFIED WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE. REVISED PLANS SHALL BE SUBMITTED FOR APPROVAL.
11. THE CONTRACTOR SHALL HIRE A CERTIFIED QUALIFIED SWPPP PRACTITIONER (QSP) TO MONITOR EROSION CONTROL WORK IN ACCORDANCE WITH THE APPROVED PLANS. THE WORK ALSO INCLUDES, BUT IS NOT LIMITED TO, INSPECTION OF EROSION CONTROL MEASURES BEFORE EACH RAINSTORM AND 5-DAY PROBABILITY RAIN FORECAST, AS WELL AS WEEKLY AND QUARTERLY MONITORING, AND FILE ANNUAL REPORTS AND NOTICE OF TERMINATION AFTER THE PROJECT COMPLETION.
12. IF RAIN IS FORECAST OR THREATENING, ALL STOCKPILED MATERIALS SHALL BE TARPED TO PREVENT EROSION. TARP SHALL BE ANCHORED WITH GRAVEL FILLED BAGS AT 8' INTERVALS.
13. WHENEVER SEDIMENT-LADEN WATER MUST BE REMOVED FROM THE CONSTRUCTION SITE, A DEWATERING PUMP, A FILTER BOX, PORTABLE SEDIMENT TANK, OR SONIC FORM OF FILTERING MEDIA IS TO BE USED PRIOR TO OR DURING DISCHARGE.

EROSION CONTROL CONSTRUCTION NOTES

1. CONSTRUCT FIBER ROLL. FIBER ROLL SPACING SHALL NOT EXCEED 20' SPACING FOR SLOPES 4:1 AND FLATTER, 15' FOR SLOPES BETWEEN 2:1 AND 4:1, AND 10' FOR SLOPES 2:1 AND GREATER (U.N.O.).
2. CONSTRUCT DRAIN INLET PROTECTION FOR USE DURING PROJECT CONSTRUCTION.
3. CONSTRUCT CONCRETE WASH-OUT AREA.
4. CONSTRUCT STABILIZED ENTRANCE TO FULL WIDTH OF DRIVEWAY (A MINIMUM 20 FEET LONG BY FULL CONSTRUCTION ENTRANCE ROADWAY WIDTH METAL RUMBLE STRIP) AT ALL ACCESS POINTS FROM THE JOB SITE TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADS, UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.

CAUTION

CONTRACTOR SHALL POTHOLE AND VERIFY ALL EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROPOSE ANY HORIZONTAL REALIGNMENT AND/OR VERTICAL ADJUSTMENT FOR UTILITY DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER OR THE PROJECT.

811 Know what's below. Call before you dig.

SCALE: 1"=20'
0 20 40

V:\2064\ACTIVE\2064A201047\CAD\CIVIL\2064A201047_CC.DWG
7/18/2019 10:38 AM

ARCHITECT:
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

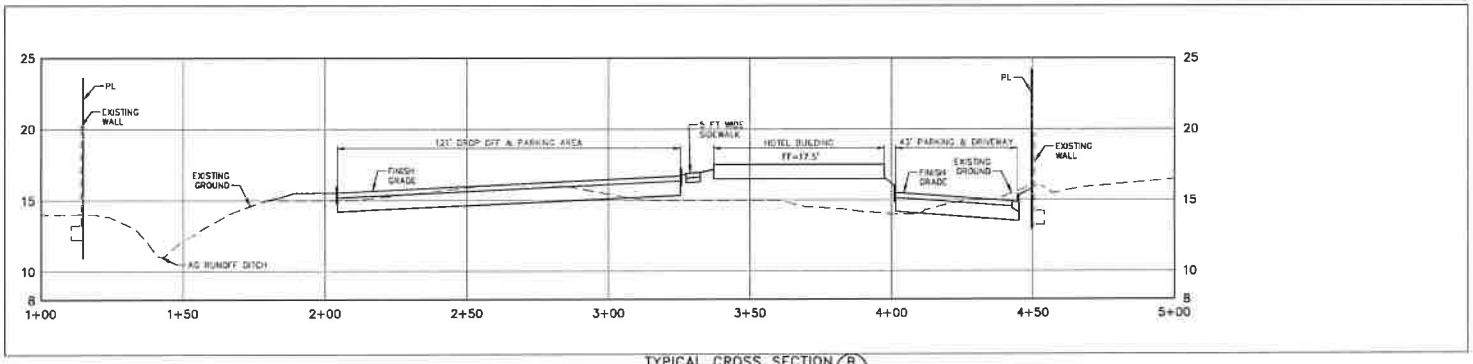
VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-8801

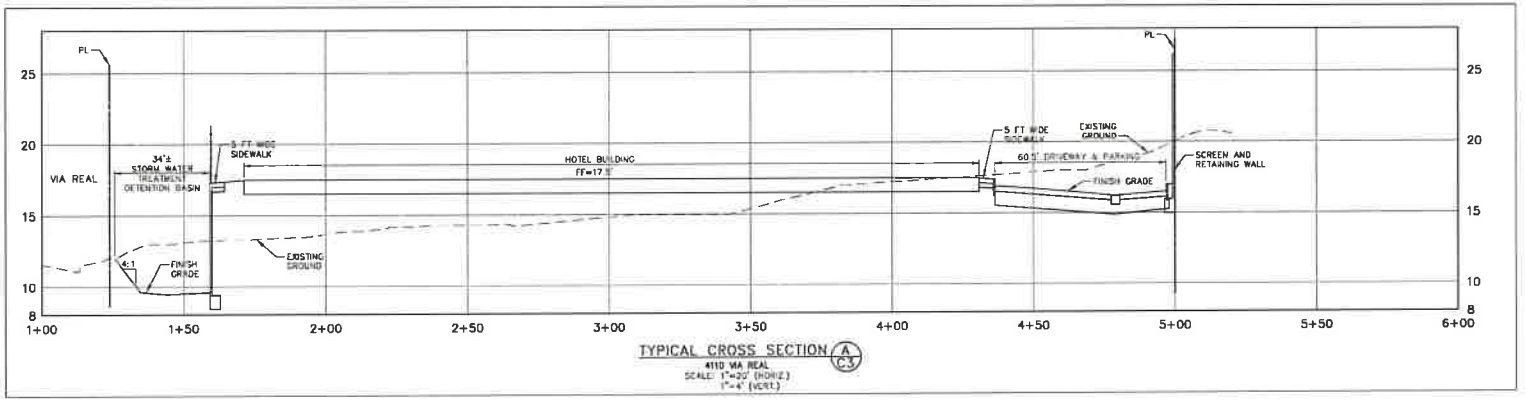
PRELIMINARY EROSION CONTROL PLAN

C8

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



TYPICAL CROSS SECTION B / C3
4110 VIA REAL
SCALE: 1"=20' (HORIZ.)
1"=4' (VERT.)



TYPICAL CROSS SECTION A / C3
4110 VIA REAL
SCALE: 1"=20' (HORIZ.)
1"=4' (VERT.)

ARCHITECT:
nKLOSURES, Inc.

Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

Stantec
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

SECTIONS

C9

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.

SIGNING AND STRIPING GENERAL NOTES

1. ALL SIGNING AND STRIPING SHALL BE ACCORDING TO THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL (CAMUTCD), 2012 EDITION. ALL PAVEMENT DELINEATION WORK AND ROADSIDE SIGN WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALTRANS STANDARD SPECIFICATIONS AND STANDARD PLANS DATED 2010, AND THE CONTRACT SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL REMOVE BY WET SANDBLASTING ALL EXISTING STRIPING AND PAVEMENT MARKINGS WHICH CONFLICT WITH NEW WORK SHOWN ON THE PLANS. SANDBLAST AREAS FOR PAVEMENT MARKING LEGENDS AND ARROWS SHALL BE RECTANGULAR. ALL SANDBLASTED AREAS SHALL BE FOG SEALED WITH AN SS EMULSION.
3. ALL CONSTRUCTION MATERIALS FOR ROADSIDE SIGN AND PAVEMENT DELINEATION WORK SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
4. THE EXACT LOCATIONS OF ALL NEW ROADSIDE SIGNS AND PAVEMENT DELINEATION SHALL BE MARKED IN THE FIELD BY THE CONTRACTOR. SIGNING AND STRIPING SHALL BE CAT TRACKED FOR REVIEW AND APPROVAL BY CITY ENGINEER PRIOR TO FINAL SIGN AND STRIPING INSTALLATION.
5. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE PAINTS LANE WIDTHS SHOWN ON THE PLAN ARE DIMENSIONED FROM FACE OF CURB TO CENTER OF STRIPE, OR BETWEEN CENTERS OF STRIPES.
6. THIS PLAN IS ACCURATE FOR SIGNING AND STRIPING WORK ONLY.

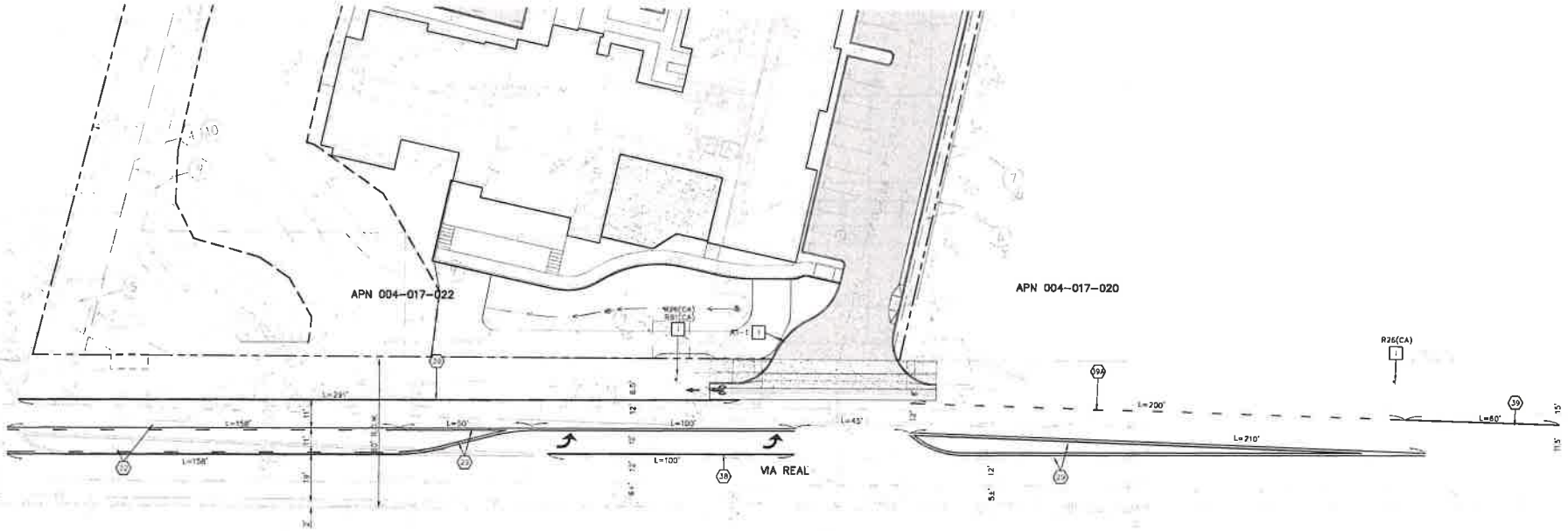
PAVEMENT DELINEATION LEGEND

- (XX) INSTALL TRAFFIC STRIPE PER CALTRANS STANDARD PLAN NOS A20A, A20B, A20C, AND A20D AS NOTED.
- INSTALL TYPE IV(L) WHITE ARROW CENTERED IN LANE AS SHOWN.
- INSTALL WHITE "BIKE LANE" LEGEND WITH ARROW AS SHOWN.
- [1] INSTALL SIGN AND POLE AS NOTED.

ROADSIDE SIGN LEGEND



R1-1 R26(CA) R81(CA)

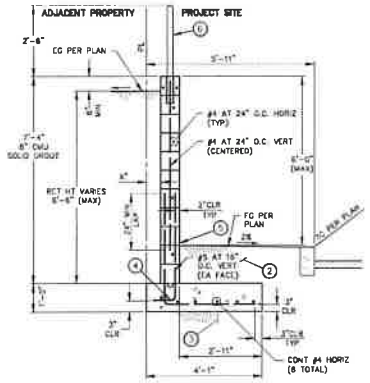


811 Know what's below. Call before you dig.

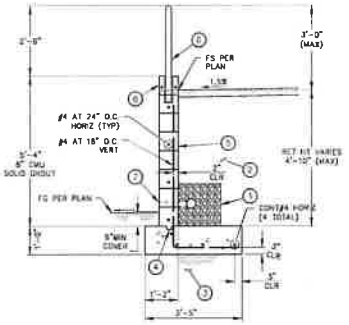
SCALE: 1"=20'

ARCHITECT				
nKLOSURES, Inc. Tel: 323.309.7334 Email:info@nKLOSURES.com	RAM HOTELS P.O.BOX 52098 AMARILLO, TX 79159	VIA REAL HOTELS 4110 VIA REAL, CARPINTERIA SEPTEMBER 6, 2016	Stantec 111 East Victoria Street, Santa Barbara, CA 93101 Phone: (805) 963-3532 Fax: (805) 966-9801	PRELIMINARY SIGNING AND STRIPING PLAN	C10

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



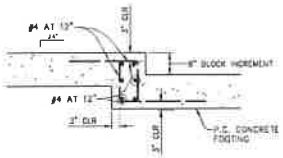
PERIMETER WALL (1)
SCALE: 1"=2"



STORM WATER BASIN WALL (2)
SCALE: 1"=2"

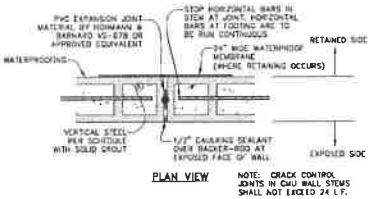
WALL CONSTRUCTION NOTES

1. CONSTRUCT 18" SQUARE GRAVEL WRAPPED WITH FABRIC WITH CONTINUOUS 4-INCH PERFORATED PIPE AT TOP OF FOOTING AND CAP ENDS.
2. CONSTRUCT GRANULAR NON-EXPANSIVE BACKFILL COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION UNDER ROADWAY AND MINIMUM 90% RELATIVE COMPACTION ELSEWHERE (UNLESS NOTED OTHERWISE) AT A 1:1 SLOPE FROM BOTTOM OF WALL STEM.
3. SUB-GRADE AT MINIMUM 90% RELATIVE COMPACTION, AS APPROVED BY PROJECT GEOTECHNICAL ENGINEER.
4. CONSTRUCT 2x KEYWAY AT CONCRETE/MASONRY CONSTRUCTION JOINTS AS NOTED.
5. CONSTRUCT SONOSHIELD HLM 5000 WATERPROOFING BY BASF OR APPROVED EQUIVALENT. WATERPROOFING SHALL BE CONTINUOUS AT RETAINED SOIL.
6. CONSTRUCT 3'-6" HIGH WROUGHT IRON FENCE WITH POSTS PER ARCHITECTURAL OR LANDSCAPE PLANS. SEE POST EMBEDMENT DETAIL "5", THIS SHEET.
7. CONSTRUCT 2-INCH WEEP HOLE DRAINS AT MAXIMUM 10-FEET ON CENTER. OUTLET 2" ABOVE FINISH GRADE.
8. CONSTRUCT 6" DIA. OPENINGS AT 10' O.C. THROUGH WALL FOR DRAINAGE.



NOTE: REINFORCEMENT SHOWN IS IN ADDITION TO THAT SHOWN IN THE WALL DETAIL(S).

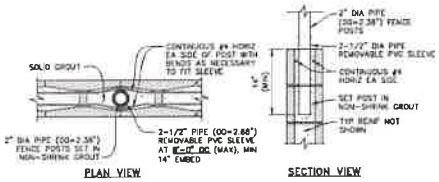
STEP FOOTING DETAIL (3)
SCALE: 1"=1"



PLAN VIEW

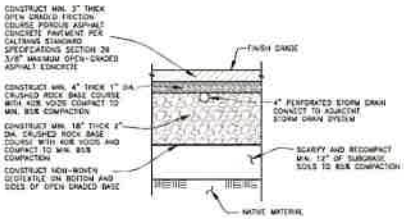
NOTE: CRACK CONTROL JOINTS IN CMU WALL STEMS SHALL NOT EXCEED 24 L.F.

CMU WALL STEM EXPANSION JOINT DETAIL (4)
SCALE: 1"=1"



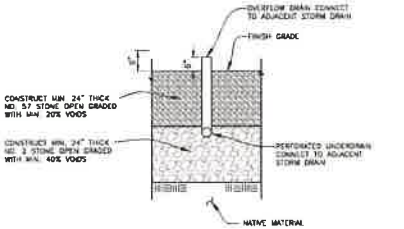
PLAN VIEW SECTION VIEW

POST EMBEDMENT DETAIL (5)
SCALE: N.T.S.

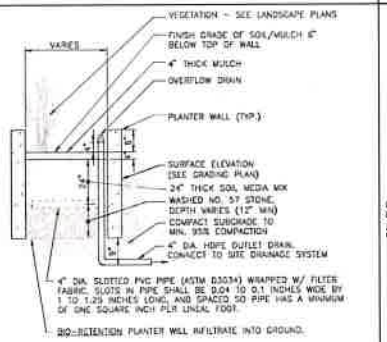


NOTES:
1. OVEREXCAVATE EXISTING SUBGRADE MATERIAL TO MIN. 12" BELOW EXISTING GROUND OR MIN 12" BELOW DESIGN SECTION, WHICHEVER IS GREATER.

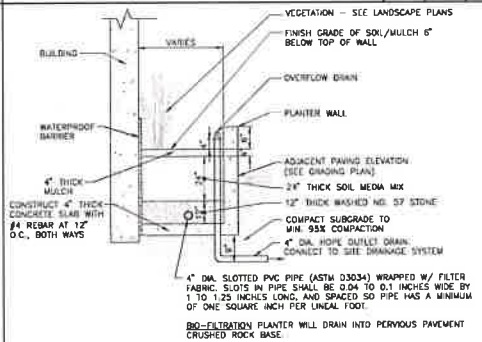
PERVIOUS ASPHALT PAVEMENT STRUCTURAL SECTION — NOT TO SCALE — A



STORM WATER BASIN — NOT TO SCALE — B



BIO-RETENTION PLANTER — NOT TO SCALE — D



BIO-FILTRATION PLANTER — NOT TO SCALE — C

811 Know what's below. Call before you dig.

V:\2064\ACTIVE\2064201647\21647-ACAD\CIVIL\2064201647C_DT.DWG
7/18/2019 2:19 PM

ARCHITECT:
nKLOSURES, Inc.
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
P.O.BOX 52098
AMARILLO, TX 79159

VIA REAL HOTELS
4110 VIA REAL, CARPINTERIA
SEPTEMBER 6, 2016

Stantec
111 East Victoria Street, Phone: (805) 963-9532
Santa Barbara, CA 93101 Fax: (805) 966-9801

DETAILS

C11

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



PROPOSED LEVEL 01 FINISH FLOOR EL. 17.50

EAST ELEVATION (2)
1/8" = 1'-0"



PROPOSED LEVEL 01 FINISH FLOOR EL. 17.50

SOUTH ELEVATION (FROM VIA REAL) (1)
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATIONS

EXHIBIT
OP-1A

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



WEST ELEVATION (2)
1/8" = 1'-0"



NORTH ELEVATION (MAIN ENTRY) (1)
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATIONS

EXHIBIT
OP-1B

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF BUILDING FROM VIA REAL (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
OP-1C

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF MAIN ENTRANCE (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:Info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
OP-1D

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



EAST ELEVATION (2)
1/8" = 1'-0"



SOUTH ELEVATION (FROM VIA REAL) (1)
1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8'
4' 16'
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATIONS

EXHIBIT
OP-2A

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



PROPOSED LEVEL 01 FINISH FLOOR EL. 17.50

WEST ELEVATION (2)

1/8" = 1'-0"



PROPOSED LEVEL 01 FINISH FLOOR EL. 17.50

NORTH ELEVATION (MAIN ENTRY) (1)

1/8" = 1'-0"

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

0' 8' 4' 16'
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATIONS

EXHIBIT
OP-2B

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made wilhout the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF BUILDING FROM VIA REAL (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
OP-2C

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.



VIEW OF MAIN ENTRANCE (1)

© 2019 NKLOSURES INC. ALL RIGHTS RESERVED

ARCHITECT:
NKLOSURES, INC. ARCHITECTS
Tel: 323.309.7334
Email:info@nKLOSURES.com

RAM HOTELS
21 PRESTWICK LANE,
AMARILLO, TX 79124

VIA REAL HOTEL
4110 VIA REAL, CARPINTERIA
NOVEMBER 21, 2019

EXTERIOR RENDERING

EXHIBIT
OP-2D

No copies, reproductions or electronic manipulation of any portion of these drawings in whole or in part are to be made without the express written permission from nKLOSURES, Inc. All content in these drawings (including concepts and designs) are the property of nKLOSURES, Inc.

Attachment A

Exhibit 3:

Recommended Project Conditions of Approval

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

PLANNING COMMISSION HEARING
PROJECT 16-1822-DP/CDP
VIA REAL HOTEL
4110 VIA REAL (APN 004-017-022)
APRIL 3, 2023

ATTACHMENT C: CONDITIONS OF APPROVAL (APPLICANT: KUSH NATHU, RAM HOTELS)

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 Development Plan and Coastal Development Permit is based upon and limited to compliance with the project description, the hearing exhibits (Attachment A, Exhibit 3 to the staff report dated April 3, 2023), 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:

   RAM Hotels proposes to construct and operate a 72-guestroom hotel on a 2.6-acre site. An existing single story, 5,678 square foot church building, children's play area, parking lot, vegetable garden and several small storage sheds would all be demolished and removed to accommodate the project. The new two-story hotel would have a building footprint of 22,460 square feet and a total square footage of 44,191 square feet. The maximum height of the new hotel would vary from 21 feet 10 inches to 25 feet, measured from the new finished grade to the top of the roof parapets.

   In addition to 72 guestrooms, the hotel would include a fitness center, business center, breakfast area, meeting room, outdoor pool, and outdoor garden patio. The hotel would also include typical support services (i.e., main lobby, admin/offices, employee breakroom, kitchen, laundry/storage, etc.). Twelve employees would be required to operate the hotel during every eight-hour shift. The hotel will operate with twelve employees daily working the following 3 shifts: Morning from 7:00 AM to 3:00 PM; Evening 3:00 PM to 11:00 PM; Overnight 11:00 PM to 7:00 AM

   The project would be served by one driveway accessed from Via Real at the southeastern corner of the property. A 77-space surface parking lot and two loading

zones would serve the proposed hotel and be located around the side and rear perimeter of the project site. New site landscaping, lighting and walkways are proposed throughout, including around the building perimeter and around the parking lot. A new masonry wall would be constructed along the side and rear property lines. In some cases, the new wall would be located on top of a retaining wall to account for grade differences between adjoining properties. A separate paved private driveway easement located along the west (side) property line is proposed to remain "as is," and will continue to serve several properties located to the north (behind) the subject property.

The project requires earthwork and grading (estimated at 4,700 cubic yards of cut; 2,900 cubic yards of fill; net export of 1,800 cubic yards of cut) in order to establish a level building pad, meet flood zone requirements and address site drainage needs. The finished floor height of the proposed hotel would be, in places, up to approximately two feet six inches above existing grade. Onsite stormwater improvements included in the project description include use of pervious concrete paving for parking areas, use of landscaped retention basins around the perimeter of the hotel building to capture roof runoff, and the expansion and improvements of a large, landscaped stormwater treatment and detention basin along the project's Via Real frontage. Other surface and underground storm drain improvements are required to convey onsite stormwater flows to the proposed treatment and detention basin.

An existing drainage feature that runs north-to-south along the project site's western edge would be protected in place and enhanced as riparian habitat. A 50-foot protective creek buffer would be established and restored with appropriate riparian and upland native plantings. A permeable walking trail and passive seating area is proposed within the creek buffer area. A separate area of riparian woodland located along the northern (rear) property line, approximately at the middle of the site would be protected in place.

Utility improvements required as part of the project include installation of a new eight-inch water line underneath the eastern hotel drive aisle to connect the existing main line in Via Real to the water line north of the project site in the Trieste Lane right-of-way. New water meters and connections for the building, irrigation system and fire protection system would tie the proposed hotel into the new water line. A new fire hydrant would be constructed toward the rear northeast corner of the hotel; the existing hydrant at the project's southeast corner would remain. A new eight-inch sewer line would run through the eastern drive aisle toward the northeast corner of the property and continue on a northerly route up Trieste Lane, connecting to an existing main line on Venice Lane. A new underground pump station would be placed at the northeast corner of the hotel's parking lot, underneath a parking space. An existing sewer pump house and force main would be removed during site demolition and prep.

Proposed offsite and frontage improvements include re-constructing the driveway curb cut and apron at the project entrance, new street lane striping to allow for left-hand turn movements into- and out of the project site and restriping the bicycle lane across the project frontage.

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 PROJECT MND

2. **AES-1. Architectural Review Board (ARB) Review.** The design, scale, character, colors, and materials of the project architecture shall be compatible with vicinity development and consistent with the City's "small beach town" character.

   Plan Requirement and Timing: The applicant shall submit plans for the project for review by the Architectural Review Board prior to approval of any Building Permit for physical development. **Monitoring:** Community Development Department staff (CDD) shall review submitted plans, provide direction to the ARB regarding this mitigation measure and site inspect during the construction phase for compliance with the approved plans.

3. **AES-2. Equipment Screening.** All mechanical equipment, including but not limited to, heating and air conditioning units, and trash receptacle areas, shall be completely screened from surrounding properties by use of a wall or fence, or shall be enclosed within a building or roof parapet/equipment well.

   Plan Requirements: The locations of all exterior mechanical equipment shall be depicted on a Roof and/or Mechanical Equipment Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and ARB shall review the Roof and/or Mechanical Equipment Plan for compliance with this measure prior to approval of a Building Permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that mechanical equipment has been installed consistent with the approved Plan.

4. **AES-3. Lighting.** Any exterior night lighting installed on the project site shall be of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels and into the protected riparian habitats and their associated buffers. Applicant shall develop a Lighting Plan incorporating these requirements and provisions for dimming lights after 10:00 pm.

   Plan Requirements: Specifications for all selected exterior lighting fixtures shall be included in the plans. The locations of all exterior lighting fixtures and photometric exhibit showing the direction and intensity of light being cast by each fixture and the height of the fixtures shall be depicted on a Lighting Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and

ARB shall review a Lighting Plan for compliance with this measure prior to approval of a building permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that exterior lighting fixtures have been installed consistent with their depiction on the final Lighting Plan.

5. **AES-4. Illuminated Signs.** Building and grounds signage shall be reviewed by the Architectural Review Board to ensure the size, design, colors, and intensity of signage is appropriate to the neighborhood setting and does not create distracting or intrusive impacts on surrounding uses.

   Plan Requirements: Detailed sign plans, depicting the location, construction, size, and dimensions of all project-related signage shall be submitted to the Architectural Review Board for review and approval prior to Building Permit issuance. All illuminated signage shall be outfitted with dimmable controls to control light intensity. **Monitoring:** CDD staff shall ensure compliance with the Architectural Review Board-approved sign plans during Building Permit review and prior to occupancy clearance.

6. **AG-1. Right to Farm Notification.** The following informational notice shall be recorded with the Santa Barbara County Clerk Recorder's office for appearance on any future property owners' Title Reports; shared with hotel employees; and disclosed to hotel guests prior to check-in:

   IMPORTANT: PROPERTY OWNER, EMPLOYEE & HOTEL GUEST NOTIFICATION

   This property is located adjacent to property zoned for agriculture and is located in an area that has been planned for agricultural uses. Existing agricultural growing operations are located north of the property. Vehicles associated with the agricultural use of this property utilize the adjacent driveway located immediately west and north of this property to access agricultural lands. While the Via Real Hotel project design includes landscape buffers and physical setbacks from the adjacent agricultural lands to reduce possible noise, light, odors and dust from impacting guests and employees of the Via Real Hotel project, property/business owners, employees and guests are to be notified that these are existing conditions and will not be considered by the City of Carpinteria to be a nuisance requiring extraordinary actions by the adjacent agricultural operators or landowners. It is in the public interest to preserve agricultural land and operations within the Carpinteria Valley and to specifically protect these lands for exclusive agricultural use. Any inconvenience or discomfort from properly conducted agricultural operations, including noise, lights, odors, dust, and chemicals, will not be deemed a nuisance.

   Plan Requirements: The applicant shall prepare and submit to the Community Development Department for review and approval the informational notice containing the above disclosure statement. The notice shall be recorded prior to granting of occupancy clearance by the City of Carpinteria. Hotel operator shall be made aware of this disclosure

requirement in writing and shall provide a copy of the disclosure document(s) used to notify hotel guests and employees of the adjacent agricultural land's "right to farm" protections. **Monitoring**: Following recordation and prior to granting of occupancy clearance, CDD staff shall be provided with a conformed copy of the recorded informational notice, and a copy of the disclosure document that will be used to notify hotel guests and employees.

7. **BIO-1. Nesting Bird Surveys.** To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 30), if feasible. If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the Project Boundary, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/ nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

   Plan Requirements: The most suitable bird nesting habitat shall be identified on the building and grading plans. This Measure shall be printed on all building and grading plans. **Timing:** A Qualified Biologist will conduct a pre-construction nesting bird survey, no more than 14 days prior to the initiation of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. The qualified biologist shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program. A report summarizing the results of the nesting bird survey and monitoring activities shall be prepared and submitted to the City, once all survey and monitoring activities are completed.

8. **BIO-2. Riparian Habitat Restoration Plan.** In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will restore and enhance the riparian habitat associated with drainage swales A and B,

and preserve these habitat areas for the life of the project. Enhancement would include removal of non-native plants and planting of appropriate riparian native plants such as arroyo and red willows. As part of this MM, a Riparian Habitat Restoration/Enhancement Plan (Plan) will be prepared for the project. This Plan will provide details on the restoration of the riparian areas associated with swales A and B and will include such elements as a planting plan, location of enhancement/restoration, irrigation (if needed), and success and monitoring criteria. The Plan will also incorporate biological aspects of the stormwater wetland treatment system (see MM BIO-3); that will be created to enhance stormwater quality. Details such as design of the wetland treatment system, planting plan and monitoring of this water quality enhancement; will be included in the Plan.

Plan Requirements/Timing: The Applicant shall provide a copy of the Riparian Habitat Restoration Plan (Plan) to the CDD for review and approval, prior to issuance of building permits, and will require that the restoration work be completed prior to Occupancy clearance for the building. CDD shall refer the Plan to the City's consulting biologist for review and approval prior to CDD acceptance of the Plan. The Plan must also outline protective measures for the riparian habitats that must be implemented during construction (i.e., fencing, exclusion zones, etc.) to avoid potential impacts to sensitive riparian habitats. The Restoration Plan will also require approval from CDFW as a Streambed Alteration Agreement will be required. Protected habitat areas shall be preserved for the life of the project.

Monitoring: Following the enhancement/restoration of the riparian habitat, a qualified biologist will conduct one (1) annual inspection of Swales A and B and associated riparian habitat for 5 years, to document that the habitat is viable and providing the intended ecological functions and values. The monitoring frequency for the riparian habitat restoration/enhancement associated with Swales A and B may be conducted in tandem with the monitoring for the Stormwater Treatment Wetland Habitat (MM BIO-3). The monitoring & reporting elements will be detailed in the Plan. The Biologist will submit annual reports to CDD, based on the annual monitoring criteria. The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.

Applicant shall record a covenant in a form approved by CDD requiring the protection and preservation of the protected riparian areas for the life of the project. Said covenant shall be recorded prior to final occupancy clearance.

9. **BIO-3. Stormwater Treatment Wetland.** In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will design and construct a stormwater treatment wetland habitat as part of the proposed treatment swale to enhance stormwater quality. The small freshwater wetland will be designed to provide both enhancement of stormwater quality and serve as a wetland habitat for wildlife.

Plan Requirements/Timing: The Applicant will provide the final design plans showing the stormwater treatment wetland, on all grading plans submitted to the City, for review and approval prior to issuance of any permits for construction. The biological aspects of the stormwater treatment wetland habitat (including planting

plan); will be detailed in the Riparian Habitat Restoration/Enhancement Plan (Plan), as identified in MM BIO-2. The Stormwater Treatment Wetland Plan will also require approval from the RWQCB, if a Section 402 water quality certification or other regulatory permitting is required. **Monitoring:** Following the construction of the treatment wetland, a qualified biologist will conduct one (1) annual inspection of the treatment wetland and swale, for 5 years, to document that the system is viable and providing the intended ecological functions and values. CDD shall review and approve the design, prior to the issuance of grading or building permits. The monitoring and reporting program for the treatment wetland can be integrated with the Riparian Habitat Enchantment/Creation program (MM BIO-2). The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.

10. **CR-1. Cultural Resources Monitoring.** Applicant shall develop and submit for review and approval by the Community Development Department a Construction Monitoring Treatment Plan to ensure that any unknown cultural resources are adequately recorded, evaluated, and if significant, mitigated. The Construction Monitoring Treatment Plan shall include, at minimum, the following required elements:
    a. Execution of a scope of work and contract for the monitoring of initial ground disturbances (e.g., rough grading and excavation) by a qualified archaeologist and Chumash Native American observer.
    b. Development and adoption of procedures for notifying the City of Carpinteria and other involved or interested parties in case of discovery of unknown cultural resources. The qualified archaeologist and Chumash Native American observer shall have the authority to temporarily halt or redirect construction activities in the vicinity of any potentially significant discovery to allow for adequate recordation and evaluation.
    c. Development and adoption of procedures to be used to record, evaluate, and mitigate any new discoveries with a minimum of delay; and
    d. Development and adoption of procedures to follow in case of discovery of human remains. In the event that isolated human remains are encountered, consultation with the most likely Native American descendent, pursuant to Public Resources Code §5097.97 and §5097.98, would apply.

    Results of the Construction Monitoring Treatment Plan shall be documented in a report after completion of initial ground disturbances. A copy of the report shall be submitted to the Community Development Department for review and approval.

    Plan Requirements/Timing: The Construction Monitoring Plan shall be prepared by a qualified archaeologist and submitted to the Community Development Department for review and approval prior to issuance of any engineering or building permits. A copy of the executed contract shall be submitted to the Community Development Department for acceptance prior to issuance of any engineering or building permits. **Monitoring:** Contracted qualified archaeologist and Chumash Native American observer shall be responsible for monitoring initial ground disturbance activities (e.g., rough grading and excavation), as applicable.

Contracted qualified archaeologist shall be responsible for submitting the final report summarizing and documenting all monitoring activities to the Community Development Department within sixty (60) days of the completion of construction.

11. **GEO-1. Geotechnical Report Compliance.** Project construction and grading shall comply with all recommendations for Grading, Foundations and Retaining Walls, contained in the Geotechnical Engineering Report prepared by Pacific Materials Laboratory, to the satisfaction of the City Engineer.

    Plan Requirements: Grading and building plans shall include all required measures as determined by the City Engineer. **Timing:** Prior to issuance of building and grading permits and during grading and construction. **Monitoring:** The City Engineer shall site inspect during grading. The City Building Inspector shall ensure that all recommendations are implemented during construction, by conducting periodic site inspections during and at the completion of construction.

12. **WQ-1 Implementation of Low Impact Design (LID) Development Measures.** The following LID measures will be incorporated with the stormwater treatment design for the project:

    - *Limitation of development envelope*. The project development footprint will be limited to provide areas for treatment and retention of stormwater runoff by means of a treatment swale along the southerly boundary, high groundwater, and preservation of historic drainage patterns.
    - *Preservation of natural drainage features.* The drainage runoff from the northerly adjacent properties is currently draining along the western side of the property in a drainage swale. This drainage pattern is proposed to be preserved. A 50-foot setback from the existing drainage swales will be accommodated and depicted on project designs.
    - *Incorporation of existing drainage into stormwater treatment design/treatment wetland.* The stormwater treatment system for the project will be so designed to direct all stormwater runoff into the existing drainages and into a stormwater treatment swale along the southern property line. The vegetated stormwater treatment will act as an aesthetic feature at the entry to the property. A freshwater treatment wetland will also be created at the end of the detention basin, to further clarify water and to provide a habitat for wildlife.
    - *Minimization of imperviousness*. The project will utilize porous pavement within the northwesterly parking lot to reduce the amount of impervious material.
    - *Use of permeable pavements.* The project utilizes porous asphalt concrete pavement at various locations on the site to allow infiltration of the parking areas, treat stormwater, and minimize runoff.
    - *Dispersal of runoff to pervious areas.* To meet the Tier 3 requirement for retaining 95th percentile rainfall intensity on the site, a large percentage of roof water will be discharged to bioretention devices. The remaining drainage

runoff will be directed to the existing swales along the eastern and western sides of the project site, which will then be routed through the treatment swale and wetlands, before it discharges off-site. In addition to the stormwater treatment, the vegetated swale will be designed to promote infiltration of water during rainfall events.

Plan Requirements: The set back from the existing drainage, LID and all storm water treatment design features shall be depicted on all building and grading plans. A final copy of the design plans showing these features will be submitted to CDD and Public Works for review and approval. **Timing:** All stormwater treatment measures shall be completed prior to occupancy clearance. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

13. **WQ-2. Compliance with NPDES Permit Requirements.** The project shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Since the project would disturb one or more acres from construction activities, the construction operators must obtain coverage under a NPDES permit, which is administered by the State, prior to the start of construction. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The following measures are examples of construction Best Management Practices (BMPs) that may be included in the SWPPP:

- Stockpiling of Soil. City Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.
- Protecting Construction Materials from Run-On and Runoff. At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants.
- Designating Waste Disposal Areas. Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.
- Installing Perimeter Controls on Downhill Lot Line. Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.
- Maintaining a Stabilized Exit Pad. Minimize sediment track-out from vehicles exiting the site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track- out occurs, remove deposited sediment by the end of the same workday.

Plan Requirements: The BMPs will be depicted on all building and grading plans and will be submitted to the CDD and Public Works for review and approval. The Applicant shall prepare a SWPPP and provide a copy of the document and a copy of the project's NPDES Construction General Permit to the CDD and Public Works Department. **Timing:** All stormwater treatment measures and structural BMPs shall

be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

14. **WQ-3. Soil Erosion & Sediment Control Plan.** To control erosion and potential discharge of soil during construction into the drainage swales, the applicant shall prepare a Soil Erosion and Sediment Control Plan. This plan can be part of the SWPPP.

    Plan Requirements: Specific BMPs that would be implemented from the Soil and Erosion Control Plan that are not otherwise covered under the SWPPP shall also be depicted on all grading plans. **Timing:** All Soil Erosion & Sediment Control BMPs shall be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

15. **WQ-4. Minimum Lowest Floor Elevation.** The project shall be designed to have a minimum lowest floor elevation of 17.0. Applicant shall obtain a Letter of Map Revision based on fill from FEMA to remove the new structure built on the property from the Special Flood Hazard Area (SFHA).

    Plan Requirements: Project plans submitted for Building and Engineering Permits shall depict a minimum lowest floor elevation of 17.0 feet. A copy of the Letter of Map Revision based on fill shall be submitted to the City for review and approval prior to submittal to the Federal Emergency Management Agency (FEMA) for approval and issuance of a Letter of Map Revision Based on Fill Determination Document (LOMR). **Timing:** Project plans depicting the minimum required lowest floor elevation shall be submitted prior to Building and Engineering Permit approvals. A copy of the application for LOMR shall be submitted to City prior to submittal to FEMA. A copy of the approved LOMR shall be submitted to the City following FEMA approval. **Monitoring:** CDD and Public Works shall review building and engineering plans for conformance with this Measure. Public Works staff shall review and approve submittal of LOMR request to FEMA prior to submittal.

16. **WS-1. Compliance for Carpinteria Valley Water District Requirements.** The Project will comply with the requirements of the Carpinteria Valley Water District (District) to ensure domestic water supply for the project. The following items shall be submitted to the District for their review and approval:
    - Final design plan set that shows profiles for water, sewer, and storm drainage
    - Signed plans set by the City of Carpinteria planning department and public work department.
    - The City completed Plan Set shall include all of the District's comments

- All required fees (including the Capital Cost Recovery Fee [CCRF], and any fees associated with inspection of the installation or cost to cover any system improvement required by the project shall be paid prior to Plan set submittal.
- Main Extension Agreement with the District for the Construction of any new water mains or other facilities requiring upgrades or improvements to meet the demand for the project shall be completed prior to final Plan set submittal.
- Construction deposits and bonds per the main extension agreement shall also be paid prior to final Plan set submittal

Plan Requirements: Profiles for water, sewer, and storm drainage shall be depicted on all final Plan set for submittal to the District. **Timing:** Final Plan set, and applicable fees shall be submitted to the District, prior to obtaining a grading permit for the project. **Monitoring:** The Applicant shall provide proof of District approval/sign-off prior to issuance of building permits.

17. **N-1. Construction Hours.** Construction activity for site preparation and for future development shall be limited to the hours between 7:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.

    Plan Requirements: Two signs stating these restrictions shall be provided to the applicant and posted on site. **Timing:** Signs shall be in place prior to the beginning of and throughout all grading and construction activities. Violations may result in suspension of permits. **Monitoring:** Building Inspector shall spot check and respond to complaints.

18. **N-2. Mechanical Equipment.** Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. Equipment engine shrouds shall be closed during equipment operation. Whenever feasible, electrical power shall be used to run air compressors and similar power tools rather than diesel equipment. The developer shall require all contractors, as a condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions.

    Plan Requirements: The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.

19. **N-3. Construction Vehicles.** Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.

Plan Requirements: The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.

20. **N-4. Stationary Equipment.** Stationary construction equipment that generates noise that exceeds 60 dBA Leq at the boundaries of the nearby residential uses shall be shielded.

    Plan Requirements: Temporary noise barriers used during construction activity shall be made of noise resistant material sufficient to achieve a Sound Transmission Class (STC) rating of STC 40 or greater, based on sound transmission loss data taken according to ASTM Test Method E90. Such a barrier may provide as much as a 10 dB insertion loss, provided it is positioned as close as possible to the noise source or to the receptors. To be effective, the barrier must be long and tall enough (a minimum height of eight feet) to completely block the line-of-site between the noise source and the receptors. The gaps between adjacent panels must be filled-in to avoid having noise penetrate directly through the barrier. The recommended minimum noise barrier or sound blanket requirements would reduce construction noise levels by at least 10 dB. **Timing/Monitoring:** The equipment area with appropriate acoustical shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.

21. **N-4. Sound Curtains.** Temporary sound curtains shall be installed for the closest sensitive receptors if construction-related noise would exceed City thresholds. A sound curtain shall be installed and maintained along the easterly and northerly property lines throughout the duration of all construction activities on the project site.

    Plan Requirements: The notes on all building and grading plans shall include these requirements. Applicant shall provide an acoustical analysis prepared by a licensed acoustical engineer to demonstrate whether earthwork and/or construction activities would exceed City noise thresholds for nearby sensitive receptors. **Timing:** The acoustical analysis shall be submitted prior to issuance of any building or engineering permits. If the use of a sound curtain is found to be necessary to mitigate construction-related noise, the sound curtain(s) shall be in place prior to the beginning of and throughout all demolition, grading, and construction activities. **Monitoring:** CDD shall be responsible for receipt and review of the acoustical analysis. If sound curtains are required, CDD shall ensure sound curtains are in place prior to start of construction. Building inspector shall spot check and respond to complaints.

22. **N-5. Noise Monitor.** A disturbance coordinator shall be designated by the contractor. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g. starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem be implemented.

Plan Requirements: A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.

23. **N-6. Exterior Walls Construction.** The exterior wall construction shall consist of wood frame, composed of 7/8" stucco, 30 lb felt vapor barrier, 6" studs with R-13 or thicker batt insulation and two layers of 5/8" type X gypsum board wall for the interior face, with a minimum Outside Inside Transmission Class (OITC) 40 (comparable to STC 50).

    Plan Requirements: The exterior wall specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of building permit.

24. **N-7. Ceiling/Roof Construction.** Standard construction techniques shall be implemented (roofing, 30 lb. felt, truss or joists, R-30 insulation and 5/8" gypsum board) to provide the necessary 20 dBA noise reduction.

    Plan Requirements: The construction techniques/specifications shall be shown on all building construction plans. **Timing:** Construction techniques for ceiling/roof shall be provided to CDD for verification, prior to initiating project construction activities. **Monitoring:** CDD/Building Inspector check construction techniques/specifications prior to issuance of building permit.

25. **N-8. Windows/Doors Specifications.** Glazing for all sound rated windows shall be of unequal thickness, or with one glazing light of laminated glass, in order avoid harmonic resonance at certain low frequencies. The windows should have the performance characteristics listed below to provide the required (or recommended) noise reduction for the south elevation. In addition to specifying the required Sound Transmission Class of building assemblies, flanking paths for noise should be reduced by sealing all potential leaks in construction by use of acoustical sealant and putty pads. Notes and details shall be included on the design drawings to insure that the construction details achieve the sound insulation potential of the basic building assemblies. The following are recommended additional notes and details that shall be followed:

    - Use permanently non-hardening acoustical sealant around perimeter of window frames and at joints of all wall and roof/ceiling building assemblies. Gypsum board seams and joints should be sealed with acoustical sealant to prevent all air leaks. If double-layer gypsum board is used, panels should be staggered.
    - Select window assemblies with effective, airtight, nonporous gaskets or weatherstripping to minimize air infiltration and sound leakage.

- Provide airtight construction at all exterior walls with acoustical sealant at interior and exterior of sole plates and sill plates, headers and top plate, where warping and drying may open construction joints over time.
- Use door jamb and head gasketing and door bottom gasketing at entry doors to seal solid core doors against weather and sound. Caulk entry door thresholds as they are placed, provide rubber-seal door thresholds, such as those by Trademark Hardware.

Some of the above steps are also necessary for compliance with CCR Title 24 Thermal Insulation requirements.

Plan Requirements: The windows/doors specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of building permit.

PROJECT SPECIFIC CONDITIONS

26. **Provision of Lower-Cost Overnight Accommodations.** The permittee, and any and all other successors or assigns, shall provide actual lower cost accommodation on the site of the hotel, subject to the following requirements:
    a. The permittee shall provide 15% of the 72 new hotel rooms (72 X 0.15 = 10.8, rounded to 11 rooms) at a per room per night rate not to exceed 75% of the "peak season" statewide average daily rate (ADR) as published on the "Visit California" website (or where unavailable, a similar reputable trade organization specializing in the California travel industry), inclusive of parking costs and resort fees, which may be adjusted in the future according to Consumer Price Index not more than once per year, with written notice to the CDD Director.
    b. If the permittee seeks to increase the rates or reduce the percentage of lower-cost accommodations, they shall obtain an amendment to this permit that will authorize the change in conjunction with a requirement to mitigate for any increased rates (i.e., payment of in-lieu mitigation fees or provision of alternate lower cost rooms).
    c. The provided eleven (11) rooms designated for this lower-cost purpose shall meet the minimum specifications of a standard, double occupancy room.
    d. The rates shall apply every day of the year and shall not be adjusted seasonally.
    e. Lower-cost rooms shall be reserved through a first-come, first-serve reservation system on the hotel website. Interested guests may also call the hotel to inquire about lower cost room availability and make a reservation if there is availability.
    f. The hotel operator shall reasonably promote and publicize availability of the lower-cost rooms to underserved communities, such as low-income communities, communities of color, and other communities that have been historically marginalized and face greater barriers to coastal access.

i. The hotel operator shall reasonably identify strategies for both online advertising and offline marketing efforts, which shall include targeted outreach to community organizations focused on underserved communities such as local non-profits, environmental justice groups, labor unions, or recipients of public benefits programs by coordinating with local program administrators.
ii. The hotel operator may identify additional actions or measures that could be taken to improve access by underserved communities, if necessary, as determined by the CDD Director upon review of the monitoring reports required by Subsection g of this condition.

g. Records of compliance with this condition shall be maintained by the permittee or its operator/management entity and submitted to CDD upon request.

Prior to the issuance of any Certificate of Occupancy for this project, the applicant, and any and all successors or assigns shall provide an assignment of the rooms that will be designated for the required low cost accommodations and a per room nightly rate in compliance with the above requirements. These requirements shall be recorded in the deed restriction described in Condition 28.

27. **General Occupancy Agreement.** By acceptance of this permit, the permittee agrees that all hotel facilities shall be open to the general public. No timeshare or other fractional ownership or long-term occupancy of hotel rooms is permitted without an amendment to this permit. No hotel rooms shall be rented for more than 30 consecutive days.

28. **Deed Restriction(s).** Prior to issuance of any permits for construction or demolition, the applicant/ landowner shall submit to CDD for review and approval documentation demonstrating that the applicant/ landowner has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the CDD Director: (1) indicating that, pursuant to this permit, the City of Carpinteria has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the adopted project conditions of approval of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

29. **Creeks Program Conditions**. To minimize construction impacts, the applicant shall prepare and submit a Construction Mitigation Plan to Community Development for review and approval. Such plans, which must be prepared by a City-approved professional biologist, arborist or landscape architect, shall include the following required measures:

Pre-Construction:

a. The limits of the construction area shall be clearly shown on the plans and fenced or flagged on the construction site. All construction activities shall stay within these limits;
b. Prior to commencement of construction activities, protective fencing shall be erected around the outermost limits of the protected zones of native trees and adjacent to the construction area. Such fencing shall remain in place until all construction is complete. For the purposes of this project, the protected zone of a native tree shall extend five feet from the tree dripline or 15 feet from the trunk of the tree, whichever is greater;
c. No construction, grading, staging or materials storage shall be allowed within the fenced exclusion areas or within the protected zones of any onsite native trees;
d. Important resources (e.g., native vegetation) located within the construction area that are to be preserved will be clearly marked on plans and on site to avoid the accidental removal of such resources;
e. Construction activities shall be scheduled to avoid the breeding seasons of sensitive wildlife species located within 300 feet of the proposed improvements;
f. Construction Phase Requirements from the City's Water Quality Protection Regulations shall be implemented to minimize impacts related to runoff, erosion and water quality;
g. The use of herbicides shall be minimized by using manual removal methods to eliminate undesired vegetation whenever possible.

Post-Construction:

h. Mechanisms to provide for the permanent protection of natural areas as identified and approved on the project plans shall be included in property exchange documents, deeds, lease agreements, CC&Rs, etc.;
i. Permanent native landscaping shall be provided to developed areas;
j. The planting of any landscape plants listed on the California Exotic Pest Plan Council's Lists of Exotic Pest Plants of Greatest Ecological Concern in California is prohibited in any ESHA or creek setback area;
k. Project applicant and any and all successors shall provide informational materials to future occupants that ensure protective standards/conditions of approval are recognized and complied with throughout the life of the project;
l. Loud, stationary equipment shall be located away from or provided with enclosures to minimize potential impacts to wildlife;

m. Post-Construction Requirements from the City's Water Quality Protection Regulations will be implemented to minimize impacts to runoff, erosion, and water quality;
n. All new fencing shall be wildlife permeable;
o. All exterior lighting shall be minimized, restricted to low intensity features, shielded and directed away from creek ESHA to minimize impacts to wildlife. Permitted lighting shall conform to the following standards:
    i. The minimum necessary to light walkways used for entry and exit to the structure, including parking areas on the site. This lighting shall be limited to fixtures that do not exceed 60 watts, or the equivalent, unless a higher wattage is authorized by the Community Development Director;
    ii. Security lighting attached to the building that is controlled by motion detectors and is limited to 60 watts, or the equivalent;
    iii. The minimum lighting necessary for safe vehicular use of the driveway, drive aisles and parking lot. The lighting shall be limited to 60 watts, or the equivalent;
    iv. A light, not to exceed 60 watts or the equivalent, at the entrance to any accessory structures;
    v. No lighting around the perimeter of the site, no lighting for sports courts or other recreational facilities and no lighting for aesthetic purposes is allowed.

Plan Requirements and Timing: Prior to issuance of a Grading or Building Permit, the applicant shall submit a Construction Mitigation Plan, prepared by a CDD approved biologist, arborist or landscape architect to CDD for review and approval. All requirements shall be specified on grading and building plans and graphically depicted if feasible. Fencing shall be installed prior to start of grading or construction. **Monitoring:** CDD shall site inspect throughout grading and construction activities.

30. To ensure that protective measures listed in the Construction Mitigation Plan are fully implemented, a qualified biological monitor approved by or working directly for the City shall be provided during construction activities for projects on parcels within a creek ESHA overlay area. The biological monitor's duties shall include:

    a. Conduct orientations for the work crew upon project commencement and subsequent orientations upon significant crew changes to educate work crews about the sensitivity of biological resources at the site and to inform them of protective measures that must be complied with;
    b. Observing construction activities and directing construction crews as needed to ensure that protective measures are implemented;
    c. If any breach in protective fencing occurs, the monitor shall order all work suspended until the fence is repaired or replaced.

Plan Requirements and Timing: The City approved biological monitor shall be identified prior to issuance of a Grading or Building Permit. **Monitoring:** The biological monitor shall report to CDD as required by the City.

31. All new fencing adjacent to creeks or a creek ESHA overlay shall be wildlife permeable as defined by the following criteria:
    a. Fences shall have a wooden (not wire) rail at the top;
    b. Fences shall be less than 40 inches high;
    c. Fences shall have a space greater than 14 inches between the ground and the bottom rail;
    d. Solid or chain link fences are prohibited.

32. **Colors and Materials.** All materials and colors used in construction and all landscape materials shall be as represented to the Architectural Review Board and any deviation will require approval by CDD, which may include review by the Board.

33. **Landscape Plan.** Complete landscape and irrigation plans shall be prepared for all landscape areas on the project site and within the public rights-of-way along the project frontages. The complete landscape and irrigation plans shall be reviewed and approved by CDD with input from the ARB as part of final design review.

34. **MWELO Compliance.** In compliance with the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881, Laird)) as amended by the May 29, 2015 Information Bulletin 2015-03 from the Department of Housing and Community Development and Chapter 15.90 of the City's Municipal Code: Water Efficient Landscaping, a Landscape Documentation Package containing the following elements shall be prepared by a design professional: PROJECT INFORMATION; WATER EFFICIENT LANDSCAPE WORKSHEET; SOIL MANAGEMENT REPORT; LANDSCAPE DESIGN PLAN; IRRIGATION DESIGN PLAN; and GRADING DESIGN PLAN. The preparation of a Certificate of Completion containing the following elements shall also be prepared by a design professional: CERTIFICATION OF INSTALLATION (per the approved plan); FINAL SOILS INFORMATION; IRRIGATION SCHEDULING PARAMETERS; MAINTENANCE SCHEDULES; and IRRIGATION AUDIT REPORT.
    Plan Requirements and Timing: Prior to approval of a Building Permit, the applicant shall submit a Landscape Documentation Package to the CDD for review and approval. The CDD shall send a copy of the Documentation Package the Carpinteria Valley Water District. The applicant shall enter into an agreement with the City to install required landscaping and irrigation and maintain required landscaping for the life of the project. Subsequent to installation of the approved Grading, Landscape and Irrigation Plans, the applicant shall submit a Certificate of Completion to CDD for review and approval. The Landscape Documentation Package and Certificate of Completion forms are available at the CDD, and are required to be approved by the CDD prior to Occupancy Clearance. **Monitoring:**

CDD shall conduct site visits to ensure installation and maintenance of landscape and irrigation.

35. **Site Upkeep & Maintenance.** The applicant shall be responsible for maintaining the premises in a clean and orderly condition at all times. This includes, but is not limited to the following:
    a. The parking lot shall be cleaned on a regular basis. Cleaning activities shall include the removal of litter; spot cleaning of oil, fuel and other automotive leaks; vacuum sweeping and pressure washing when necessary;
    b. All trash/recycling shall be properly disposed of in the appropriate receptacles provided on site. The applicant shall regularly inspect the perimeter of the site to ensure that trash is not leaving the premises via wind or runoff;
    c. All structures and improvements on site shall maintain a tidy appearance and be kept in good working order; and
    d. All site landscaping shall be adequately maintained

    Plan Requirements: This requirement shall be included in the approved conditions of approval signed by the applicant prior to approval of any Building Permit for physical development. **Timing:** CDD shall monitor in the field as required. **Monitoring:** CDD staff shall periodically inspect the site to ensure compliance with this condition. If it is found that the site is not being maintained in a manner consistent with this condition, the matter shall be referred to the City's Code Compliance staff for resolution.

36. **Solid Waste.** An enclosure for all trash and recycling solid waste bins shall be provided onsite. Said enclosure shall be sufficient in size and capacity to contain all solid waste containers/bins/dumpsters and shall be designed and constructed to screen all solid waste containers from public view. All solid waste containers shall be lidded and/or the enclosure structure shall be roofed. Said enclosure shall be accessible at all times. Enclosure area shall comply with all specifications outlined in CMC 15.09.030. Frequency of trash service shall be scheduled as needed to ensure solid waste generated by the development does not exceed the capacity of the approved trash enclosure. When not being serviced, all solid waste containers/bins/dumpsters shall remain stored within the trash enclosure at all times.

    Plan Requirements: Enclosure area shall be depicted on plans submitted for Building Permit review and shall include construction specifications/details for screening, access and roof coverage (as applicable). **Timing:** CDD and/or Public Works staff shall verify the enclosure is constructed consistent with Plan requirements prior to Occupancy clearance. **Monitoring:** CDD and Public Works staff shall periodically monitor the site to ensure the enclosure is maintained and functions adequately.

37. **Required Parking.** A minimum of 77 parking spaces shall be maintained onsite for the life of the project. Parking spaces shall remain available for the use of hotel guests, visitors and employees. In addition, bicycle parking shall be provided onsite in a quantity consistent with the requirements of the CA Green Building Code and maintained for the life of the project.

Plan Requirements: Parking spaces and bicycle racks shall be shown on the plans submitted for Building Permit and Engineering Permit review. **Timing:** Parking spaces shall be striped and maintained (as needed) and bicycle racks installed prior to Final Occupancy clearance. **Monitoring:** CDD and PW shall periodically inspect the site for ongoing compliance. A copy of the lease agreement terms concerning employee offsite parking shall be provided to CDD prior to Occupancy clearance.

38. **Loading Zones.** Every effort shall be made to utilize the designated loading zones in the hotel parking lot for business deliveries, and to schedule deliveries for the morning hours. This requirement shall be written into all hotel operators' lease agreements and shall be enforced by the applicant/owner or their agent(s).

Plan Requirements and Timing: This requirement shall be written into all hotel operator lease agreements, and shall be in effect for the life of the project. **Monitoring:** A copy of the standard lease agreement terms addressing business deliveries shall be provided to the City prior to Occupancy clearance.

39. **Traffic Safety Committee.** Applicant shall submit plans and appropriate materials to the City's Traffic Safety Committee depicting all proposed revisions to street striping and curb painting along the project frontage. The Traffic Safety Committee shall be responsible for reviewing the proposed changes and making a recommendation to the City Council for final action. In the event any of the proposed traffic circulation and/or public on street parking alterations that are included as part of the project are not supported by the Traffic Safety Committee and/or City Council, the project shall return to the Planning Commission for a permit revision. The Planning Commission shall have the option of revising or adding project conditions, as warranted, to address the impacts of these changes.

Plan Requirements and Timing: Applicant shall submit improvement plans to the Public Works Department. Review by the Traffic Safety Committee and approval by the City Council shall occur prior to issuance of an Engineering Permit to begin any improvement work in the City rights-of-way. **Monitoring:** CDD and PW staff shall be responsible for ensuring all necessary approvals have been granted.

DEVELOPMENT PLAN CONDITIONS

40. **EHS Approval.** Prior to issuance of Building Permits for any kitchen improvements associated with the approved hotel, applicants shall obtain approval from Santa Barbara County Environmental Health Services (EHS).

Plan Requirements: Approval stamps on the final building plans or similar proof of EHS approval shall be obtained and copies provided to CDD for any kitchen or food preparation facilities. **Timing:** Proof of EHS approval shall be provided prior

to issuance of any Building Permits for kitchen improvements. **Monitoring:** EHS and the City Building Inspector shall be responsible for ensuring all kitchen improvements are constructed per the approved plans.

41. **Construction Materials Storage.** Construction materials and waste such as paint, mortar, concrete slurry, fuels, etc. shall be stored, handled, and disposed of in a manner which minimizes the potential for storm water contamination.
Plan Requirements and Timing: Bulk storage locations for construction materials and any measures proposed to contain the materials shall be shown on the building and grading plans submitted to the City for review prior to issuance of a Building or Grading Permit. **Monitoring:** CDD and Public Works shall site inspect prior to the commencement and as needed during all grading and construction activities.

42. **Waste Diversion.** Sixty-five percent (65%) or more of all construction and demolition debris generated shall be diverted from the landfill, as mandated by Carpinteria Municipal Code. Demolition and/or excess construction materials shall be separated onsite for reuse/recycling or proper disposal (e.g., concrete asphalt). During demolition and grading, separate bins for recycling of construction materials and brush shall be provided onsite.
Plan Requirements: This requirement shall be printed on demolition plans. Applicant shall submit a Waste Management Plan (WMP) prior to demolition and provide Public Works with a completed WMP, including receipts for recycled materials to demonstrate compliance with the City's Construction and Demolition Program's 65% mandatory diversion rates. **Timing:** Materials shall be recycled as necessary throughout demolition and grading activities. **Monitoring:** Public Works shall review and approve a completed WMP prior to issuance of a Building Permit.

43. **Construction Waste.** To prevent construction and/or employee trash from blowing offsite, appropriate receptacles shall be provided onsite prior to commencement of grading or construction activities. Waste shall be picked up weekly or more frequently as directed by CDD staff.
Plan Requirements and Timing: Prior to Building Permit issuance, applicant shall designate and provide to CDD the name and phone number of a contact person to monitor trash/waste and organize a clean-up crew. Trash control shall occur throughout all grading and construction activities. **Monitoring:** CDD shall inspect periodically throughout grading and construction activities.

44. **Construction Washout Area.** 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 location of the washout area shall be clearly noted at the construction site with signs.
Plan Requirements: The applicant shall designate a washout area, acceptable to CDD, and this area shall be shown on the grading and building plans. **Timing:** The

wash off area shall be designated on all plans prior to issuance of a Grading or Building Permit. The washout area shall be in place and maintained throughout construction. **Monitoring:** CDD shall check plans prior to issuance of a Grading or Building Permit and staff shall site inspect throughout the construction period to ensure proper use and maintenance of the washout area.

45. **Dust Management.** Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site by following the dust control measures listed below. During clearing, grading, earth moving, excavation or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.

    a. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the winds speed exceeds 15 miles per hour. Reclaimed water should be used whenever possible.

    b. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

    c. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days 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 form the point of origin.

    d. After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.

    Plan Requirements: All requirements shall be shown on the grading and building plans. **Timing:** Condition shall be adhered to throughout all grading and construction activities. **Monitoring:** CDD shall ensure measures are on plans. Grading and Building Inspectors shall spot check and ensure compliance onsite. APCD inspectors shall respond to nuisance complaints.

46. **Dust Monitor.** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress.

    Plan Requirements: The name and telephone number of such persons shall be provided to the APCD and the Community Development Department. **Timing:** The dust monitor shall be designated prior to issuance of a Grading or Building Permit. **Monitoring:** CDD shall contact the designated monitor as necessary to ensure compliance with dust control measures.

47. **Diesel Exhaust Control Measures.** The following Diesel Exhaust Control Measures should be implemented during construction activities:

    a. Diesel construction equipment meeting the California Air Resources Board's current emission standards for off-road heavy-duty diesel engines shall be used.
    b. The engine size of construction equipment shall be the minimum practical size.
    c. The number of construction equipment operation simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
    d. Construction equipment shall be maintained in tune per the manufacturer's specifications.
    e. Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines.
    f. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
    g. Catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed on equipment operating onsite.
    h. Diesel powered equipment should be replaced by electric equipment whenever feasible.
    i. State law requires that idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units should be used whenever possible.

    Plan Requirements: All requirements shall be shown on grading and building plans. **Timing:** Condition shall be adhered to throughout all grading and construction activities. **Monitoring:** CDD shall ensure measures are on plans. Grading and Building Inspectors shall spot check and ensure compliance onsite.

48. **Utilities.** This Development Plan and Coastal Development Permit does not constitute approval for the installation of new and/or repair of existing underground utilities. All modifications to, or installations of new utilities shall be under separate permit(s) from the appropriate utility providers and the Public Works Department for any work within the public right-of-way. Utility provider permission for excavation shall precede issuance of any permits for construction within the public right-of-way.

49. **Project Approval Timing.** Approval of the Development Plan shall expire two years after approval by the Planning Commission unless prior to the expiration date, substantial physical construction has been completed on the development or a time extension has been applied for by the applicant. The decision-maker with jurisdiction over the project may, upon good cause shown, grant a time extension.

50. **Project Approval Time Extension.** If the 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 a Building Permit.

51. **Project Conformance.** No permits for development shall be issued except in conformance with the approved Development Plan and Coastal Development Permit. The size, shape, arrangement, use and location of buildings, walkways, parking areas and landscaped areas shall be developed in conformity with the approved Development Plan marked Attachment A, Exhibit 3 dated April 3, 2023. Substantial conformity shall be determined by the Community Development Department Director.

52. **Project Superseded.** On the date a subsequent Development Plan is approved for this site, any previously approved but unbuilt plans shall become null and void.

53. **Underground Service Alert.** 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.

54. **Easements** Existing and proposed easements for all utilities shall be located and described on the engineering plans or the architectural drawings prior to issuance of building permits.

CITY RULES & REGULATIONS/LEGAL REQUIREMENTS

55. **Formula Business Regulations.** The applicant acknowledges it is informed of the City's formula business regulations and agrees to abide by said regulations and ensure all hotel operators and/or management entities shall be in compliance with the City's formula business regulations in effect at the time of application for any certificate of occupancy and business license.

56. **ABC License.** No provision of alcohol service is permitted as part of this approval. Should the applicant or any future hotel operator(s) choose to provide any of such service, the proper licenses and approvals must first be obtained from the City of Carpinteria and ABC.

    Plan Requirements/Timing: Prior to initiating alcohol service, applicant and/or tenant shall apply to the City (and/or respective State agency) for all necessary licenses and approvals. **Monitoring:** CDD staff shall ensure all necessary licenses/permits are obtained prior to initiating any of the enumerated ancillary uses.

57. **Food Dispenser Containers.** In the event the approved hotel includes any kind of food service, all food and beverage service shall comply with the City's ban on food dispenser containers made entirely or in part from non-recyclable plastic

(including but not limited to expanded polystyrene (eps) containers), including the annual self-reporting requirements as outlined in CMC §8.50, and the City's ban on single use plastic and paper bags as outlined in CMC §8.51.

58. **Building Permits Required.** Before using any land or structure, or commencing any work pertaining to the erection, moving, alteration, enlarging, or rebuilding of any building, structure, or improvement, the applicant shall obtain a Building Permit. These Permits are required by ordinance and are necessary to ensure implementation of the conditions required by the Planning Commission. Before any Permits will be issued by the Community Development Department, the application must obtain written clearance from all departments 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.

59. **Project Conditions.** All applicable conditions of approval and mitigation measures shall be printed in their entirety on applicable pages of construction or building plans submitted to CDD. The approved set of plans shall be retained at the construction site for review by the Building Inspector during the course of construction.

60. **Signed Project Conditions.** Prior to issuance of a Building Permit, the applicant shall provide a signed copy of the Conditions or Approval on a form acceptable to Community Development. Such form may be obtained from the CDD office.

61. **Payment of Fees**. Prior to issuance of a Building Permit, the applicant shall pay all applicable CDD permit processing fees in full. Any outstanding plan check or inspection fees incurred during construction shall be paid in full prior to Occupancy clearance.

62. **School Fees.** The applicant shall pay the statutory school fees in effect at the time of issuance of Building Permits to the Carpinteria Unified School District. **Plan Requirements and Timing:** The applicant shall submit final square footage calculations and the required fee payment to the School District prior to issuance of Building Permits. **Monitoring:** CDD shall ensure payment is made prior to issuance of a Building Permit.

63. **Development Impact Fees.** In accordance with Chapter 15.80 of the Carpinteria Municipal Code, the applicant shall pay Development Impact Fees to the City prior to Building Permit issuance. The amount of the fees will be determined at the time permits are issued.

64. **Landscape Bond.** Prior to the issuance of any Building Permits, the applicant shall post a landscape security bond of $500.00 and comply with the following requirements:

    a. All landscaping and irrigation plans shall be prepared by a State licensed landscape architect or similar professional as determined appropriate by CDD.

b. The landscaping shall be maintained in good condition for the life of the project. After landscaping has become established at three years and found to be in good condition, the security will be released.
c. Landscaping shall be drought resistant, low water species.
d. Where feasible, locally adapted native plants shall be required.
e. Prior to Occupancy Clearance, all landscaping and planting shall be installed; and
f. Specimen trees shall be appropriate to the site and shall be maintained in good condition so as to attain a full and healthy mature appearance.

65. **Change of Use.** Any change of use in the proposed buildings or structures shall be subject to environmental analysis and appropriate review by the City including Building Code compliance.

66. **Precedence of Conditions of Approval**. The conditions of this approval supersede all conflicting notations, specifications, dimensions, and the like which may be shown on submitted plans.

67. **Damage to Public Property.** Any and all damage or injury to public property resulting from this development, including without limitation, City streets, shall be corrected or result in being repaired and restored to its original or better condition.

68. **Project Compliance.** 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.

69. **Standards.** 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.

70. **Project Revisions.** Any minor changes may be approved by the City Manager and/or Community Development Director. Any major changes will require the filing of a modification application to be considered by the Planning Commission.

71. **Terms of Building Permit Issuance.** No building permits 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 a building permit or prior to occupancy when allowed by the Community Development Director.

72. **Violation of Conditions of Approval.** If, at any time, the City or Planning Commission determines that there has been, or may be, a violation of the findings or conditions of this Development Plan and Coastal Development Plan, 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, modify conditions, 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. The applicant shall reimburse the City for all costs associated with gaining compliance with the original conditions of approval.

73. **Legal Challenge.** In the event that any Condition of Approval is challenged by Applicant/Owner/Permittee in an action filed in a court of law or threatened to be filed therein which action is brought within the time period provided by law, this approval shall be suspended pending dismissal of such action, the expiration of the limitation period applicable to such action, or final resolution of such action. If any Condition of Approval is invalidated by a court of law, the entire project shall be reviewed by the City and substitute Conditions of Approval may be imposed.

74. **Indemnification and Waiver of Liability.** The owner/applicant ("Owner") hereby agrees to defend, indemnify and hold harmless the City, its officers, employees, agents, consultants and independent contractors ("City's Agents") from any claim, action or proceeding ("Claims") against the City and the City's Agents, whether brought by the Owner or any other person or entity, to attack, review, set aside, void or annul, in whole or in part, the City's approval of the Development Plan and Coastal Development Permit (the "Project"), or any condition attached thereto, or any proceedings, acts or determinations taken, done or made prior to the approval that were part of the approval process. Owner further agrees to indemnify and hold harmless the City and the City's Agents from any award of attorneys' fees or court costs made in connection with any Claim. Owner further agrees to pay any and all City costs, permits, attorneys' fees, engineering fees, license fees and taxes arising out of or concerning the Project, whether incurred prior to or subsequent to the date of approval and that the City's costs shall be reimbursed prior to this approval becoming valid. These commitments of defense and indemnification are material conditions of the approval of the Project. Nothing contained in this condition shall prevent the City or the City's Agents from independently defending any Claim. If the City or the City's Agents decide to independently defend a Claim, the City and the City's Agents shall bear their own attorneys' fees, expenses and costs of that independent defense.

SPECIAL DISTRICT CONDITION LETTERS

75. **Departmental & Special District Conditions.** Compliance with the attached Departmental and District letters is required as follows:

    a. City of Carpinteria Public Works Department dated _____
    b. Carpinteria–Summerland Fire Protection District dated July 25, 2019
    c. Carpinteria Sanitary District letter dated August 19, 2019
    d. Carpinteria Valley Water District letter dated August 20, 2019
    e. Santa Barbara County Air Pollution Control District dated November 23, 2022

Written authorization to proceed and consent to conditions of approval by the legal owner of the property shall be provided to the City prior to building permit issuance.

Approved by the Planning Commission on April 3, 2023

I HAVE READ AND UNDERSTOOD, AND I WILL COMPLY WITH ALL ABOVE STATED CONDITIONS OF THIS PERMIT

_____

Applicant/Property Owner Date

CARPINTERIA~SUMMERLAND
FIRE PROTECTION DISTRICT

July 25, 2019

Nick Bobroff
Senior Planner
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, CA 93013

RE:FPC-P Project:18-1949 / New Hotel
APN:004-017-022 / 4110 Via Real

Dear Nick Bobroff:

The following items are necessary for fire protection:

1. Address numbers must be posted at the driveway and on the buildings such that they are visible from the street. Numbers shall be a minimum 4 inches high on a contrasting background.

2. Per Carpinteria-Summerland Fire District Ordinance No. 2019-01 pertaining to fees and service charges, a permit application fee is assessed on all plan reviews.

3. ALL REQUIRED ACCESS WAYS (public or private) shall be installed and made serviceable prior to the erection of combustible materials.

4. FIRE HYDRANT capable of supplying the required fire flow for fire protection shall be provided for all buildings or portions of buildings which have been or are hereafter constructed within this project.

5. The hydrant(s) will be an onsite hydrant. Contact the Carpinteria Valley Water District. Submit one set of plans to CSFD showing the location, size and type of hydrants, valves, main lines and lateral lines for approval.

6. Hydrant submittal to Fire Department shall be submitted to fire department and installed prior to erection of combustibles.

7. A Fire District Approved KEY ENTRY SYSTEM shall be installed in an accessible location.

8. PRIOR TO ROUGH FRAMING SIGN OFF, all new buildings and structures shall be protected by an approved automatic fire sprinkler system.

9. Multi-station fire alarm devices shall be provided such that all occupants will be notified in the event of a fire. State Fire Marshal approved interconnected smoke detectors must be installed in accordance with the California Fire Code.

10. EXIT SIGNS. Illuminated exit signs and Emergency Exit lighting shall be provided in accordance with the provisions of the California Fire Code.

11. Roof Access shall be provided in accordance with the provisions of the Carpinteria City Municipal Code

12. Any future changes, including further division, intensification of use, or increase in hazard classification, may require additional conditions in order to comply with applicable fire district development standards.

If you need additional information on Fire District conditions, please contact me at 805-566-0483.

Sincerely,

Todd Jenkins
Fire Inspector I / Plans Examiner / Fire Prevention Bureau
cc: Applicant

CARPINTERIA
Sanitary District

5300 Sixth Street
Carpinteria, CA 93013
Phone (805) 684-7214 ▪ Fax (805) 684-7213

August 19, 2019

Mr. Nick Bobroff
City of Carpinteria
5775 Carpinteria Avenue
Carpinteria, California 93013

Subject: 16-1822-DP/CDP: Via Real Hotel
4110 Via Real (APN 004-017-022)

Dear Mr. Bobroff:

Thank you for the opportunity to provide comments on the subject project. The District offers the following comments to provide the applicant with direction and information related to the provision of sanitary sewer service for the proposed development. The project is to remove the existing Church and construct a new 72-room hotel.

The site does not have an adequate sewer line fronting the property on Via Real. The applicant is proposing to construct a private sewer lift station, construct a private 4-inch sewer force main and connect to a new sewer manhole in Trieste Lane. A new gravity sewer main would be extended north in Trieste Lane approximately 285 feet and connect to the existing public sewer main in Venice Lane. The District has the following comments.

1. All costs and expenses associated with the installation of sewer facilities will be the sole responsibility of the developer. The developer will be required to enter into an agreement with the District that guarantees the construction of the necessary infrastructure.
2. A Performance Bond shall be in place prior to the issuance of a sewer construction permit. The bond shall be in the amount of 100% of the approved Engineer's estimate to construct the sewer portion of the project. The bond shall guarantee the faithful performance of the required sewer service improvements per District standards and specifications. A letter of credit may be used in lieu of a bond as a form of surety at the discretion of the District General Manager. Once the work is completed and accepted, the surety will be released. A Maintenance Bond will be required for a period of one year following project acceptance.
3. All sanitary sewer facilities shall be designed and constructed in accordance with the current version of the District's Design Standards and Specifications.
4. The proposed plans show a food preparation area within the hotel. The food preparation area will be required to have a grease-management device sized in accordance with the 2015 unified plumbing code (UPC) and approved by the District. The grease-management device should be located where it is accessible and easily maintained and serviced.

5. The Preliminary Water and Sewer Plans show a 4-inch sewer lateral extended from the sewer lift station to provide drainage at the trash storage area. District Ordinance No. 2 expressly prohibits the discharge of surface drainage, rainwater, stormwater, seepage, or unpolluted industrial process waters to enter any sanitary sewer by any devise or method whatsoever. The sewer lateral to provide drainage at the trash storage area is not allowed.

6. Development Impact Fees (DIF) for the proposed project will be required. The existing church has existing sewer connections to the District and the project DIF fees will be credited for that connection. The project will receive a DIF credit of **$5677.28** for the existing 5,678 square foot church facility. The proposed 72-room has an estimated DIF fee of **$145,284.00**. The fees will be determined when the District reviews the finalized construction plans.

7. District sewer service charges (SSCs) are collected through the County of Santa Barbara property tax rolls on an annual basis. Prior to obtaining a Certificate of Occupancy, the applicant shall pay District applicable SSCs due for the period between building occupancy and the following June 30th for each new EDU being served. The estimated SSC for the proposed 72-room Hotel is **$22,313.53**.

Thank you again for the opportunity to provide feedback on this project. Please do not hesitate to contact me if you have any questions or need additional information regarding sewer service requirements. I can be reached at (805) 684-7214 extension 13 or by email at lancel@carpsan.com

Sincerely,
CARPINTERIA SANITARY DISTRICT

Lance Lawhon
Engineering Technician

Carpinteria Valley Water District

1301 Santa Ynez Avenue • Carpinteria, CA 93013
Phone (805) 684-2816

BOARD OF DIRECTORS

Polly Holcombe
President
Matthew Roberts
Vice President
Shirley L. Johnson
Alonzo Orozco
Case Van Wingerden

GENERAL MANAGER

Robert McDonald, P.E. MPA

August 20, 2019

City of Carpinteria
Attn: Nick Bobroff
5775 Carpinteria Ave
Carpinteria, CA 93013

SUBJECT: 4110 VIA REAL, APN NO. 004-017-022, ACCOUNT NO. 09-092545-02, VIA REAL HOTEL COMMENTS AND CONDITIONS

Dear Nick,
Please be advised, this parcel is within the jurisdiction of Carpinteria Valley Water District and therefore is entitled to District water service in accordance with District Rules and Regulations. Currently the District is in a Stage I Drought Emergency; for more information on Ordinance 15-2, please visit the District website www.cvwd.net.

This letter is good for one year from the date of the letter.

The subject parcel is currently served by a 2-inch water meter and service on the southeast corner of the property. After reviewing the submitted materials, dated July 2019, the District has the following conditions:

- Renderings and irrigation plans show trees and shrubbery on/near water lines and appurtenances. Trees and shrubbery shall be a minimum of 10' (beginning at the canopy) away from water assets.
- Irrigation meter and backflow device are arbitrarily shown within the driveway apron. Actual location shall be shown on the irrigation and utility plan.
- Backflow and other details shall reference CVWD standard drawings available at www.cvwd.net
- The hydrant on the southeast end of the property will likely need to be relocated due to revised sidewalk.
- Sheet C12 is referenced but not provided.
- Sheet C5 shows the backflow device at the entrance, a potential visual impact.
- Meter on Trieste Lane shall be 3/4"
- Provide details for connecting to the existing system.
- Provide plan and profile drawings for the proposed water line.
- Shorten hydrant lateral on north end of the site or install irrigation at this location to prevent stagnation.
- Provide fire sprinkler, potable water, and irrigation demand calculations.

Following the submission of complete plan and profile drawings the District requests an additional review.

Should you have any questions please do not hesitate to contact me at 805-684-2816 ext 103.

Regards,
Carpinteria Valley Water District



Tim Beaman, P.E.
Associate Engineer

apcd air pollution control district
SANTA BARBARA COUNTY

November 23, 2022

Nick Bobroff
City of Carpinteria
Community Development Department
5775 Carpinteria Avenue
Carpinteria, CA 93013

Sent Via Email: nickb@carpinteriaca.gov

Re: Santa Barbara County Air Pollution Control District Suggested Conditions for Via Real Hotel, 16-1822-DP/CDP

Dear Nick Bobroff:

The Santa Barbara County Air Pollution Control District (District) has reviewed the referenced project, which consists of the construction and operation of a 72-room hotel on a 2.6-acre site. An existing single story, 5,678 square-foot (SF) church, children's play area, parking lot, vegetable garden, and several small storage sheds would all be demolished and removed to accommodate the project. The new two-story hotel would have a building footprint of 22,460 SF and a total square footage of 44,191 SF. The maximum height of the new hotel would vary from 21 feet 10 inches to 25 feet, measured from the new finished grade to the top of the roof parapets. In addition to 72 guestrooms, the hotel would include a fitness center, business center, breakfast area, meeting room, outdoor pool, outdoor garden patio, and a 77-space parking lot. The hotel would also include typical support services (i.e., main lobby, admin/offices, employee breakroom, kitchen, laundry/storage, etc.). The project requires earthwork and grading (estimated at 4,700 cubic yards [CY] of cut; 2,900 CY of fill; net export of 800 CY of cut) in order to establish a level building pad, meet flood zone requirements, and address site drainage needs. Construction is expected to take approximately 18 months. The subject property, a 2.6-acre parcel zoned CDP/R and identified in the Assessor Parcel Map Book as APN 004-017-022, is located at 4110 Via Real in the City of Carpinteria.

The proposed project is subject to the following **regulatory requirements** that should be included as conditions of approval in the applicable land use permit:

1. Prior to building permit issuance, **District Authority to Construct permits** must be obtained for all equipment that requires a District permit. Proof of receipt of the required District permits shall be submitted by the applicant to planning staff. District Authority to Construct permits are required for diesel engines rated at 50 brake horsepower and greater (e.g., firewater pumps and emergency standby generators) and boilers/large water heaters whose combined heat input rating exceeds 2.0 million British thermal units per hour (Btu/hr). *Advisories:* (1) In the case of a diesel-fired emergency generator, an equipment-specific Health Risk Assessment may be required as part of District permit issuance. The applicant should refer to the District's website at www.ourair.org/dice-atcm for more information on diesel engine permitting. (2) 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. All portable diesel-fired construction engines rated at 50 brake horsepower 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.

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. Natural gas-fired fan-type central furnaces with a rated heat input capacity of less than 175,000 British thermal units per hour (Btu/hr) and water heaters rated below 75,000 Btu/hr must comply with the emission limits and certification requirements of District Rule 352. Please see www.ourair.org/wp-content/uploads/rule352.pdf for more information.

7. Boilers, water heaters, and process heaters rated between 75,000 and 2.0 million British thermal units per hour (Btu/hr) must comply with the emission limits and certification requirements of District Rule 360. Note: Units fired on fuel(s) other than natural gas still need to be certified under Rule 360. Please see www.ourair.org/wp-content/uploads/rule360.pdf for more information.

8. Boilers, water heaters, and process heaters rated between 2 million to 5 million British thermal units per hour (Btu/hr) must comply with the emission limits and certification requirements of District Rule 361. Please see www.ourair.org/wp-content/uploads/Rule361.pdf for more information.

9. The applicant is required to complete and submit an **Asbestos Demolition/Renovation Notification** (District Form ENF-28, which can be downloaded at www.ourair.org/compliance-forms) for each regulated structure to be demolished or renovated. Demolition notifications are required regardless of whether asbestos is present or not. The completed notification should be presented or mailed to the District with a minimum of 10 working days advance notice prior to disturbing asbestos in a renovation or starting work on a demolition. For additional information on asbestos notification requirements, please see www.ourair.org/asbestos/ or contact the District's Compliance Division at (805) 961-8800.

In addition, the District recommends that the following **best practices** be considered for inclusion as conditions of approval, in the interest of reducing emissions of criteria air pollutants, greenhouse gases, and dust:

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 should 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.

3. At a minimum, prior to occupancy, any feasible greenhouse gas reduction measures from the following sector-based list should be applied to the project:
   - Energy use (energy efficiency, low carbon fuels, renewable energy)
   - Water conservation (improved practices and equipment, landscaping)
   - Waste reduction (material re-use/recycling, composting, waste diversion/minimization)
   - Architectural features (green building practices, cool roofs)
   - Transportation (reduce vehicle miles traveled through employee commute trip reduction programs, such as ride-sharing programs and alternative transportation options, such as public transit, local shuttles, park-and-ride lots, etc., pedestrian- and bicycle-friendly features such as sidewalks and bike racks)
   - Electric Vehicle Infrastructure (EV charger installation, installation of pre-wiring for future EV chargers)
   - For additional information on greenhouse gas mitigation and potential strategies, see www.ourair.org/ghgmitigation-sbc.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 979-8336 or via email at hamiltont@sbcapcd.org.

Sincerely,

Ted Hamilton-Rolle

Ted Hamilton-Rolle,
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 should be 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, sprinkler systems, or dust suppressants in all areas of vehicle movement 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. When using water, this includes wetting down areas as needed but at least once 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.

Attachment B

November 21, 2019 ARB Meeting Minutes

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

2) Applicant: Nikhil Kamat, NKlosures, Inc. for RAM Hotels
Project: 16-1822-DP/CDP
Planner: Nick Bobroff
Project Location: 4110 Via Real
Zoning: Commercial Planned Development with a Residential Overlay (CPD/R)

Request of Nikhil Kamat, NKlosures, Inc, agent/architect for RAM Hotels, to consider Project 16-1822-DP/CDP for a continued preliminary review of a request to demolish the existing church and all associated improvements and construct a new two-story 72-guestroom hotel. The new hotel would have a total floor area of 44,191 square feet and reach a maximum height of 25 feet from finished grade. The project would include a new 77-space parking lot, site landscaping, creek buffer restoration component, and stormwater/drainage and frontage improvements. The property is a 2.62-acre parcel zoned Commercial Planned Development with a Residential Overlay (CPD/R) and shown as APN 004-017-022 addressed as 4110 Via Real.

Staff presented the project, described the revisions made since the ARB's last review of the project, and shared the various options developed by the applicant for responding to the past comments about the façade treatments.

The project applicant explained that their intent was to stay as close to the previously-approved 2017 design as possible while still responding to ARB suggestions for further refinements. He noted that the irrigation plans had been updated to address past ARB comments.

Public Comment:
Steve Bunting asked whether any of the proposed creek buffer landscaping would encroach into his private access easement. The applicant responded that all landscaping would be located outside of the easement.

Sue Skenderian asked whether there is a plan for the total number of hotels in Carpinteria. Staff explained that there is not such a plan, and that hotel developments are typically subject to discretionary permit actions.

Boardmember Discussion:
Boardmember Cox suggested use of ficus repens (sticky vine) as a possible solution for adding landscaping along the east property line wall where this is not much room available for plantings to soften the wall. He also asked whether dogs were going to be allowed at the hotel, and if so, if any further consideration had been given to providing a suitable outdoor pet area. The applicant explained that they had not determined whether pets would be allowed, but if so, pet owners would be able to walk the trail within the creek buffer.

Boardmember Reginato was in support of the revisions to the east-facing façade within the pool enclosure. He also expressed support for Option "2," noting it has good cohesion and gives the building a "muted" feel.

Boardmember Johnson agreed with Boardmember Reginato's comments and also preferred the Option "2" color scheme. He suggested the tips could be left on the top of the wrought iron fence pickets along the perimeter walls if it would help with security concerns.

Boardmember Stein was also in support of the Option "2" colors. He asked about project lighting; the applicant explained a night-sky compliant lighting plan had previously been provided to and reviewed by the Board, and that it has not changed other than to reflect the updated site plan layout.

In response to a question about replacing the row of potted plants along the eastern property line wall with the ficus repens, the ARB commented that some of the potted plants could be eliminated but that some should be retained to break up the façade and add further interest.

ACTION: Motion by Boardmember Johnson, seconded by Boardmember Reginato to recommend revised preliminary approval to the Planning Commission with their comments attached.

VOTE: 4-0

3) Applicant: Don Gragg for Nell & John Able
Project: 18-1909-ARB/CDP
Planner: Nick Bobroff
Project Location: 477 Concha Loma Drive
Zoning: Single Family Residential (20-R-1)

Request of Don Gragg, agent for Nell and John Able, to consider Project 18-1909-ARB/CDP for preliminary review of a proposal for a remodel and additions of 1,527 square feet to the ground floor and basement levels of an existing house; a 117 square foot addition to an attached garage; construction of a pool; and construction of a detached 698 square foot secondary dwelling unit. The property is a 30,154 square foot parcel zoned Single Family Residential (20-R-1) and shown as APN 003-370-008, addressed at 477 Concha Loma Drive.

Staff presented the project, describing the background (including the secondary dwelling unit and Reasonable Accommodation request). Staff explained that with the exception of receiving input from the ARB on revisions in response to past ARB comments, staff had no objections or concerns with the project.

Don Gragg, project agent, explained that he revised the secondary dwelling unit to utilize a butterfly roof that would better relate to the design of the primary residence. He also explained that he simplified the design of the front entry tower feature on the primary residence. Finally, in response to a question from the Board, he explained that the basement-level storage room could be used as a garage, if needed, but that it would still require granting of an exception from the City's limitation on one shared driveway for the primary residence and secondary dwelling unit.

Public Comment:
Jason Lusk complimented the design, describing it as being respectful of the neighborhood. He expressed his support for the project.

Susan Mailheau asked about the project's proximity to Carpinteria Creek and whether the owner intends to remove any of mature eucalyptus located at the rear of the property as part of the project. The applicant responded that no plans for tree removal are included in the project at this time, and staff explained that the property is separated from the creek by the Salzgeber Meadow property.

Attachment C

Proposed Final Mitigated Negative Declaration (MND)

Via Real Hotel, 4110 Via Real
Project 16-1822-DP/CDP
April 3, 2023 Planning Commission Hearing

PROPOSED FINAL
MITIGATED NEGATIVE DECLARATION

VIA REAL HOTEL

4110 Via Real, Carpinteria, CA 93013

Development Plan / Coastal Development Permit

Project 16-1822-DP/CDP

December 2022

Applicant:

Kush Nathu, RAM Hotels
PO Box 52098
Amarillo, TX 79159
(806) 683-0163 / kush@ramhotels.net

Contact:

Nick Bobroff, Principal Planner
Community Development Department
City of Carpinteria
805-755-4407 / nickb@carpinteriaca.gov

CITY OF CARPINTERIA
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:**
Via Real Hotel, Project 16-1822-DP/CDP

2. **Lead Agency:**
City of Carpinteria, Community Development Department
5775 Carpinteria Avenue, Carpinteria, CA 93013

3. **Contact Person and Phone:**
Nick Bobroff, Principal Planner
Phone: (805) 755-4407
Email: nickb@ci.carpinteria.ca.us

4. **Project Location:**
4110 Via Real, Carpinteria, CA 93013
APN: 004-017-022

5. **Project Sponsor Name and Address:**
RAM Hotels
21 Prestwick Lane, Amarillo, TX 79124

6. **General Plan Designation:**
General Commercial (GC)

7. **Zoning:**
Commercial Planned Development with a Residential Overlay (CPD/R)

8. **Description of Project:**
RAM Hotels proposes to construct and operate a 72-guestroom "Fairfield Inn and Suites by Marriott" hotel on a 2.6-acre site. An existing single story, 5,678 square foot church building, children's play area, parking lot, vegetable garden and several small storage sheds would all be demolished and removed to accommodate the project. The new two-story hotel would have a building footprint of 22,460 square feet and a total square footage of 44,191 square feet. The maximum height of the new hotel would vary from 21 feet 10 inches to 25 feet, measured from the new finished grade to the top of the roof parapets.

In addition to 72 guestrooms, the hotel would include a fitness center, business center, breakfast area, meeting room, outdoor pool, and outdoor garden patio. The hotel would also include typical support services (i.e., main lobby, admin/offices, employee breakroom, kitchen, laundry/storage, etc.). Twelve employees would be required to operate the hotel during every eight-hour shift. The hotel will operate with twelve employees daily working the following 3 shifts: Morning from 7:00 AM to 3:00 PM; Evening 3:00 PM to 11:00 PM; Overnight 11:00 PM to 7:00 AM

The project would be served by one driveway accessed from Via Real at the southeastern corner of the property. A 77-space surface parking lot and two loading zones would serve

the proposed hotel and be located around the side and rear perimeter of the project site. New site landscaping, lighting and walkways are proposed throughout, including around the building perimeter and around the parking lot. A new masonry wall would be constructed along the side and rear property lines. In some cases, the new wall would be located on top of a retaining wall to account for grade differences between adjoining properties. A separate paved private driveway easement located along the west (side) property line is proposed to remain "as is," and will continue to serve several properties located to the north (behind) the subject property.

The project requires earthwork and grading (estimated at 4,700 cubic yards of cut; 2,900 cubic yards of fill; net export of 1,800 cubic yards of cut) in order to establish a level building pad, meet flood zone requirements and address site drainage needs. The finished floor height of the proposed hotel would be, in places, up to approximately two feet six inches above existing grade. Onsite stormwater improvements included in the project description include use of pervious concrete paving for parking areas, use of landscaped retention basins around the perimeter of the hotel building to capture roof runoff, and the expansion and improvements of a large, landscaped stormwater treatment and detention basin along the project's Via Real frontage. Other surface and underground storm drain improvements are required to convey onsite stormwater flows to the proposed treatment and detention basin.

An existing drainage feature that runs north-to-south along the project site's western edge would be protected in place and enhanced as riparian habitat. A 50-foot protective creek buffer would be established and restored with appropriate riparian and upland native plantings. A permeable walking trail and passive seating area is proposed within the creek buffer area. A separate area of riparian woodland located along the northern (rear) property line, approximately at the middle of the site would be protected in place.

Utility improvements required as part of the project include installation of a new eight-inch water line underneath the eastern hotel drive aisle to connect the existing main line in Via Real to the water line north of the project site in the Trieste Lane right-of-way. New water meters and connections for the building, irrigation system and fire protection system would tie the proposed hotel into the new water line. A new fire hydrant would be constructed toward the rear northeast corner of the hotel; the existing hydrant at the project's southeast corner would remain. A new eight-inch sewer line would run through the eastern drive aisle toward the northeast corner of the property and continue on a northerly route up Trieste Lane, connecting to an existing main line on Venice Lane. A new underground pump station would be placed at the northeast corner of the hotel's parking lot, underneath a parking space. An existing sewer pump house and force main would be removed during site demolition and prep.

Proposed offsite and frontage improvements include re-constructing the driveway curb cut and apron at the project entrance, new street lane striping to allow for left-hand turn movements into- and out of the project site and restriping the bicycle lane across the project frontage. Proposed plans for the project are included as Attachment 2.

Construction of the project is anticipated to take approximately 18 months, comprised of the following phases: (1) demolition and clearing- eight to 10 weeks; (2) Grading and earthwork- two weeks; (3) foundation construction- two weeks; (4) underground utility installation- three weeks; (5) framing- 10 to 12 weeks; (6) exterior finishes- eight to 10

weeks; (7) Interior insulation, sheetrock, etc.- eight to 10 weeks; (8) finish hardscape work- one week; (9) interior finish work- 10 to 12 weeks; (10) parking lot finishing- 10 weeks; (11) landscape installation- six weeks; (12) pool construction- six to eight weeks; and (13) installation of furniture, fixtures and interior equipment- eight weeks.

9. **Surrounding Land Uses and Setting:**
The project site is located in an urban area toward the west end of the City of Carpinteria, north of U.S. Highway 101 (U.S. 101) on Via Real (see Vicinity Map, Attachment 1). The 2.6-acre (113,839 square feet) site is presently improved with a single story 5,678 square foot church building, a children's play area, a surface parking lot, and vegetable garden. Several small storage buildings are located toward the rear of the property adjacent to the vegetable garden area. The site sits slightly above Via Real in elevation and slopes gently toward the street.

Several access, utility and drainage easements encumber the property: A 30-foot-wide easement for a water line runs along the property's east (side) property line; a three-foot wide easement occupies a portion of the same strip of land for other public utilities. Along the west (side) property line, a 30-foot-wide strip of land is encumbered by a (20-foot wide) access easement for the adjacent properties to the north behind the subject property, and a 10-foot-wide easement for drainage purposes (to accommodate historic offsite drainage from northerly properties and convey it to the existing outlet and culvert at Via Real). The drainage easement is occupied by the existing vegetated drainage feature that runs north to south through the property and expands to also encompass a 50-foot by 130-foot area at the southwest corner of the property around the existing concrete headwall and drainage outlet. A 10-foot-wide sewer easement traverses the southwest corner of the property as well.

The general project area includes a mix of residential and commercial developments, including several nearby motels (Motel 6; Sandyland Reef Motel), limited retail/commercial/office uses, and several larger multifamily residential developments. The project site is bordered to the north by land zoned for agriculture and currently in open field agricultural production within unincorporated Santa Barbara County. To the northeast are single family residences located on Trieste Lane. Immediately adjacent to the project site to the east is the 37-unit "Pueblo del Estero" apartment complex (4140 Via Real). On the west, the project site is bordered by the recently completed 43-unit "Casas de las Flores" affordable housing apartments. To the south of the project site is Via Real and beyond U.S. Highway 101.

10. **Other Public Agencies Whose Approval is Required:**
- Carpinteria Sanitary District
- Carpinteria-Summerland Fire Protection District
- Carpinteria Valley Water District
- California Department of Fish and Wildlife
- Central Coast Regional Water Quality Control Board

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

The City of Carpinteria provided notification to Chair, Julie Tumamait-Stenslie of the Barbareño / Ventureño Band of Mission Indians, pursuant to AB52 requirements. Letters in support of AB52 consultation were also sent by the City of Carpinteria on July 14, 2020 to various applicable Tribal representatives. No comments indicating concerns regarding potential Tribal Cultural resources were received for the proposed project. Mitigation measures are proposed to reduce potential significant impacts to Tribal Cultural Resources to less than significant.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant" as indicated by the checklist on the following pages.

X	Aesthetics		Mineral Resources
X	Agriculture & Forestry Resources	X	Noise
	Air Quality		Population / Housing
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Energy		Transportation
X	Geology / Soils	X	Tribal Cultural Resources
	Greenhouse Gas Emissions		Utilities / Service Systems
	Hazards / Hazardous Materials		Wildfire
X	Hydrology / Water Quality	X	Mandatory Findings of Significance
X	Land Use / Planning		

DETERMINATION

On the basis of this initial study:

	I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Nick Bobroff, Principal Planner
City of Carpinteria

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) Negative Declaration: "Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant" to "Less Than Significant." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures as described in (5) below may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration (§15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

1. AESTHETICS Would the project:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?			X	
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 a publically accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		X		
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?		X		

Existing Environmental Setting

The project site is located in an urbanized area toward the west end of the City of Carpinteria, north of U.S. Highway 101 (U.S. 101) on Via Real. The 2.6-acre (113,839 square feet) site is presently improved with a single story 5,678 square foot church building, a children's play area, a surface parking lot, and vegetable garden. Several small storage buildings are located toward the rear of the property adjacent to the vegetable garden area. The site sits slightly above Via Real in elevation and slopes gently toward the street.

The project site is landscaped predominantly with lawn area with few trees clustered around the building and along the east (side) property line. Because of the minimal existing site landscaping (outside of groundcover), the church building's significant setback from Via Real (approximately 85 feet), and the building's low, single-story height, views of the Santa Ynez Mountains from Via Real and U.S. Highway 101 over the site are generally available. The project site is somewhat obscured from view from U.S. Highway 101 by existing vegetation planted along the shoulder of the northbound U.S. Highway 101 right-of-way. Views from the project site to the ocean are not available due to the generally flat topography of the area and intervening vegetation and urban development.

The general project area includes a mix of residential and commercial developments, including several nearby motels (Motel 6; Sandyland Reef Motel), limited retail/commercial/office uses, and several larger multifamily residential developments. The project site is bordered to the north by land within unincorporated Santa Barbara County zoned for agriculture and currently in open field agricultural production. To the northeast are single family residences located on Trieste Lane. Immediately adjacent to the project site on the east side is the 37-unit "Pueblo del Estero" two-story apartment complex (4140 Via Real). On the west, the project site is bordered by the recently completed 43-unit two-story "Casas de las Flores" affordable housing apartments. To the south of the project site is Via Real and beyond U.S. Highway 101.

Thresholds of Significance

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers will have varying opinions and reactions to changes in a viewshed or the appearance of new buildings and structures. This evaluation compares the existing visual characteristics of the project study area against the potential changes in visual characteristics that could result from implementation of the proposed project.

The City of Carpinteria has adopted *Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended* (1997), which provide criteria for determining the potential significance of visual impacts. Key factors in assessing the aesthetic resources of a project site include the physical attributes of the site, its relative visibility, and its relative uniqueness. Four types of areas are especially important: coastal and mountain views, the urban fringe, and travel corridors. Based on criteria contained in the City's *Guidelines,* the proposed project would result in a significant visual impact if it would result in one or more of the following conditions:

Views

Projects that would impair public views from designated open space (public easements and right-of-way), roads or parks to significant visual landmarks or scenic vistas (Pacific Ocean, downtown skyline, mountains, waterways). To meet this significance threshold, one or more of the following conditions must apply:

- *The project would substantially impair a view through a designated public view corridor as shown in an adopted community plan, the General Plan, or the Coastal Land Use Plan. Minor view blockages would not be considered to meet this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view.*
- *The project would cause "substantial" view impairment of a public resource (such as the ocean) that is considered significant by the applicable community plan.*
- *The project exceeds the allowed height or bulk regulations, and this excess caused unnecessary view impairment.*
- *The project would have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view impairment (cumulative effects are usually considered significant for a community plan analysis, but not necessarily for individual projects). View impairment would be considered "extensive" when the overall scenic quality of a resource is changed; for example, from an essentially natural view to a largely man-made appearance.*

Neighborhood Character/Architecture.

Projects that severely contrast with the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply:

- *The project exceeds the allowed height or bulk regulations and existing patterns of development in the surrounding area by a significant margin.*
- *The project would have an architectural style or use building materials in stark contrast to adjacent development, where the adjacent development follows a single or common architectural theme.*

- *The project would result in the physical loss or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or Local Coastal Program.*
- *The project is located in a highly visible area (e.g., adjacent to an interstate highway) and would strongly contrast with the surrounding environment through excessive bulk, signage, or architectural projections.*
- *The project would have a cumulative effect by opening up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multi-family).*

For this analysis, changes to existing visual conditions are not considered significant if the project-related changes would be subordinate to the existing visual environment. Only views available from public viewing locations, such as roadways, are evaluated against the above significance thresholds.

Project Specific Impacts:

a) *Would the project have a substantial adverse effect on a scenic vista?*

Less Than Significant Impact

A significant impact would occur if the project would have a substantial adverse effect on a scenic vista. The project site is adjacent to Via Real, approximately 150 feet north of the U.S. Highway 101 center median. Persons traveling in either direction on Via Real or U.S. Highway 101 are provided with intermittent views of the Santa Ynez Mountains and foothills north of the project site through, and between/over, existing vegetation and development along the highway shoulder and along Via Real. The project area is not designated as a public view corridor, nor is this particular view of the Santa Ynez Mountains deemed significant in the City's General Plan/Coastal Land Use Plan, although public views of the mountains and ocean are protected under the Coastal Act.

At a maximum height of 25 feet from new finished grade, and a finished floor height approximately three feet above the existing sidewalk elevation along the project's Via Real frontage, the proposed two-story structure would be below the City's 30-foot maximum height allowed per the Zoning Code. As the proposed building height and finished floor elevation are comparable to other nearby development, the proposed hotel building would not strongly contrast with the surrounding environment in terms of overall building height. The protection of the existing driveway easement and drainage feature along the west side of the property, coupled with the provided 50-foot creek buffer would preserve an approximately 100-foot-wide open corridor between the proposed hotel and its western (side) property line which would preserve a view corridor to the mountains from Via Real and U.S. Highway 101. Existing vegetation along the shoulder of U.S. Highway 101 and/or replacement landscaping along the shoulder of U.S. Highway 101 as part of the "South Coast Highway 101 HOV Lanes" project will continue to partially obscure views to the mountains from the highway and would also obscure views of the proposed hotel building itself.

The proposed project would incrementally contribute toward further obstruction of the public viewshed from Via Real and U.S. Highway 101 to the mountains, however the resultant view impacts from this project do not exceed any of the prescribed thresholds for significance. Therefore, the impact to scenic vistas would be less than significant.

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?*

Less Than Significant Impact

Currently there are no officially designated scenic highways in the City of Carpinteria or within the project area located within the County of Santa Barbara. 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 and U.S. Highway 101 as eligible for designation as state scenic highways (City of Carpinteria 2003). The County of Santa Barbara Scenic Highway Element (2009) indicates the entire length of US Highway 101 within Santa Barbara County and State Highway 150 from its junction with US Highway 101 east into Ventura County as eligible scenic highways.

Motorists traveling along US Highway 101 are afforded intermittent views of the Santa Ynez Mountains around/through vegetation along the highway shoulder, and over/around existing development adjacent to the highway. The proposed hotel would also be intermittently visible to highway travelers in both directions. Views of the proposed hotel from US Highway 101 are generally short in duration and would not be notably out of scale or character with adjoining development in terms of visibility or impacting existing views. Therefore, this impact would be less than significant.

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 a publically accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Potentially Significant Impact Unless Mitigation Incorporated

A significant impact would occur if the project exceeds the allowed height or bulk regulations and existing patterns of development in the surrounding area by a significant margin; would have an architectural style or use building materials in stark contrast to adjacent development, where the adjacent development follows a single or common architectural theme; would result in the physical loss or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or Local Coastal Program; is located in a highly visible area (e.g., adjacent to an interstate highway) and would strongly contrast with the surrounding environment through excessive bulk, signage, or architectural projections; or where the project would have a cumulative effect by opening up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multi-family).

The proposed project would comply with all pertinent development standards related to building height, size and placement on the property. No significant community identification symbols or landmarks are present in the project area or would be impacted by the project. The incorporated portion of the project vicinity is built out, such that the proposed project is not likely to have any impact on opening up the area for additional development or changing the overall character of the area. The unincorporated areas behind the project location are either zoned and developed with single family residential land uses, or zoned and used for agricultural uses. The project vicinity exhibits a mix of architectural styles and land use types. The proposed hotel would introduce yet another architectural vernacular to the area and make use of some exterior finishes

and colors/materials that are unique for this part of the City. As previously mentioned, the project site is located prominently on one of the City's major east-west arterial roadways and within sight of U.S. Highway 101. Given the visibility of the site and the somewhat unique architecture, materials, and colors proposed for the hotel building, strong contrasts in appearance could result in a potentially significant aesthetic impact unless properly mitigated. Review of the project by the Architectural Review Board, as required by Mitigation Measure AES-1 (below) to ensure the chosen architectural style, colors and materials do not strongly contract with surrounding development and are appropriate to the neighborhood character would reduce potential impacts to a less than significant level. Likewise, Mitigation Measure AES-2 would require that all mechanical equipment and trash receptacle areas be properly located and screened to avoid aesthetic impacts on surrounding land uses.

d) *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Potentially Significant Impact Unless Mitigation Incorporated

The proposed hotel project would introduce new sources of exterior lighting to the project area as a result of new exterior building, pathway and parking lot lighting, in addition to new illuminated building and site signage. Given the proximity of the project to residential developments to the east, north and west, excessive lighting that spills over from the project site could pose an adverse impact on neighboring land uses and detract from nighttime views in the area. Compliance with the City's standard lighting conditions through Mitigation Measure AES-3, which requires that any new exterior lighting be night-sky compliant in design to minimize glare, spillover and similar lighting impacts, and AES-4, which addresses illuminated signage, would reduce these impacts to less than significant.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's 2003 General Plan and Coastal Land Use Plan (the Plan), herein incorporated by reference. The Plan incorporates numerous Objectives and Policies that provide mitigation for the actions allowed under the Plan, including mitigation for aesthetic impacts as a result of buildout under the Plan. The proposed project must be found consistent with the Objectives and Policies of the Plan in order to be approved. Cumulative development throughout the Carpinteria Valley would incrementally contribute to aesthetic impacts, however, with adherence to the Plan's Objectives and Policies, the project's contribution to cumulative aesthetic impacts would not be considerable and would be further reduced through the implementation of the project-specific measures below.

Required Mitigation Measures

AES-1. Architectural Review Board (ARB) Review. The design, scale, character, colors, and materials of the project architecture shall be compatible with vicinity development and consistent with the City's "small beach town" character.

Plan Requirement and Timing: The applicant shall submit plans for the project for review by the Architectural Review Board prior to approval of any Building Permit for physical development.

Monitoring: Community Development Department staff (CDD) shall review submitted plans, provide direction to the ARB regarding this mitigation measure and site inspect during the construction phase for compliance with the approved plans.

AES-2. Equipment Screening. All mechanical equipment, including but not limited to, heating and air conditioning units, and trash receptacle areas, shall be completely screened from surrounding properties by use of a wall or fence, or shall be enclosed within a building or roof parapet/equipment well.

Plan Requirements: The locations of all exterior mechanical equipment shall be depicted on a Roof and/or Mechanical Equipment Plan to be reviewed and approved by CDD with input from the ARB.

Monitoring: CDD and ARB shall review the Roof and/or Mechanical Equipment Plan for compliance with this measure prior to approval of a Building Permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that mechanical equipment has been installed consistent with the approved Plan.

AES-3. Lighting. Any exterior night lighting installed on the project site shall be of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels and into the protected riparian habitats and their associated buffers. Applicant shall develop a Lighting Plan incorporating these requirements and provisions for dimming lights after 10:00 pm.

Plan Requirements: Specifications for all selected exterior lighting fixtures shall be included in the plans. The locations of all exterior lighting fixtures and photometric exhibit showing the direction and intensity of light being cast by each fixture and the height of the fixtures shall be depicted on a Lighting Plan to be reviewed and approved by CDD with input from the ARB.

Monitoring: CDD and ARB shall review a Lighting Plan for compliance with this measure prior to approval of a building permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that exterior lighting fixtures have been installed consistent with their depiction on the final Lighting Plan.

AES-4. Illuminated Signs. Building and grounds signage shall be reviewed by the Architectural Review Board to ensure the size, design, colors, and intensity of signage is appropriate to the neighborhood setting and does not create distracting or intrusive impacts on surrounding uses.

Plan Requirements: Detailed sign plans, depicting the location, construction, size, and dimensions of all project-related signage shall be submitted to the Architectural Review Board for review and approval prior to Building Permit issuance. All illuminated signage shall be outfitted with dimmable controls to control light intensity.

Monitoring: CDD staff shall ensure compliance with the Architectural Review Board-approved sign plans during Building Permit review and prior to occupancy clearance.

Residual Impact

With incorporation of the required mitigation measures, residual aesthetic impacts would be less than significant.

2. AGRICULTURAL AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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 non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversation of forest land to non-forest use?				X
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?		X		

Existing Environmental Setting

The project site is located within an urbanized part of the City zoned for commercial and residential uses, and is currently developed as a church. The California Department of Conservation's California Important Farmland Finder (CIFF) Map designates the project site as "Urban and Built-Up Land." The northern (rear) property line boundary of the project site comprises the City of Carpinteria municipal boundary, and abuts agricultural lands zoned AG-I-5 in unincorporated Santa Barbara County. The agricultural lands in question are used to grow row crops, and are designed by CIFF as "Farmland of Statewide Importance." Vehicular access to the agricultural lands is taken via a private access easement along the western (side) boundary of the project site.

Thresholds of Significance

The City of Carpinteria's *Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended* (1994), does not provide specific criteria, but rather provides the following general thresholds:

- Development proposed on any property five acres or greater in size with a Prime Agricultural Soils designation may represent a significant environmental impact.
- Development proposed on any property in an Agricultural Preserve would represent a significant environmental impact.
- Development proposed on any property which in the past five years has been in agricultural production and which is agriculturally zoned may represent a significant environmental impact.
- Development of 10 or more-acre non-prime parcels may be significant due to historical use or surroundings (conversion may make adjacent agricultural land ripe for conversion).

In addition, CEQA Appendix G states that a project will have a significant impact on the environment if it will:

- Conflict with adopted environmental plans and goals of the community where it is located.
- Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.

Project Specific Impacts

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 non-agricultural use?*

No Impact

The project site is designated "Urban and Built-Up Land" according to the Department of Conservation's CIFF Map. Therefore, the project would not result in the conversion of any lands designated "prime farmland," "unique farmland," or "farmland of statewide importance." Accordingly, there would be no impact.

b) *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

No Impact

The project site is not zoned for agricultural use, nor is it under a Williamson Act contract. Therefore, the project would have no impact on existing zoning for agricultural use or a Williamson Act contract.

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

There are no lands in the immediate project area zoned for, or designated as "forest land," "timberland," or "timberland zoned Timberland Production." Therefore, the project would have no impact on forest lands.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact

There are no forest lands located on or in the immediate vicinity of the project site. Therefore, there is no potential for the project to result in the loss of forest land or conversion of forest land to non-forest use.

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?

Potentially Significant Impact Unless Mitigation Incorporated

As discussed in the existing environmental setting section (above), the project site is zoned and designated for, and developed with urbanized land uses, however it shares its northern (rear) property line boundary with unincorporated Santa Barbara County lands zoned for agriculture that are designated as "farmlands of statewide importance" and that are currently being cultivated for row crops. At its closest points, the proposed hotel would be located approximately 70 feet from the shared property line with the nearest agricultural lands. The proposed hotel's parking lot would be a minimum of 12 feet from the shared property line at its closest point (at the location of the trash enclosure). Much of the shared rear property line would be physically separated by the required 50-foot creek buffer and the protected riparian canopy area adjacent to the rear property line. Nevertheless, when intensified urban land uses are located in close physical proximity to agricultural lands, the potential exists for land use compatibility conflicts to occur with respect to odors, dust, noise or similar impacts associated with typical agricultural activities. If not addressed, ongoing nuisance complaints related to agricultural activity could interfere with or disrupt the viability of the adjacent agricultural operations.

Therefore, Mitigation Measure AG-1 requires the recordation of an informational notice on the title of the property alerting current and future owners that the property is adjacent to properties zoned for agricultural uses, and that any inconvenience or discomfort from properly conducted agricultural operations, including noise, odors, dust, lighting and chemical usage, will not be deemed a nuisance. The informational notice will be recorded with the Clerk Recorder's office. The hotel operator shall also be required to provide written notification of the County's "Right to Farm" ordinance and its applicability to the adjacent agricultural operations to all hotel guests.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Land Use Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to agricultural resource impacts. However, the project's contribution to cumulative agricultural impacts would not be considerable and would be further reduced through the implementation of the project specific measures to address property owner and hotel guest notification that the project has been developed next to an existing agricultural operation protected under the County of Santa Barbara's "Right to Farm" Ordinance.

Required Mitigation Measures

AG-1. Right to Farm Notification. The following informational notice shall be recorded with the Santa Barbara County Clerk Recorder's office for appearance on any future property owners' Title Reports; shared with hotel employees; and disclosed to hotel guests prior to check-in:

IMPORTANT: PROPERTY OWNER, EMPLOYEE & HOTEL GUEST NOTIFICATION
This property is located adjacent to property zoned for agriculture and is located in an area that has been planned for agricultural uses. Existing agricultural growing operations are located north of the property. Vehicles associated with the agricultural use of this property utilize the adjacent driveway located immediately west and north of this property to access agricultural lands. While the Via Real Hotel project design includes landscape buffers and physical setbacks from the adjacent agricultural lands to reduce possible noise, light, odors and dust from impacting guests and employees of the Via Real Hotel project, property/business owners, employees and guests are to be notified that these are existing conditions and will not be considered by the City of Carpinteria to be a nuisance requiring extraordinary actions by the adjacent agricultural operators or landowners. It is in the public interest to preserve agricultural land and operations within the Carpinteria Valley and to specifically protect these lands for exclusive agricultural use. Any inconvenience or discomfort from properly conducted agricultural operations, including noise, lights, odors, dust, and chemicals, will not be deemed a nuisance.

Plan Requirements: The applicant shall prepare and submit to the Community Development Department for review and approval the informational notice containing the above disclosure statement. The notice shall be recorded prior to granting of occupancy clearance by the City of Carpinteria. Hotel operator shall be made aware of this disclosure requirement in writing and shall provide a copy of the disclosure document(s) used to notify hotel guests and employees of the adjacent agricultural land's "right to farm" protections.
Monitoring: Following recordation and prior to granting of occupancy clearance, CDD staff shall be provided with a conformed copy of the recorded informational notice, and a copy of the disclosure document that will be used to notify hotel guests and employees.

Residual Impact

With incorporation of the required mitigation measure, residual agricultural and forest resources impacts would be less than significant.

3. AIR QUALITY **Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with or obstruct implementation of the Clean Air Plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				X

Existing Environmental Setting

The City of Carpinteria and Santa Barbara County are located in the South-Central Coast Air Basin (Basin), composed of Ventura County, Santa Barbara County and San Luis Obispo County. Development activities within Santa Barbara County that would potentially impact the Basin are under the jurisdiction of the Santa Barbara County Air Pollution Control District (APCD). The physical and regulatory air quality setting for the Carpinteria Valley and Santa Barbara County is described in detail in the APCD's 2019~~6~~ Ozone Plan, which is incorporated by reference (SBCAPCD 2019~~6~~). The 2019~~6~~ Ozone Plan is available for review at local libraries, Carpinteria City Hall and at the APCD office at 260 N. San Antonio Road, Suite A, Santa Barbara or on their website at: www.ourair.org~~www.sbcapcd.org~~.

Air Quality Standards and Attainment Status. Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards or 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. Criteria air pollutants include the following: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size ($PM_{2.5}$) and lead. Ambient air quality is determined by comparing contaminant levels in ambient air samples to national and State standards that are set by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB). National Ambient Air Quality Standards (NAAQS) were first established by the federal Clean Air Act of 1970. The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation; these NAAQS may not be exceeded more than once a year, except annual standards, which may never be exceeded.

California Ambient Air Quality Standards (CAAQS) were established by CARB in 1967 and are generally more restrictive than the NAAQS. They are consistent with the Clean Air Act that requires state regulations to be at least as restrictive as the federal requirements. The CAAQS provide thresholds used to determine if basin pollution levels are low enough to attain the national clean air standards. Basin 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 NAAQS and CAAQS are presented in Table 3.3-1, Ambient Air Quality Standards.

Table 3.3-1 Ambient Air Quality Standards

Pollutant	Average Time	California Standards	National Standards
O_3	1 hour	0.09 ppm (180 μg/m^3)	—
	8 hours	0.070 ppm (137 μg/m^3)	0.075 ppm (147 μg/m^3)
NO_2	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	0.053 ppm (100 μg/m^3)
	1 hour	0.18 ppm (339 μg/m^3)	0.100 ppm (188 μg/m^3)
CO	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
SO_2	24 hours	0.04 ppm (105 μg/m^3)	
	1 hour	0.25 ppm (655 μg/m^3)	0.075 ppm (196 μg/m^3
PM_{10}	24 hours	50 μg/m^3	150 μg/m^3
	Annual Arithmetic Mean	20 μg/m^3	—
$PM_{2.5}$	24 hours	No Separate State Standard	35 μg/m^3
	Annual Arithmetic Mean	12 μg/m^3	15.0 μg/m^3

Source: CARB 2019a

Notes: ppm = parts per million by volume; μg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter

The attainment classifications for these criteria pollutants are outlined in Table 3.3-2, Santa Barbara County Attainment Classification.

Table 3.3-2 Santa Barbara County Attainment Classification

Pollutant	*Averaging Time*	*State Designation/Classification*	*National Designation/Classification*
O_3	*8 hour*	*Nonattainment ~~Attainment~~*	*Unclassified / Attainment*
	1 hour	*Nonattainment ~~Attainment~~*	—
NO_2	*1 hour*	*Attainment*	—
	Annual arithmetic mean	*Attainment*	*Unclassified / Attainment*
CO	*1 hour, 8 hour*	*Attainment*	*Unclassified / Attainment*
SO_2	*1 hour*	*Attainment*	—
	24 hour	*Attainment*	*Unclassified /Attainment*
PM_{10}	*24 hour*	*Nonattainment*	*Unclassified*
	Annual arithmetic mean	*Nonattainment*	—
$PM_{2.5}$	*24 hour*	*Unclassified*	*Unclassified / Attainment*
	Annual arithmetic mean	*Unclassified*	*Unclassified / Attainment*

Source: CARB 2020; EPA 2019

As shown in Table 3.3-2, Santa Barbara County is designated as a nonattainment area for state PM_{10} standards. Effective July 1, 2020, Santa Barbara County was designated as being an attainment area for State ozone (O_3) standards. It is also an attainment area or unclassified for all other standards.

Air Quality Monitoring Data. The APCD maintains ambient air quality monitoring stations throughout the County. The closest ambient air quality monitoring station to the project site is located on Gobernador Canyon Road in Carpinteria, which measures O_3 and NO_2. The nearest station measuring CO, PM_{10}, and $PM_{2.5}$ is the Santa Barbara monitoring station located at 700 E. Canon Perdido. The UCSB West Campus monitoring station is the nearest station to the project site that measures SO_2. The most recent background ambient air quality data from 2018 to 2020 is presented in Table 3.3-3.

Table 3.3-3 Ambient Air Quality Data
(parts per million (ppm) unless otherwise indicated)

Pollutant	Averaging Time	2018	2019[1]	2020[2]	Most Stringent Ambient Air Quality Standard	Monitoring Station
O_3	8-hour	0.070	0.071	0.086	0.070	Carpinteria – Gobernador Road
	1-hour	0.084	0.086	0.103	0.09	
CO	1-hour*	1.5	1.0	1.0	20	Goleta (Las Flores Canyon for 2020)
SO_2	1-hour	0.002	0.01	0.08	0.25	West Campus
PM_{10}	Annual	25.2 µg/m³	20.1 µg/m³	24.1 µg/m³	20 µg/m³	Santa Barbara
	24-hour	128.0 µg/m³	72 µg/m³	84.0 µg/m³	50 µg/m³	
$PM_{2.5}$	Annual	8.5 µg/m³	6.8 µg/m³	9.3 µg/m³	12 µg/m³	Santa Barbara
	24-hour	38.0 µg/m³	23 µg/m³	63.0 µg/m³	35 µg/m³	
NO_2	1-hour	0.029	0.018	0.012	0.18	Carpinteria – Gobernador Road

Source: SBCAPCD Annual Monitor Reports 2018-2020.
Notes: µg/m³ = micrograms per cubic meter; -- = no data available to determine the value.

As Table 3.3-3 demonstrates, air quality within the project region is in compliance with both CAAQS and NAAQS for NO_2, CO and SO_2, but not O_3. The PM_{10} levels monitored at the air monitoring stations exceeded the state 24-hour and annual standards during 2018, 2019, and 2020. $PM_{2.5}$ levels exceeded the state and the federal 24-hour and annual standards during 2018 and 2020.

[1] SBCAPCD 2019 Annual Air Quality Report highest concentration used as is this is the data that is available for that year.
[2] SBCAPCD 2020 Annual Air Quality Report highest concentration used as is this is the data that is available for that year.

Santa Barbara County Air Pollution Control District. The APCD Rules and Regulations establish emission limitations and control requirements for various sources, based upon their source type and magnitude of emissions. The APCD rules applicable to the proposed project may include the following:

- 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 three minutes in any one hour.
- Rule 305 (Particulate Matter – Southern Zone). Rule 305 states that a person shall not discharge into the atmosphere from any source particulate matter in excess of the concentrations listed in the rule.
- 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 323 (Architectural Coatings). This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.
- Rule 329 (Asphalt Paving). The provisions of this rule shall apply to the manufacture, application and sale of cutback and emulsified asphalt materials for the paving, construction and maintenance of streets, highways, parking lots and driveways.
- 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 prohibition of visible dust (opacity of 20% or greater) beyond the property line, a requirement to cover soil hauling trucks or maintain adequate freeboard below the truck bed rim, and minimization of road dust from track-out/carry out by construction vehicles.
- Rule 352 (Natural Gas-Fired Furnaces). This rule applies to any person who manufactures, supplies, sells, offers for sale, installs, or solicits the installation of any natural gas-fired fan-type central furnaces or water heaters for use within the District
- Rule 360 (Natural Gas Boilers). This rule applies to any person who supplies, sells, offers for sale, installs, modifies, or solicits the installation or modification of any boiler, water heater, steam generator or process heater for use within the District with a rated heat input capacity greater than or equal to 75,000 British thermal units per hour up to and including 2,000,000 British thermal units per hour.

Environmental Thresholds

Air quality impacts are evaluated on both a short-term and long-term basis. Short-term impacts are generally considered to occur during project construction while long-term impacts are associated with project operation.

Air quality threshold criteria are developed and applied using federal, state and local data and methodologies including computerized modeling techniques. State CEQA Guidelines state in Appendix G, that for air quality, a project will ordinarily have a significant effect on the environment if it will:

- *Violate any ambient State or Federal air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.*

In addition, the APCD has prepared criteria and thresholds for determining significance under CEQA. According to the APCD's Scope and Content of Air Quality Sections in Environmental Documents (APCD 2011), a proposed project would not have a significant impact on air quality, either individually or cumulatively, if operation of the project will:

- *Emit (from all project sources, both stationary and mobile) less than the daily trigger for offsets or air quality impact analysis set in the APCD New Source Review Rule, for any pollutant;*
- *Emit less than 25 pounds per day of NOX or ROC from motor vehicle trips only;*
- *Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);*
- *Not exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than one (1.0) for non-cancer risk;*
- *Be consistent with the latest adopted federal and state air quality plans for Santa Barbara County*

Due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health related air quality standards. Therefore, CO "hotspots" analyses are not required.

Quantitative thresholds of significance are not currently in place for short-term or construction emissions; however, the APCD uses 25 tons per year for ROG or NO_X as a guideline for determining the significance of construction impacts. Under APCD Rule 202 D.16, if the combined emissions from all construction equipment used to construct a stationary source that requires an Authority to Construct permit will have the potential to exceed 25 tons of any pollutant, except CO, in a 12-month period, the owner of the stationary source shall provide offsets under the provisions of Rule 804, and shall demonstrate that no ambient air quality standard would be violated (APCD 2011a).

Although quantitative thresholds of significance are not currently in place for short-term emissions, CEQA requires that short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading be discussed in the environmental document. In the interest of public disclosure, the APCD recommends that construction-related NO_X, ROC, PM_{10} and $PM_{2.5}$ emissions from diesel and gasoline powered equipment, paving and other activities, be quantified.

Standard dust control measures must be implemented for any discretionary project involving earth-moving activities. Some projects have the potential for construction-related dust to cause a nuisance. Because Santa Barbara County is currently in nonattainment for the state PM_{10} standard, dust mitigation measures are required for all discretionary construction activities (regardless of the significance of the fugitive dust impacts) based on policies within the 1979 Air Quality Attainment Plan (APCD 2011a).

Also, because diesel particulate matter is the primary airborne carcinogen in California, if the activity involves the use of diesel-powered equipment within a quarter-mile of a sensitive receptor such as a school, residence,

daycare or eldercare facility, the APCD may consider the impact significant. The project site is immediately bordered by residential land uses to the east, north, and west.

Project Specific Impacts

a) Conflict with or obstruct implementation of the Clean Air Plan?

Less Than Significant Impact

Wolf Environmental, Inc. conducted an Air Quality and Greenhouse Gas Assessment for the Project (Wolf Environmental, Inc., 2021). A copy of their report is provided in Appendix C and relevant information is incorporated in this section by reference.

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and Greenhouse Gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as CEQA and National Environmental Policy Act (NEPA) documents, pre-project planning, compliance with local air quality rules and regulations, etc.

Wolf Environmental utilized the CalEEMod model (Version 2020.4.0, dated 12/05/21) to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations for the project. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Detailed results of the CalEEMod analysis are included in the air quality report (Wolf Environmental, Inc., 2021). Table 3-4 indicates the construction emissions and Table 3-5 indicates the operational emissions from the Project.

Table 3-4. Project Construction Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Construction Emissions	1.34	1.29	1.93	2.67e-003	0.17	0.10	240.28

Table 3-5. Project Operational Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Operational Emissions	3.03	0.67	1.19	6.15e-003	0.48	0.14	989.59

Construction Emissions

Due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health related air quality standards. Therefore, CO "hotspots" analyses are not required.

Quantitative thresholds of significance are not currently in place for short-term or construction emissions; however, the Santa Barbara County Air Pollution Control District (SBCAPCD) uses 25 tons per year for Reactive Organic Gasses (ROG) or NOx as a guideline for determining the significance of construction impacts. Under SBCAPCD Rule 202 D.16, if the combined emissions from all construction equipment used to construct a stationary source that requires an Authority to Construct permit will have the potential to exceed 25 tons of any pollutant, except CO, in a 12-month period, the owner of the stationary source shall provide offsets under the provisions of Rule 804 and shall demonstrate that no ambient air quality standard would be violated (APCD 2011a). Please note that this project is not a stationary source, and this latter threshold is not applicable.

Although quantitative thresholds of significance are not currently in place for short-term emissions, CEQA requires that short-term impacts such as exhaust emissions from construction equipment and fugitive dust generation during grading be discussed in the environmental document. In the interest of public disclosure, the SBCAPCD recommends that construction- related NOx, ROG, PM10 and PM2.5 emissions from diesel and gasoline powered equipment, paving and other activities, be quantified.

Standard dust control measures must be implemented for any discretionary project involving earth-moving activities. Some projects have the potential for construction-related dust to cause a nuisance. Because Santa Barbara County is currently in nonattainment for the state PM10 standard, dust mitigation measures are required for all discretionary construction activities (regardless of the significance of the fugitive dust impacts) based on policies within the 1979 Air Quality Attainment Plan (APCD 2011a).

Due to the temporary, short-term nature of construction emissions, the SBCAPCD does not apply the quantitative operational emissions thresholds of 25 pounds per day for ROC and NOx to construction activities. As no quantitative emissions thresholds for maximum daily construction emissions are established, and the proposed project is under those thresholds in any event, the proposed project air quality impacts in relation to construction activity would be less than significant.

Operational Emissions

Long-Term emissions from the Project would be generated primarily by mobile source (vehicle) emissions from the Project site and area sources such as lawn maintenance equipment. Significance criteria have been established for criteria pollutant emissions as documented above would apply to the project regarding NOx or ROC emissions. CalEEMod results indicate that the annual operational emissions from the Project will be less than the air district emissions thresholds for criteria pollutants noted above, and therefore the proposed project air quality impacts in relation to operational activity would be less than significant.

The primary way of determining consistency with the Air Quality Plan's (AQP's) assumptions is determining consistency with the applicable General Plan to ensure that the Project's population density and land uses are consistent with the growth assumptions used in the AQP's for the air basin.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth, and then designate locations for land uses to regulate growth. Existing and future pollutant emissions computed in the AQP are based on land uses from area general plans. AQP's detail the control measures and emission reductions required for reaching attainment of the air standards.

The applicable General Plan for the project is the City of Carpinteria General Plan/Local Coastal Land Use Plan, dated April 2003. The Project is consistent with the currently adopted General Plan for the City as well as the County's Climate Action Plan (CAP) and is therefore consistent with the population growth and Vehicle Miles Traveled (VMT) applied in the plan. Therefore, the Project is consistent with the growth assumptions used in the applicable AQP's. As a result, the Project will not conflict with or obstruct implementation of any air quality plans. Therefore, no mitigation is needed.

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?*

Less Than Significant Impact

Construction of the project would result in emissions of ozone precursors including reactive organic gasses (ROG), nitrous oxides (NOx), and fugitive dust emissions (PM10). During operation, the project would result in emissions of ozone precursors associated with mobile source emissions and other stationary sources. Inconsistency with any of the plans would be considered a cumulatively adverse air quality impact. As discussed above, the Project is consistent with the currently adopted General Plan for the City and is therefore consistent with the population growth and Vehicle Miles Traveled (VMT) applied in the AQP.

Project specific emissions that exceed the thresholds of significance for criteria pollutants would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the County is in non-attainment under applicable federal or state ambient air quality standards. It should be noted that a project is not characterized as cumulatively insignificant when project emissions fall below thresholds of significance.

As indicated in Tables 3-4 and 3-5, results of the analysis show that emissions generated from construction and operation of the Project will be less than the applicable air district emission thresholds for criteria pollutants. Therefore, the project would have less than significant impacts on applicable federal or state ambient air quality standards. No mitigation required

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses that have the greatest potential to attract these types of sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities.

Although the Project site is adjacent to residential uses, the fact that no SBCAPCD criteria pollutant thresholds or GHG emissions thresholds would be exceeded because of either project construction or operations ensures this impact is less than significant and no mitigation is required.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

No Impact

CEQA requires that an analysis of potential odor impacts be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people located near existing odor sources.

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Air districts throughout the state have identified some common types of facilities that have been known to produce odors. The types of facilities that are known to produce odors are typically associated with heavy industry or agriculture. The Project will not generate odorous emissions given the nature or characteristics of the Project. The project will have no impacts from such emissions. Therefore, no mitigation is required.

Cumulative Impacts

Cumulative development throughout the Carpinteria Valley would incrementally increase air pollutant emissions, which could cumulatively degrade regional air quality. However, all new development within the Carpinteria Valley would be consistent with the City or County's General Plan/Local Coastal Land Use Plans; therefore, all such development would be within the projections contained in the adopted CAP. Therefore, cumulative development in the Carpinteria Valley should not hinder progress toward attainment of the County's air quality objectives and cumulative impacts are considered less than significant.

Required Mitigation Measures

None required.

Residual Impact

Residual impacts of air quality resources would be less than significant.

4. BIOLOGICAL RESOURCES **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?		X		
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 Game or US Fish and Wildlife Service?		X		
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?		X		
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a creek preservation policy or tree protection ordinance?		X		
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?				X

The following technical studies related to biological resources, were conducted for this project:

- Wetland Delineation and Jurisdictional Determination, Strorrer Environmental Services LLC, April 2017 (Strorrer, 2017).
- Preliminary Jurisdictional Waters/Wetlands Delineation Report, September 19, 2017 (Stantec, 2017)
- Technical Memorandum- Creek Setback, Via Real Hotel Development Project, March 28, 2018 (Manjunath Venkat, Consulting Biologist).
- Tree Inventory & Mapping Associated with Swale B (RECON, 2018).

Copies of these Wetland Delineation Reports, the technical memorandum, and RECON's tree inventory spreadsheet are provided in Appendix D.

Information regarding description of existing natural resources conditions present at the project site and discussion of potential impacts are partially based on these reports and incorporated by reference, as applicable.

Environmental Thresholds

In addition to these reports, the following City of Carpinteria Guidelines and Policies were also utilized as guidelines to analyzing the potential impacts to Biological Resources and formulation of mitigation measures:

- Guidelines for the Implementation of the California Environmental Quality Act of 1970, Exhibit A-Environmental Review Guidelines, City of Carpinteria.
- Creeks Preservation Program Final Document, Volume One, City of Carpinteria, September 2005.
- General Plan/Local Coastal Land Use Plan & Environmental Impact Report, City of Carpinteria, 2003.
- Relevant Technical Studies prepared for projects in the Project Site Vicinity
- City of Carpinteria Environmental Thresholds, Resolution 4082 (1994), *Biological Resources.* This threshold determines whether a project may substantially affect a rare or endangered species of animal or plant or habitat to the species, interfere substantially withy the movement of any resident or migratory fish or wildlife species, or substantially diminish the habitat for fish, wildlife, or plants. The threshold provides for the evaluation of plan and animal species listed in State and Federal publications as well as in professional journals which identify the rarity, endangerment, vigor, and general distribution of the endangered species. City General Plan and Coastal Plan environmentally sensitive habitat designations are also utilized for project impact evaluation. Finally, information from wildlife biologists or botanists may be used to determine the value and significance of biological resources not currently listed in publications and journals.
- City of Carpinteria Environmental Thresholds, Resolution 4082 (1994), *Mitigation Measures.* Measures capable of reducing or avoiding potentially significant impacts shall be identified during the preliminary evaluation of non-exempt projects. A broad range of potential mitigations should be considered to maximize the potential for project modifications which mitigate adverse impacts and enable projects to qualify for Negative Declarations. The list of mitigation measures identified at the Initial Study stage must later be refined and specified to meet the standards for inclusion in the environmental document.

Existing Environmental Setting

The project site is situated within the United States Geological Survey (USGS) Carpinteria 7.5-minute topographic quadrangle. The property is bordered on the north by agricultural land and residential development, to the south by Via Real and U.S. Highway 101, to the west by an apartment complex, and to the east by residential development and commercial structures. The project site is relatively flat, ranging in elevation from approximately 15 feet above Mean Sea Level (MSL) in the north to 7 feet above MSL in the south.

The Carpinteria Salt Marsh is located south of the proposed Project area, to the south of U.S. Highway 101. It is one of the largest and most critical estuaries in California, supporting several sensitive plant and animal species. The Project site is in the Carpinteria Valley of 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 range from approximately 600 to 2,000 feet above MSL. Elevations of the valley floor range from sea level to approximately 130 feet above MSL. In general, topography of the Carpinteria Valley area slopes towards the south to southwest.

The approximately 2.61-acre project site is presently improved with a single story 5,678 square foot church, a children's play area, a surface parking lot and the remnants of a vegetable garden. Several small outbuildings are located near the rear of the lot adjacent to the former garden. The habitat on the project site primarily consists of planted ornamental species, disturbed/developed areas and non-native plant species. Most of the site not otherwise occupied by buildings or impervious surfaces is dominated by non-native grasses and groundcover. Several scattered non-native trees are planted near the church building and playground, and along the eastern side property line adjacent to the surface parking lot. A secondary paved road, serving the agricultural lands located to the north of the project site runs along the property's western (side) property boundary. Based on a review of historic aerial photos, the area at the northerly (rear) of the subject lot appears to have been used as a vegetable garden from 2011 through 2014.

Four vegetation/land cover types were identified on the project site (Stantec, 2017; see Appendix D). Figure ~~1~~2 of the Stantec Report (Appendix D) s~~S~~hows the Vegetation Communities on the project site. These vegetation communities are:

Myoporum Groves - This vegetation community is dominated by non-native myoporum trees (*Myoporum laetum*), occurring along the western boundary of the project site, in the upstream half of the drainage that traverses the northern portion of the site.

Non-native Grassland - This non-native community occurs on the southern and western portions of the project site, adjacent to the church building and playground area, and is dominated by kikuyu grass (*Pennisetum clandestinum*). Throughout the property, areas mapped as non-native grassland historically have been periodically maintained via mowing and/or weed whipping.

Ruderal Herbaceous Scrub - Ruderal vegetation occupies the northern outcrop portion of the property. It is dominated by non- native, herbaceous plant species including greenstem filaree (*Erodium moschatum*), cheeseweed, cut-leaved geranium (*Geranium dissectum*), prickly sow thistle, English plantain (*Plantago lanceolata*), scarlet pimpernel (*Lysimachia arvensis*), kikuyu grass, and annual grasses such as bromes (*Bromus* spp.) and wild oat (*Avena fatua*).

Disturbed/Developed - This land use type describes existing structures, dirt roads, and other disturbed areas; ornamental vegetation is also included under this classification.

Man-made drainages (Swales) - There are two on-site man-made drainage features on the property, referred to here as "Swale A" and "Swale B" (Stantec, 2017). Figure ~~2~~4 of the Stantec Report shows the drainage swales on the project site. Historically, both drainage swales functionally served as an irrigation ditch, conveying agricultural runoff from the fields to the north, to an existing concrete headwall and 36-inch culvert that crosses under Via Real and the U.S. Highway 101 to the South, where it connects to the Carpinteria Salt Marsh. Swale A, approximately 315 feet, is located along the western boundary of the site. Swale A is described as a culverted irrigation ditch that extends north-to-south adjacent to the western driveway (Figure ~~2~~4). Vegetation adjacent to Swale A is primarily ground cover consisting of non-native grasslands. Within Swale A, non-native species such as pampas grass (*Cortaderia selloana*), wild radish (*Raphanus sativus*), morning glory (*Calystegia* sp.), and an unidentified sedge (*Cyperus* sp.) were observed. A couple of red willows are the only native species associated with Drainage Swale A. The morphological and hydrological characteristics of these drainage swales are described in further detail in the Wetlands Delineation Report (Stantec, 2017, Appendix D).

Drainage Swale B, approximately 256 feet, is located near the northwest corner of the project site, adjacent to an unpaved road on the agricultural property immediately to the north of the project site (Figure 24). Swale B, described as a roadside ditch, appears to receive some agricultural runoff from the adjacent fields, but does not convey flows to Swale A. The Vegetation associated with drainage Swale B includes both native and non-native trees. Native vegetation includes coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and red willows (*Salix laevigata*); interspersed with non-native myoporum trees (*Myoporum laetum*). Understory vegetation is dominated by kikuyu grass (*Pennisetum clandestinum*) with English ivy (*Hedera helix*) also present. Additional species observed within and adjacent to Swale B include non-native Canary Island date palm (*Phoenix canariensis*), castor bean (*Ricinus communis*), and pampas grass (*Cortaderia selloana*).

The 2017 jurisdictional delineation conducted at the project site (Stantec, 2017) estimated the following acreage of potential jurisdictional waters and wetlands associated with the drainage swales:

Table 4-1. Potential Jurisdictional Waters on the Project Site

Drainage Feature	USACE/RWQCB Non-wetland Waters (acres)	CDFW Jurisdictional Waters (acres)	CCC Wetlands (acres)
Drainage Swale A	0.02	0.09	0.02
Drainage Swale B	0.04	0.04	--
Total	**0.06**	**0.13**	**0.02**

USACE= US Army Corps of Engineers
RWQCB = Regional Water Quality Control Board
CDFW= California Department of Fish and Wildlife
CCC = California Coastal Commission

Project Specific Impacts

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?*

Potentially Significant Impact Unless Mitigation Incorporated

As indicated under the Existing Environmental Setting section, a substantial portion of the project site is developed or disturbed, with existing buildings and parking structures and a children's play area. Except for a few native trees associated with drainage Swale B, the vegetation communities occurring on the site is primarily non-native and ruderal in nature. In addition to the lack of native vegetation and cover, the surrounding residential areas to the east, west, northeast and the agricultural lands to the north; all greatly diminish the project site as a natural habitat area for special-status plants and wildlife species. No special-status species were detected during any of the project site surveys. The California Natural Diversity Database (CDFW, 2021) was queried to obtain a list of occurrence records of special status plants and wildlife in the project vicinity. The database search radius included six USGS Quadrangles surrounding the project site, including the Carpinteria Quadrangle within which the project site is situated. The query yielded 257 "element" (species) records for the larger search radius around the project site. Out of this broad list, 18 special status plants and wildlife species were assessed in Table 4-2, based on database analysis and literature review; for

their potential to occur on the project site. The species occurrence potential was based on the following criteria:

Present: Species were observed within the project site during project surveys or population has been acknowledged by California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), or local experts.

High: Both a documented record exists of the species at the project site or immediate vicinity, and the suitable habitat conditions (including soil type) preferred by this species, occurs on the site.

Moderate: Number of recent records of species in the project area and the habitat conditions preferred by the species are marginal and/or limited within the project site and immediate surroundings.

Low (Unlikely to Occur): Recent records of species in the project area is low, number of species records is low, and the project site does not support suitable habitat for this species

Table 4-2. Special-status Species Occurrence Potential, 4110 Via Real, Carpinteria

Species Name	Regulatory Status	Preferred Habitat/Environmental Conditions	Potential to Occur on Project Site
Plants			
Late-flowered mariposa lily *Calochortus fimbriatus*	Fed: none CA: none CRPR: 1B.3	Perennial bulbiferous herb, occurs in chaparral, cismontane woodland, riparian woodland, 900-6250 feet elevation.	Low/Unlikely to Occur. Suitable habitat not present, project site not within the preferred elevation.
Ojai fritillary *Fritallaria ojaiensis*	Fed: none CA: none CRPR: 1B.2	Perennial herb, occurs in broad-leafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest, microhabitat: rocky, 740-3,275 feet elevation.	Low/Unlikely to Occur. Suitable habitat not present, project site not within the preferred elevation.
Santa Barbara honeysuckle *Lonicera subsicata* var. *subsicata*	Fed: none CA: none CRPR: 1B.2	Perennial evergreen shrub, occurs in chaparral, cismontane woodland and coastal scrub, 35-3280 feet elevation.	Low/Unlikely to Occur: Suitable habitat not present, project site not within the preferred elevation.
Sonoran maiden fern *Thelypteris puberula* var. *sonorensis*	Fed: none CA: none 2B.2	Perennial rhizomatous herb, occurs in meadows and seeps, 165-2000 feet elevation	Low/Unlikely to Occur: Suitable habitat not present, project site not within the preferred elevation.
Nuttall's scrub oak *Quercus dumosa*	Fed: none CA: none CRPR: 1B.1	Perennial evergreen shrub occurs in closed-cone coniferous forest, chaparral,	Low/Not Present. Suitable habitat not present, project site not within the preferred elevation. Focused tree

		and coastal scrub, 50-1310 feet.	survey did not detect this species on the project site.
Umbrella larkspur *Delphinium umbraculorum*	Fed: none CA: none CRPR: 1B.3	Perennial herb, occurs in chaparral and cismontane woodland, 1310-5250 feet elevation.	Low/Unlikely to Occur. Suitable habitat not present, project site not within the preferred elevation.
White-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	Fed: none CA: none CRPR: 1B.3	Perennial herb, occurs in chaparral, cismontane woodland	Low/Unlikely to Occur: Suitable habitat not present, project site not within the preferred elevation.
Animals			
California red-legged frog *Rana draytonii*	FT, CSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamside with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	Low/unlikely to Occur: Suitable habitat conditions are not present for this species on the project site. Low records for this species in the project vicinity, from over 10 years.
Coast range newt *Taricha torosa*	CSC	Burrow in or use soil, fallen logs, or debris for cover. Found in drier chaparral, oak woodland, and grasslands During breeding, coast range newts will migrate to intermittent streams, rivers, lakes, and ponds where they lay eggs in shallow water attached to submerged rocks or twigs.	Low/unlikely to Occur: Suitable habitat conditions are not present for this species on the project site. Low records for this species in the project vicinity, mostly from the Santa Barbara area.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	CSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Low/Unlikely to Occur: Suitable habitat is not present on the project site. The understory of the marginal riparian habitat adjacent to swale A is highly

			disturbed. One record for this species in the project area, from 2013.
Cooper's Hawk (nesting) *Accipiter cooperii*	WL	Forages and nests in open woodlands, woodland margins, and riparian forests	Low/Unlikely to Occur: Project site presents very limited foraging opportunities but there is not suitable breeding habitat.
Monarch butterfly (*Danaus plexippus)*	FC, USFS	Winter roost sites extend along the coast from northern Mendocino to Baja Calif., Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby	Low/Unlikely to Occur: There are no suitable roosting habitats on site and no records of overwintering of monarch butterflies in the immediate vicinity of the project site.
San Diego desert woodrat *Neotoma lepida intermedia*	CSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Low/Unlikely to Occur: Project site does not support suitable habitat. The habitat adjacent to swale A, presents marginal habitat, however this area is highly disturbed.
Silvery legless lizard *Anniella pulchra*	CSC	Sandy or loose loamy soils under sparse vegetation; soil moisture is essential; prefer soils with high moisture content. There are no known records for this species within the immediate project surrounding.	Low/Unlikely to Occur: Suitable habitat is present on the project site, however, it is limited to a very small area along the northern swale (swale B). The understory of the marginal riparian habitat adjacent to swale B is highly disturbed. Low records of species in the project vicinity from over 10 years.
Western pond turtle *Emmys marmorata*	CSC	Inhabits permanent or nearly permanent bodies of water in various habitat types; requires basking sites such as partially submerged logs, vegetation mats, or open mud banks.	Low/Unlikely to Occur: The project site does not support suitable habitat; there are no permanent or nearly permanent bodies of water on site. Low records of this species in the project vicinity, most recent from 2016.

Plants

CRPR = California Rare Plant Rank

CRPR 1A = Plants presumed extirpated in California and either rare or extinct elsewhere

CRPR 1B = Plants rare, threatened, or endangered in California and elsewhere

CRPR 2A = Plants presumed extirpated in California but common elsewhere

CRPR 2B = Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3 = Review List: Plants about which more information is needed
CRPR 4 = Watch List: Plants of limited distribution

Threat Ranks
Ranks at each level also include a threat rank (e.g., CRPR 4.3) and are determined as follows:
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Animals
CSC= California Species of Special Concern (CDFW)
FT= Federally recognized as Threatened (USFWS)
FC = Candidate Species for Federal Listing (USFWS)
USFS= US Forest Service Sensitive Species
WL = Watch List (CDFW)

As the analysis in Table 4-2 of special status species potential occurrence reveals, the project site supports very limited habitat for special status species. Except for drainage swale A and swale B on the property, most of the site is developed with existing structures, parking lots, landscaped areas supporting non-native grassland and ornamental trees. A portion of the property in the north, behind the existing church building was also historically used for an orchard/horticultural use. Remnants of pipes and signs of cultivation are still evident in this area. The project site is also surrounded by residential development and is situated just north of the busy US Highway 101 corridor and is fragmented from other natural areas in the vicinity. The historical intensive use of the parcel and existing conditions greatly preclude the potential for special status plants and wildlife species to occur on the property. No state- or federally-listed threatened or endangered plants or wildlife species were detected during project surveys. The proposed development is anticipated to result in loss of approximately 0.70 acres of ruderal, non-native grasses (lawn). The loss of this vegetation is considered not significant since this vegetation cover is not suitable habitat for special status species. In 2018, following consultation with California Coastal Commission (CCC) and City staff, the project was designed to avoid all impacts to the existing drainage features (Swale A and Swale B) on the property.[3] The analysis of potential impacts to the drainage swales on the project site, regulatory coordination and impacts avoidance measures, are further described in Section b).

Although no impacts to special status plants or wildlife would occur because of the lack of suitable habitat and avoidance of impacts to protected drainage swales; the project site does support marginal habitat in the form of non-native grass (lawn) and riparian trees for primarily foraging birds. The riparian trees offer a low potential for nesting. The trees on the project site can support nesting birds, including raptors, protected under the California Fish and Game Code (CFGC) and the federal Migratory Bird Treaty Act (MBTA). The project could adversely affect raptors and other nesting birds if construction occurs while they are present on or adjacent to the site, through direct mortality or abandonment of nests. The loss of a nest due to construction

[3] *Following a site visit in 2018 with Dr. Jonna Engel, Biologist, California Coastal Commission (CCC), City Staff, and Applicant's consulting biologist, the CCC determined that Swale B did not meet the definition of a "Creek" that is typically afforded protection under the Local Coastal Plan (LCP). However, since this drainage swale supports native riparian vegetation, recognized as ESH or Environmental Sensitive Habitat, the riparian vegetation within swale B should be protected. The CCC also determined that Swale A meets the definition of a "Creek", based on presence of wetland soils detected during the jurisdictional delineation and hydrologic connection between upstream areas and receiving waters downstream. As such, a 50-foot setback was required to protect Swale A. The project was therefore designed to avoid all impacts to ESH habitat within drainage swale A and Swale B; with a 50-foot set back from Swale A.*

activities would be a violation of the MBTA and CFGC 3503 et. seq., and a potentially significant impact. Therefore, Implementation of Mitigation Measure (MM) BIO-1 (nesting bird survey) is proposed, which would reduce potential impacts to less than significant.

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 Game or US Fish and Wildlife Service?*

Potentially Significant Impact Unless Mitigation Incorporated

Table 4-1 under the existing conditions description, provides an estimate of jurisdictional waters present on the site. The drainage swales are potentially state and federal waters subject to jurisdictional protection under Section 401 of the Clean Water Act (Water Quality Certification), Section 1600 of the California Fish and Game Code (Streambed Alteration Agreement Program) and Section 404 of the Clean Water Act (Dredge and Fill Permit).

b - c) In analyzing the potential impacts to riparian habitats, wetlands, and the swales ("creeks") on the project site; the policies/regulations and goals of two important local regulatory programs were utilized as reference. These include:

- The City of Carpinteria Creeks Preservation Program (City of Carpinteria, 2005); and
- City of Carpinteria General Plan/Local Coastal Land Use Plan (City of Carpinteria, 2003)

City of Carpinteria Creeks Preservation Program, Section 3.3.2 – Biological Resources

Objective 2 of the program states:

"Restore aquatic, riparian and upland habitats occurring within and adjacent to local creeks, including sensitive communities and species. Sensitive communities and species are defined as those designated as endemic, rare, threatened, endangered, or of concern by the federal, state, and/or local governments."

In support of this Objective, the City will not permit projects (whether public or private) that would result in the significant fragmentation of biological habitat within creek Environmentally Sensitive Habitat Areas (ESHA) and/or creek setback areas established by the General Plan/Local Coastal Plan (LCP) and Zoning Ordinance-ESHA Overlay District. Likewise, the City will not permit projects that would create significant barriers to the movement or migration of fish and wildlife through creeks and adjacent habitats (i.e., wildlife corridors will be maintained). Significant fragmentation or barriers are manmade features, structures, or activity that would block or greatly reduce the movement of wildlife between recognized natural habitat areas or that would significantly reduce the biological value or diversity of the habitat.

Implementation Policy: A 50-foot buffer or setback is required from the top of the upper banks of the creeks or existing edge of riparian vegetation (dripline)

The following City Local Coastal Plan/Land Use Plan (LUP) objectives and wetlands polices were also considered in the analysis of potential impacts and in project design to avoid potential impacts to protected resources:

- **Objective LU-1a:** *The policies of the Coastal Act (Public Resources Code Section 30210 through 30263) are hereby incorporated by reference (and shall be effective as if included in full herein) as the guiding policies of the Land Use Plan.*
- **Objective LU-1c:** *Where policies in the Land Use Element overlap, the policy that is most protective of resources (e.g., land, water, air, etc.) shall take precedence.*
- **Objective OSC-1a:** *Protect Environmentally Sensitive Habitat Area(s) (ESHA) from development and maintain them as natural open space or passive recreational areas.*
- **Objective OSC-6:** *Preserve the natural environmental qualities of creekways and protect riparian habitat.*

As indicated in the response to Section a, above, focused wetland delineation studies and riparian vegetation mapping of sensitive resources on the property were conducted. Project proponents then consulted with the City and CCC staff, which included a site visit to evaluate proposed project development and existing conditions. Following the site visit and review of project site technical studies and preliminary project design plans, the CCC determined the following[4]:

- The creeks-related development standards apply to both the channel along the western boundary of the property (Swale A), and the channel along the northern property line (adjacent to the farm fields) (Swale B);
- The mandatory 50' creek buffer area would be an appropriate location to use for onsite stormwater measures (i.e., bioretention and biofiltration) as part of a habitat enhancement/restoration project; and
- The project should include a habitat restoration/enhancement component for the creek (drainage channels) itself to improve water quality before stormwater leaves the project site via the culvert under Via Real and U.S. Highway 101 and enters the protected Carpinteria Salt Marsh.

Based on the City of Carpinteria's Creeks Preservation Program requirements, objectives of the LCP/LUP, and the CCC determination; the project was re-designed to protect the isolated riparian habitat in Swale B in place, and incorporate a 50-foot setback from drainage swale A, thus avoiding all direct impacts to the riparian area associated with swale B (considered to be "ESHA" or Environmentally Sensitive Habitat Area) and to preserve the channel and hydrologic flow integrity of Swale A. In addition, in adherence to the CCC requirements and to reduce potential indirect impacts to the swales to a level below significance, the project proposes to implement MM BIO-2, Riparian Habitat Enhancement/Restoration and MM BIO-3 Storm Water Quality Enhancement. ~~Figure 3~~Attachment 4 is an overlay of the engineering plans, which depicts the design of the stormwater treatment system. The stormwater system will be designed to provide both water quality enhancement and serve as a small wetland habitat.

Due to the proposed habitat restoration/enhancement of the riparian habitat within on-site streambeds, a Section 1600 permit would be required from the California Department of Fish and Wildlife (CDFW). In addition, projects involving discharges of pollutants to waters of the state are regulated under Section 402 of the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System permit (NPDES) program, and must have a Stormwater Pollution Prevention Plan (SWPPP) reviewed and approved by the Central Coastal Regional Water Quality Control Board (RWQCB) and the City. Permitting such as those discussed above would occur after the completion of the CEQA process and approval from the City. With the incorporation of MM BIO-2 and MM BIO-3, potential minimal, indirect impacts to drainage swales on the site will be reduced, in adherence to the City's Creeks Preservation Program, LCP/LUP goals and policies and

[4] CCC communication relayed to project team via Mr. Nick Bobroff, City of Carpinteria.

the CCC requirements. Therefore, potential impacts to protected creek habitat on the site would be reduced to less than significant levels.

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?*

Potentially Significant Impact Unless Mitigation Incorporated

Please refer to the response to Section b, above. The project was designed to avoid all direct impacts to both drainage swales A and B, which are potentially subject to state regulations. However, the project will be subject to both Section 1600 and NPDES permits due to habitat restoration within a watercourse and the inclusion of a retention basin for stormwater. Although MMs BIO-2 and BIO-3 would be implemented to enhance the riparian habitat associated with drainage swales A and B, preserve channel integrity of swale A and to enhance the storm water quality exiting the project site, before it discharges to protected habitat in the Carpinteria Salt Marsh, south of the project, the project would still require permitting as detailed in Section b. With the implementation of these mitigation measures, the project impacts to potential state or federally protected wetlands would be reduced to less than significant.

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?*

No Impact

No native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or native wildlife nursery sites are present on the project site. Therefore, the proposed project would not have an impact on wildlife movement or native wildlife nursery sites. There would be no impact.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a creek preservation policy or tree protection ordinance?*

Potentially Significant Impact Unless Mitigation Incorporated

Project plans do not entail removal of any native or protected trees. As discussed under Section b, above, the project has conducted technical studies to inventory potential jurisdictional wetlands on the project site, consulted with the City of Carpinteria and the CCC and in adherence to LCP/LUP and City's Creeks Preservation Program; has re-designed the project to avoid all direct impacts to potential jurisdictional waters and protected swales on the site. MMs BIO-2 and BIO-3 are also proposed to enhance riparian habitat and to enhance storm water quality, respectively. As part of MM BIO-2, a Riparian Habitat Enhancement/Restoration Plan will be prepared, which will contain the details of the riparian habitat enhancement associated with drainage swales A and B, and the stormwater wetland treatment system to be created. With the implementation of MM BIO-1 through MM BIO-3, the project would not conflict with any local policies or ordinances protecting biological resources, such as a creek preservation policy or tree protection ordinance and any potential indirect impacts to protected swales would be reduced to less than significant levels.

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?

No Impact

The project site is not subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to biological resource impacts. However, the project's contribution to cumulative biological resource impacts would not be considerable and would be further reduced through the implementation of the project specific measures addressing nesting and migratory bird protection, protection of wetlands/creek ways (swales) on the project site in adherence to LCP/LUP and City's Creeks preservation program requirements, and enhancement of ESHA riparian habitat and storm water quality

Required Mitigation Measures

The below Mitigation Measures (MMs) are required to reduce impacts to potential nesting/migratory birds, and wetlands/riparian habitat, to less than significant levels.

BIO-1. Nesting Bird Surveys. To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 30), if feasible. If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the Project Boundary, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/ nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

Plan Requirements: The most suitable bird nesting habitat shall be identified on the building and grading plans. This Measure shall be printed on all building and grading plans.
Timing: A Qualified Biologist will conduct a pre-construction nesting bird survey, no more than 14 days prior to the initiation of construction.

Monitoring: City of Carpinteria's Community Development Department (CDD) shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. The qualified biologist shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program. A report summarizing the results of the nesting bird survey and monitoring activities shall be prepared and submitted to the City, once all survey and monitoring activities are completed.

BIO-2. Riparian Habitat Restoration Plan. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will restore and enhance the riparian habitat associated with drainage swales A and B, and preserve these habitat areas for the life of the project. Enhancement would include removal of non-native plants and planting of appropriate riparian native plants such as arroyo and red willows. As part of this MM, a Riparian Habitat Restoration/Enhancement Plan (Plan) will be prepared for the project. This Plan will provide details on the restoration of the riparian areas associated with swales A and B and will include such elements as a planting plan, location of enhancement/restoration, irrigation (if needed), and success and monitoring criteria. The Plan will also incorporate biological aspects of the stormwater wetland treatment system (see MM BIO-3); that will be created to enhance stormwater quality. Details such as design of the wetland treatment system, planting plan and monitoring of this water quality enhancement; will be included in the Plan.

Plan Requirements/Timing: The Applicant shall provide a copy of the Riparian Habitat Restoration Plan (Plan) to the CDD for review and approval, prior to issuance of building permits, and will require that the restoration work be completed prior to Occupancy clearance for the building. CDD shall refer the Plan to the City's consulting biologist for review and approval prior to CDD acceptance of the Plan. The Plan must also outline protective measures for the riparian habitats that must be implemented during construction (i.e., fencing, exclusion zones, etc.) to avoid potential impacts to sensitive riparian habitats. The Restoration Plan will also require approval from CDFW as a Streambed Alteration Agreement will be required. Protected habitat areas shall be preserved for the life of the project.

Monitoring: Following the enhancement/restoration of the riparian habitat, a qualified biologist will conduct one (1) annual inspection of Swales A and B and associated riparian habitat for 5 years, to document that the habitat is viable and providing the intended ecological functions and values. The monitoring frequency for the riparian habitat restoration/enhancement associated with Swales A and B may be conducted in tandem with the monitoring for the Stormwater Treatment Wetland Habitat (MM BIO-3). The monitoring & reporting elements will be detailed in the Plan. The Biologist will submit annual reports to CDD, based on the annual monitoring criteria. The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.

Applicant shall record a covenant in a form approved by CDD requiring the protection and preservation of the protected riparian areas for the life of the project. Said covenant shall be recorded prior to final occupancy clearance.

BIO-3. Stormwater Treatment Wetland. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will design and construct a stormwater treatment wetland habitat as part of the proposed treatment swale to enhance stormwater quality. The small freshwater wetland will be designed to provide both enhancement of stormwater quality and serve as a wetland habitat for wildlife.

Plan Requirements/Timing: The Applicant will provide the final design plans showing the stormwater treatment wetland, on all grading plans submitted to the City, for review and approval prior to issuance of any permits for construction. The biological aspects of the stormwater treatment wetland habitat (including planting plan); will be detailed in the Riparian Habitat Restoration/Enhancement Plan (Plan), as identified in

MM BIO-2. The Stormwater Treatment Wetland Plan will also require approval from the RWQCB, if a Section 402 water quality certification or other regulatory permitting is required.

Monitoring: Following the construction of the treatment wetland, a qualified biologist will conduct one (1) annual inspection of the treatment wetland and swale, for 5 years, to document that the system is viable and providing the intended ecological functions and values. CDD shall review and approve the design, prior to the issuance of grading or building permits. The monitoring and reporting program for the treatment wetland can be integrated with the Riparian Habitat Enchantment/Creation program (MM BIO-2). The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.

Residual Impact

With incorporation of these mitigation measures, residual impacts would be less than significant.

5. CULTURAL RESOURCES **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

City of Carpinteria Environmental Thresholds

- City of Carpinteria Environmental Thresholds, Resolution 4082 (1994), *Cultural Resources.* This threshold determines whether a project may disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group and whether it may conflict with established religious uses of the area. Cultural resources include prehistoric, historic, and Native American ethnic sites.

  Each project is reviewed to see if it is within a sensitive area. If this is so, or it is in a potentially sensitive area based on known archaeological site distribution patterns, a qualified archaeologist is required to evaluate the significance of the site as defined in CEQA and National Historic Preservation Act.

- City of Carpinteria Environmental Thresholds, Resolution 4082 (1994), *Mitigation Measures.* Measures capable of reducing or avoiding potentially significant impacts shall be identified during the preliminary evaluation of non-exempt projects. A broad range of potential mitigations should be considered to maximize the potential for project modifications which mitigate adverse impacts and enable projects to qualify for Negative Declarations. The list of mitigation measures identified at the Initial Study stage must later be refined and specified to meet the standards for inclusion in the environmental document.

Existing Environmental Setting

The project site currently supports a church building, parking lot, a child's playground. The project site has also been previously disturbed by both agricultural and residential development. The site is not identified as a sensitive cultural area on any City or County documents, and there are no known cultural resources within the site.

Project Specific Impacts

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 formal cemeteries?*

Potentially Significant Impact Unless Mitigation Incorporated

The proposed project consists of the demolition of existing development and the development of a new 72-guestroom hotel, including a fitness center, business center, breakfast area, meeting room, outdoor pool, and outdoor garden patio.

In 2020, on behalf of the proposed project, consultation was initiated with the Central Coast Information Center (CCIC), Department of Anthropology, University of California, Santa Barbara, relative to a records search for potential archaeological and built environment cultural resources. CCIC conducted a records search within a 2,000-foot radius of the project site.[5] The search indicated there are no historic, or archaeological resources recorded for the project site. Further, CCIC analysis indicated that archaeological sites in this broad area tend to be located along watercourses, on coastal terraces, and on alluvial benches. No such physical & environmental conditions are present on the project site.

Based on the results of the records search, CCIC indicated there is a low to moderate potential for cultural resources to be present within the project area. Though the estuary and Santa Monica Creek are nearby, CCIC concluded that it is unclear whether the project area was a seasonal wetland prior to modern development. CCIC maps and records do not clarify this. Discussions with Chumash tribal representative, Julie Tumamait, suggested the area could contain unknown cultural resources and that monitoring of initial ground disturbances is encouraged. Based on ~~CCIC~~ the recommendations from CCIC and Ms. Tumamait, Mitigation Measure MM CR-1, is proposed. With the implementation of this measure, potential impacts to cultural resources would be reduced to less than significant.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to cultural resource impacts. However, the project's contribution to cumulative cultural resource impacts would not be considerable and would be further reduced through the implementation of the project specific measure addressing standard discovery provisions.

[5] Central Coast Information Center (CCIC) records search, letter dated August 4, 2020.

Required Mitigation Measures

CR-1. Cultural Resources ~~Discovery~~ Monitoring. ~~In the event archaeological remains are encountered during grading, work shall be stopped immediately or redirected until a CDD qualified archaeologist and Native American representative are retained by the applicant to evaluate the significance of the find pursuant to Phase 2 investigation specifications of the City Archaeological Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with City Archaeological Guidelines and funded by the applicant.~~ Applicant shall develop and submit for review and approval by the Community Development Department a Construction Monitoring Treatment Plan to ensure that any unknown cultural resources are adequately recorded, evaluated, and if significant, mitigated. The Construction Monitoring Treatment Plan shall include, at minimum, the following required elements:

a. Execution of a scope of work and contract for the monitoring of initial ground disturbances (e.g., rough grading and excavation) by a qualified archaeologist and Chumash Native American observer.
b. Development and adoption of procedures for notifying the City of Carpinteria and other involved or interested parties in case of discovery of unknown cultural resources. The qualified archaeologist and Chumash Native American observer shall have the authority to temporarily halt or redirect construction activities in the vicinity of any potentially significant discovery to allow for adequate recordation and evaluation.
c. Development and adoption of procedures to be used to record, evaluate, and mitigate any new discoveries with a minimum of delay; and
d. Development and adoption of procedures to follow in case of discovery of human remains. In the event that isolated human remains are encountered, consultation with the most likely Native American descendent, pursuant to Public Resources Code §5097.97 and §5097.98, would apply.

Results of the Construction Monitoring Treatment Plan shall be documented in a report after completion of initial ground disturbances. A copy of the report shall be submitted to the Community Development Department for review and approval.

Plan Requirements/Timing: The Construction Monitoring Plan shall be prepared by a qualified archaeologist and submitted to the Community Development Department for review and approval prior to issuance of any engineering or building permits. A copy of the executed contract shall be submitted to the Community Development Department for acceptance prior to issuance of any engineering or building permits~~This condition shall be printed on all building and grading plans~~.

Monitoring: Contracted qualified archaeologist and Chumash Native American observer shall be responsible for monitoring initial ground disturbance activities (e.g., rough grading and excavation), as applicable. Contracted qualified archaeologist shall be responsible for submitting the final report summarizing and documenting all monitoring activities to the Community Development Department within sixty (60) days of the completion of construction~~CDD shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. In the event that potentially significant cultural or archaeological resources are uncovered during ground disturbing activities, all work on the site will cease and a qualified archaeologist will be contacted in addition to the Native American Heritage Commission~~.

Residual Impact

With the implementation of the proposed mitigation measure, there would be no residual impacts.

6. ENERGY Would the project:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Environmental Thresholds

Neither the City of Carpinteria nor the County of Santa Barbara have identified significance thresholds for electrical and/or natural gas service impacts. CEQA Appendix G provides thresholds used to evaluate potential Energy impacts of the proposed project.

Existing Environmental Setting

Private electrical and natural gas utility companies provide service to customers in Central and Southern California, including the unincorporated areas of Santa Barbara County. In Carpinteria, electrical service is provided by Southern California Edison and gas service is provided by the Southern California Gas Company. The City of Carpinteria also recently joined 3CE, Central Coast Community Energy. Central Coast Community Energy is a Community Choice Energy agency established by local communities to source clean and renewable energy in Santa Barbara County while retaining the local utility provider's traditional role in delivering power and maintaining electric infrastructure, as well as billing.

Project Specific Impacts

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?*

Less Than Significant Impact

Neither the City nor County has identified significance thresholds for electrical and/or natural gas service impacts (Thresholds and Guidelines Manual). The proposed project consists of the development of land for the construction of a new 72-guestrooms hotel. A church, child's play area, parking lot, vegetable garden, and storage sheds would be demolished to accommodate the proposed project. During the construction phase, energy efficient construction equipment would be utilized. The hotel would be constructed in compliance with current building code requirements in effect at the time of building permit issuance, including Title 24 energy efficiency requirements and Green Building Code requirements. The Hotel would also be serviced by local Waste Management companies, which would also provide recycling services, which the hotel will promote. In summary, the project would have minimal long-term energy requirements and a negligible demand on regional energy needs. Thus, the environmental impact from proposed project

development resulting in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation would be less than significant.

Cumulative Impacts:

The project's contribution to the regionally significant demand for energy is not considerable and is therefore less than significant.

Recommended/Required Mitigation Measures:

The project would result in less than significant impacts upon energy consumption. As no significant energy impacts are anticipated, no mitigation would be required.

Residual Impact:

No residual impacts would occur.

7. GEOLOGY AND SOILS **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?		X		
b) Result in substantial soil erosion or the loss of topsoil?		X		
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?		X		
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?		X		

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?				X
f) Director or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

City of Carpinteria Thresholds

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 conflict with any of the Federal, State, or local policies, ordinances or regulations listed above.

Existing Environmental Setting:

The Carpinteria Valley is subject to geologic hazards related primarily to earthquakes and secondary hazards, such as landslides and liquefaction. The project site is located over one mile north of the Rincon and Carpinteria Faults. These faults are not delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, as they are not "active" faults. The State of California Conservation Department, Division of Mines and Geology (CDMG) has calculated the probabilities for earthquakes throughout the State of California. Research indicates a 10 percent 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 project area. As noted in the Carpinteria General Plan/Coastal Plan, there are no Alquist-Priolo Special Studies Zones for the Carpinteria Planning Area. There has been no recent movement (within the last 11,000 years), or recent fault rupture that has been identified along the known faults in the area.

Project Specific Impacts:

Pacific Material Laboratory of Santa Barbara, Inc., conducted a geotechnical study of the project site and prepared a geotechnical report, attached in Appendix E (Pacific Materials Laboratory, 2016). The analysis for this section incorporates this study by reference, as applicable.

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?*

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?*

Potentially Significant Impact Unless Mitigation Incorporated

There is the potential for an earthquake in the Carpinteria area that would cause seismic shaking and could affect the project site. However, the project would be required to conform to the California Building Code (CBC) requirements. In addition, only previously manipulated and engineered slopes on the property are proposed to be minimally re-graded to achieve a finished slope face that is more gradual (less steep) than the existing slope faces. The final slope angles would be 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 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 undeveloped slope areas to minimize the potential for shallow erosion to occur, which would ensure that impacts would be less than significant.

The geotechnical report prepared by Pacific Materials Laboratory (PML, 2014) identified compressible clay layers that were encountered in the subsurface exploration at depths ranging from 3 to 13 feet below the existing ground surface. The underlying soils were found to have a low potential for expansion. The potential for liquefaction was identified to be high. A Liquefaction Analysis contained in the report predicts a total anticipated settlement of 1.5 inches, due to soils prone to liquefaction and corresponding volumetric compression. This compression would potentially contribute to a differential settlement of 0.75 inches to proposed structures, in a seismic event. Based on this analysis, the report indicates that "cosmetic damage to the building due to the settlement will require repair and the floor system may require re-leveling. However, risk to the human occupancy is considered extremely low." Because of the liquefaction potential, mitigation measure GEO-1 is proposed. This measure outlines grading, excavation/recompaction, and foundation design recommendations designed to provide stability and reduce the potential risk from liquefaction and other seismic activity-related impacts. Implementation of this mitigation measure would reduce impacts to a less than significant level.

b) *Result in substantial soil erosion or the loss of topsoil?*

Potentially Significant Impact Unless Mitigation Incorporated

Grading on the site would involve 4,700 Cubic Yards (CY) of cut and 2,900 CY of fill. Thus, approximately 800 CY would need to be exported from the site. Substantial soil erosion is not anticipated as the site is

generally flat, with a less than two percent (2%) overall slope from the north to the south property lines. Nevertheless, project grading activities would occur within a 100-year floodplain and within 50 feet of the onsite Swale A, which has hydrologic connectivity to the Carpinteria Salt Marsh. Since the project would disturb an area larger than one acre, development of a Storm Water Pollution Prevention Plan (SWPPP) would also be required. Therefore, under Section 10- Hydrology and Water Quality, The Low Impact Design (LID)/Stormwater measures that will be implemented under **MM WQ-1** and **MM WQ-2** will conform with the National Pollutant Discharge Elimination System (NPDES) and MS4 permit requirements and entail the development of a SWPPP for the project. In addition, **MM WQ-3** requires the preparation of a Soil Erosion and Sediment Control Plan. Use of the Best Management Practices (BMPs) that will be detailed in the mandatory SWPPP and Soil Erosion and Sediment Control plan will further prevent soil erosion and the discharge of sediment into the local waterways and storm drains during the project's construction phase. Although proposed earthmoving activities on the site would occur within both a 100-year floodplain and within 50 feet of Swale A, which itself has hydrologic connectivity to the Carpinteria Salt Marsh, this alone does not make it more likely that significant impacts would occur if the mitigation measures are applied and the SWPPP/BMPs are adhered to. Therefore, these potential impacts would be reduced to less than significant levels with the incorporation of the identified mitigation measures.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact

The proposed project would be connected to, and served by, the Carpinteria Sanitary District (CSD). Therefore, septic systems would not be required, and no impact would occur.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact

The potential for paleontological resources to be encountered during project grading is very low or none, as the construction is proposed on a developed lot. The soils on the parcel were historically subjected to extensive cut and fill, which have been mechanically manipulated for the previous construction. Therefore, project impacts to paleontological resources would be less than significant.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. 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 and would be further reduced through the implementation of the project specific measures addressing standard Uniform Building Code provisions and grading and erosion control.

Required Mitigation Measures

GEO-1. Geotechnical Report Compliance. Project construction and grading shall comply with all recommendations for Grading, Foundations and Retaining Walls, contained in the Geotechnical Engineering Report prepared by Pacific Materials Laboratory, to the satisfaction of the City Engineer.

Plan Requirements: Grading and building plans shall include all required measures as determined by the City Engineer.

Timing: Prior to issuance of building and grading permits and during grading and construction.

Monitoring: The City Engineer shall site inspect during grading. The City Building Inspector shall ensure that all recommendations are implemented during construction, by conducting periodic site inspections during and at the completion of construction.

Compliance with water quality measures WQ1-WQ-3 are also necessary to reduce Geology/Soils impacts to less than significant levels.

Residual Impact: With incorporation of the mitigation measure GEO-1, and mitigation measures WQ-1 through WQ-3, impacts would be reduced to less than significant.

8. GREENHOUSE GAS EMISSIONS Would the project:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Thresholds of Significance

The Santa Barbara County Air Pollution Control District does not publish numerical thresholds for GHG emissions. Projects in SBCAPCD's footprint rely on the following thresholds from the San Luis Obispo Air Pollution Control District (SLOAPCD).

Based on the adopted air district guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

1. Qualified GHG Reductions Strategies. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,

2. Bright-Line Threshold. A project would have a significant impact if it exceeds the "bright-line threshold" of 1,150 metric tons CO2E/year; OR,

3. Efficiency Threshold. A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO2E/service population/year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled.

Existing Environmental Setting:

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs), analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O_x), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6) (Cal EPA, 2006).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (Cal EPA, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Project Specific Impacts:

Construction GHG Emissions

Greenhouse gas emissions resulting from construction of the project were estimated and included herein for disclosure purposes. Project-generated GHG emissions are estimated using CalEEMod consistent with the SBCAPCD recommendations for project-level review because CalEEMod can quantify indirect GHG emissions and GHG mitigation (SBCAPCD 2015a). Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activity were quantified using the CalEEMod. On-site sources of GHG emissions include off-road equipment, and off-site sources include hauling and vendor trucks and worker vehicles.

Operational GHG Emissions

Based on the adopted air district guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

1. Qualified GHG Reductions Strategies. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,

2. Bright-Line Threshold. A project would have a significant impact if it exceeds the "bright-line threshold" of 1,150 metric tons CO2E/year; OR,

3. Efficiency Threshold. A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO2E/service population/year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled. As the project would be below the "bright-line" threshold of 1,150 metric tons CO2E/year (see Table 8-1, below), impacts would be less than significant.

Table 8-1. Project Operational Greenhouse Gas Emissions

Summary	CO2e
Project Operational Emissions Per Year (plus amortized construction emissions)	997.59 MT/yr

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact

The anticipated operational and amortized greenhouse gas emissions resulting from the Project are below identified threshold levels; implementation of the Project would therefore not result in Project-specific or site-specific significant adverse impacts from greenhouse gas emissions within the Project study area. Therefore, no mitigation measures are needed.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant Impact

California passed the California Global Warming Solutions Act of 2006 (AB 32). AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. Under AB 32, California Air Resources Board (CARB) must adopt regulations by January 1, 2011, to achieve reductions in GHGs to meet the 1990 emission cap by 2020. On December 11, 2008, CARB adopted its initial Scoping Plan, which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan.

SB 375 requires Metropolitan Planning Organizations (MPO's) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPO's, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

Executive Order B-30-15 establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent

below 1990 levels by 2050. Executive Order B-30-15 requires MPO's to implement measures that will achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth, and that designate locations for land uses to regulate growth.

The Project is consistent with the currently adopted General Plan for the City and the adopted SBCAG Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and is therefore consistent with the population growth and VMT applied in those plan documents. Therefore, the Project is consistent with the growth assumptions used in the applicable AQP.

CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan. The current plan has identified new policies and actions to accomplish the State's 2030 GHG limit. Below is a list of applicable strategies in the Scoping Plan and the Project's consistency with those strategies.

- California Light-Duty Vehicle GHG Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs for long-term climate change goals.
- The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to light-duty vehicles that would access the Project. The Project would not conflict or obstruct this reduction measure.
- Energy Efficiency – Pursuit of comparable investment in energy efficiency from all retail providers of electricity in California. Maximize energy efficiency building and appliance standards.
- The Project is consistent with this reduction measure. Though this measure applies to the State to increase its energy standards, the Project would comply with this measure through existing regulation. The Project would not conflict or obstruct this reduction measure.
- Low Carbon Fuel – Development and adoption of the low carbon fuel standard.
- The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to the fuel used by vehicles that would access the Project. The Project would not conflict or obstruct this reduction measure.

Based on the assessment above, the Project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, any impacts would be less than significant, and no mitigation would be required.

Cumulative Impacts:

Cumulative development throughout the Carpinteria Valley would incrementally contribute to greenhouse gas emission impacts. However, the project's contribution to cumulative greenhouse gas emission impacts would not be considerable.

Recommended/Required Mitigation Measures:

None required.

Residual Impact:

There will be no residual impacts.

9. HAZARDS AND HAZARDOUS MATERIALS Would the project:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
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?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Environmental Thresholds

Appendix G of the CEQA Guidelines indicates that a project would have a significant impact due to hazards or hazardous materials, if it would create a public health hazard, expose people to potential health hazards

or pose a threat to the environment through the use, production or disposal of materials which pose a hazard. The County's safety thresholds address involuntary public exposure from facilities or activities involving significant quantities of hazardous materials (e.g., oil wells, pipelines, rocket propellants, chlorine, etc.).

Existing Environmental Setting:

The County's safety threshold addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

There is no evidence that significant amounts of hazardous materials were used, stored or spilled on the premises or within 2,000 feet of the premises in the past, according to the California Water Board GeoTracker and the EPA "Cleanups In My Community Map" (GeoTracker, 2021). Since the site has been used prior for church and community gathering, past use and storage of chemicals is unlikely. The site may have been used for agriculture upwards of 25 years ago. Agricultural chemicals may have been stored here, though not in significant quantities given the length of time since agricultural activities ceased on the property and the relatively small area in cultivation.

Project Specific Impacts:

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
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?*

Less Than Significant Impact

The project site is developed with a church and a playground. The proposal to develop the site with a hotel use would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hotel properties typically do not cause significant hazards to the public or the environment through an accidental release of hazardous materials into the environment. The types and quantities of hazardous materials present or stored on the site would be limited to those commonly associated with hotel uses, such as batteries, oil, paints, solvents, fertilizers and gasoline. There are no aspects of the proposed use that would include or involve hazardous materials at levels that would constitute a hazard to human health or the environment, or require the preparation of a Hazardous Materials Business Plan. The use of common household materials (cleaners, garden and automotive products, etc.) on the project site would not result in significant hazardous materials/waste impacts. Traffic that would be generated by the project would not substantially interfere with emergency response capabilities to the project site or to other properties in the project area. Therefore, impacts regarding the use, release and transport of hazardous materials would be less than significant.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Less Than Significant Impact

The closest school is Aliso Elementary School, which is over a half a mile from the project site. The closest hospital is over 10 miles away from the project site. The proposed hotel project would not emit or involve the handling of hazardous materials, substances or waste. Therefore, impacts regarding hazardous materials near schools would be less than significant.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Less Than Significant Impact

A portion of the property in the north, behind the existing church building was used for small-scale agricultural operations, primarily as an orchard. Due to this relatively small-scale agricultural operation, no out of the ordinary contaminants are to be expected.

The following databases compiled pursuant to Government Code Section 65962.5 were checked (November 29, 2021) for known hazardous materials contamination at the project site:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database.
- Geotracker search for Leaking Underground Storage Tanks (LUST); and

The CERLCIS and GeoTracker databases showed no evidence of toxic substances at the project site or the surrounding area of the project site. Thus, the proposed project development would not create a significant hazard to the public or the environment, and therefore, potential impacts from hazardous materials would be less than significant.

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 for people residing or working in the project area?*

No Impact

The airport closest to the project site is the Santa Barbara Airport, located approximately 19.6 miles west of the project site. The City of Carpinteria does not have any airports or airstrips, and the project site is not located within an airport Land Use Plan, or within two miles of a public or private airstrip. No impact would occur.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact

The project site is located on a developed parcel adjacent to residences, urban uses, U.S. Highway 101, and agricultural lands. The development of a 72-guestroom hotel on the site would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impact would occur.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

No Impact

The project site is located adjacent to multi-family residences and agricultural lands. The project site is not adjacent to or near wildlands. As indicated in Section 20- Wildfire; the project site is not located in a Fire Hazard Severity Zone, according to the Fire Hazard Severity Zone Map adopted by Cal Fire in 2007. Moderately severe fire hazard zone occurs over 1.5 miles from the project site and a very high severity zone occurs over 2.5 miles to the north (Cal Fire – Fire Hazard Severity Zone Map, 2007). Therefore, the project would not have the potential to expose people to a significant risk because of wildland fires. In addition, the facility would have a fire hydrant that would be installed as part of the project development, that would mitigate the risk from wildfire. No impact would occur.

Cumulative Impacts:

Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the City.

Recommended/Required Mitigation Measures:

None are recommended or required.

Residual Impact:

Residual hazardous materials / safety impacts would be less than significant.

10. HYDROLOGY AND WATER QUALITY **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede		X		

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; or iv. Impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?		X		
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		X		

Environmental Thresholds

The City of Carpinteria's Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (1997), are utilized as environmental thresholds for assessing impacts of the proposed project, relative to Hydrology and Water Quality:

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).

The analysis and determinations in this section are based on the following drainage and hydrology studies conducted for this project:

- Preliminary Drainage Report- Evaluation of BMPs and Drainage Improvements at 4110 Via Real in Carpinteria, (Stantec 2016, Revised March 2017),
- Flood Hazard Determination Report, Santa Barbara County Flood Control and Conservation District Water Agency, December 10, 2015).
- Flood Determination Memo - 4110 Via Real, Accessor Parcel Number (APN) 004-017-022 (Memo from Stantec to City of Carpinteria, April 1, 2016).

Copies of these documents are provided in Appendix F.

Water Resources Thresholds

A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each over-drafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project's impacts on water resources are considered significant.

A project is also deemed to have a significant effect on water resources if a net increase in pumping from a well would substantially affect production or quality from a nearby well.

Existing Environmental Setting:

The project site slopes gently to the southwest and southeast at a 0.5 percent slope. The site supports Hydrological soils Group Type Cb soils (Camarillo fine sandy loam, fine substratum), per United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (www.websoilsuvey.sc.egov.usda.gov). The proposed project is a 2-story hotel building surrounded by paved parking and landscaping. Agricultural fields to the north of the project site drain to an existing headwall and a 36" diameter storm drain that cross under Via Real and the U.S. Highway 101 to the south (Stantec 2016, revised 2017). The drainage runoff from the northerly adjacent properties currently drains along the western side of the property in drainage swale A and the drainage along the western boundary of the site drains to the existing drop inlet at Via Real.

The groundwater depth below natural ground at the site is approximately 8-10 feet. The project site is located within flood Zone A, as shown in the Flood Insurance Rate Map (FIRM) for the area, prepared by the Federal Emergency Management Agency (FEMA) [6]. Base Flood Elevations (BFE) have not been established for this Zone.

The project site currently receives municipal water service from the Carpinteria Valley Water District.

Project Specific Impacts:

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or ground water 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? 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; or*

[6] FIRM Panel 0683C1420G, December 4, 2015.

iv. Impede or redirect flood flows?

Potentially Significant Impact Unless Mitigation Incorporated

The project site is currently developed, with existing structures and paved areas. The proposed project consists of the demolition of existing development and the development of a new 72-guestroom hotel, including a fitness center, business center, breakfast area, meeting room, outdoor pool, and outdoor garden patio. Table 10-1 below shows the relevant data relative to post developmental conditions (Stantec 2016, revised 2017). Project construction could result in erosion and/or sedimentation that could potentially affect adjacent wetlands. These effects could also result in impediments to groundwater recharge as well as changes to the existing drainage patterns on-site. Such patterns would also be affected by project grading. Unless properly mitigated, project construction activities could therefore result in potentially significant effects to hydrology and water quality.

Table 10-1. Project Data, 4110 Via Real, Carpinteria

Project Name/Number	Via Real Hotel
Application Submittal Date	September 6, 2016
Project Location	4110 Via Real, Carpinteria, CA 93013
Project Phase No.	NA
Project Type and Description	2-story hotel building surrounded by paved parking
Total Project Site Area (acres)	2.61 acres
Total New Impervious Surface Area	0.92 acres
Total Replaced Impervious Surface Area	0.75 acres
Total Pre-Project Impervious Surface Area	0.75 acres
Total Post-Project Impervious Surface Area	1.68 acres
Net Impervious Area	NA (Tier 3)
Watershed Management Zone(s)	1
Design Storm Frequency and Depth	25-year rainfall event
Urban Sustainability Area	No Applicable

The project would be required to comply with Chapter 8.10 of the City of Carpinteria Municipal Code, which addresses stormwater pollution prevention. Additionally, the project would be required to comply with the Non-Point Discharge Elimination System (NPDES) and the Construction General Permit (CGP) program to control both construction and operational (i.e., occupancy) storm water discharges. In California, the State Water

Quality Control Board administers the NPDES permitting program and is responsible for developing permitting requirements. Under the conditions of the permit, the project applicant would be required to eliminate or reduce non-stormwater discharges to waters of the nation, develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for project construction activities (developed by a Qualified SWPPP Developer and in compliance with the CGP), and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the project site's SWPPP. The state permit prohibits the discharge of materials other than storm water discharges and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 Code of Federal Regulations (CFR) 117.3 or 40 CFR 302.4. The state permit also specifies that construction activities must meet all applicable provisions of Sections 30 and 402 of the CWA.

In order to reduce potential impacts from post development storm water runoff, and to comply with the City of Carpinteria's Stormwater Management Plan (CMC 8.10) and Tier 3 Post-Construction Requirements (PCRs), the project proposes a variety of Low Impact Design (LID) mitigation measures identified as Water Quality (WQ) measures, which are also described in the Drainage Study Report (Stantec 2016, revised 2017), included in Appendix F. Measures include preservation of natural drainage features, use of permeable pavements, and controlling all runoff on site. Other measures include filter inserts, and directing runoff from impervious areas to pervious, self-retaining landscaped areas. In addition, a stormwater treatment swale and detention basin are proposed as treatment of runoff water, before it exits the site. The treatment swale will include a freshwater wetland habitat (see MM BIO-3, under Biological Resources Section). The stormwater quality measures are depicted in Figure 2 – Stormwater Quality Plan. The treatment swale will also be designed to promote percolation into the ground which will result in the slow and controlled discharge of runoff into the below ground.

The LID/Stormwater measures detailed in MM WQ-1 will ensure that the proposed project would not violate water quality standards or waste discharge requirements, substantially decrease groundwater, or interfere with groundwater recharge. The reduction in the amount of impervious surfaces, preservation of natural drainage on the site, construction of a stormwater treatment swale/retention basin and a treatment wetland will all collectively retain/enhance the stormwater discharge from the site. In addition, MM WQ-2 is proposed, which includes conformance with the NPDES permit requirements. In addition, MM WQ-3 is required, which entails the preparation and implementation of a Soil Erosion and Sediment Control Plan. Use of the Best Management Practices (BMPs) that will be detailed in the mandatory SWPPP and Soil Erosion and Sediment Control plan will further prevent soil erosion and the discharge of sediment into the local storm drains during the project's construction phase. As a result, the construction impacts would be reduced to less than significant levels with mitigation incorporated. Once constructed, the project will not introduce polluted runoff into the existing storm drain system. In addition, the project will not create excess runoff that will exceed the capacity of the existing storm water drainage system. With incorporation of mitigation measures WQ-1, WQ-2 and WQ-3. impacts would be reduced to less than significant levels.

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?

Potentially Significant Impact Unless Mitigation Incorporated

As indicated earlier, the project site is located in Zone A, on Flood Insurance Rate Map (FIRM) Panel 060831420, based on the Flood Hazard Determination (Santa Barbara County Flood Control and Water Conservation District & Water Agency, 2015). Zone A is the flood insurance rate zone that corresponds to

the 100-year floodplains that are determined in the Flood Insurance Study (FIS) by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations (BFEs) or depths are available for this zone. However, in the Drainage study conducted by Stantec, they utilized the Letter of Map Revision based on the fill for an adjacent property called the "Casas de las Flores" project (4096 Via Real). FEMA accepted the calculations and Base Flood Elevation for this adjacent project. Utilizing the BFEs for this project, the drainage study estimated the elevation at the project site to be 13.04 feet. In accordance with standard practice, the finish floor height of the proposed structures will be elevated two (2) feet above the BFE. Therefore, the building's lowest ~~finish~~ floor height should be elevated to a minimum elevation of 15.04 feet (NAVD1988). Consistent with this minimum required ~~finish~~ lowest floor height, the ~~finish~~ lowest floor will be set at 17.0 feet based on the flood elevation and earthwork, to provide a balanced site. This ~~finished~~ lowest floor height requirement is reflected as a Mitigation Measure (MM WQ-4). With the implementation of MM WQ-4, potential risks from floods are reduced to a less than significant level.

Tsunami is a series of traveling ocean waves of extremely long length generated primarily by vertical movement on a fault (earthquake) occurring along the ocean floor. As a tsunami reaches the shallow waters of the coast, the waves slow down, and the water can pile up into a wall 30 feet or more in height. The project site is not susceptible to inundation by tsunami as stated by the California Emergency Management Agency's "Tsunami Inundation Map for Emergency Planning." The tsunami inundation zone ends at U.S. Highway 101, which is approximately 100 feet south of the project site; therefore, impacts associated with tsunamis would be less than significant.

Mudflows commonly occur in conjunction with landslides, due to slope instability. The project site is generally flat and, according to the City of Carpinteria General Plan/Coastal Plan, the site is not located in an area of high risk for landslides (2003). Therefore, impacts associated with mudflows would be less than significant.

The project site is served by the Carpinteria Valley Water District (District), by a 2-inch water meter and service line on the southeast corner of the property. Domestic water service (including irrigation and fire line) for the project will come from the District and be served by a new upsized 3-inch water meter and service line to replace the existing 2-inch meter. Water for irrigation of the common area landscaping west of the creek would be supplied via a new irrigation meter as discussed below under "Utilities and Service Systems".

Coordination regarding water supply for the project was initiated with the District in 2016. In an e-mail dated September 26, 2016, the District indicated that the District does not issue a "Can and Will Serve Letter."[7] The District also indicated in the e-mail that they will not fully commit to the supply of water until the project meets certain requirements. Mitigation Measures WS-1 is therefore proposed, which entails compliance with the District's requirements. With the implementation of these measures, the project's demand on water supply would be in conformance with local plans for water resources management and impacts to local groundwater management plan would be less than significant.

Implementation of the approved Project's Stormwater Control Plan and the project's Low Impact Development design features would ensure that 100 percent of runoff from impervious surfaces would stay on site, be filtered, and return to the groundwater basin. Therefore, the project's impact on groundwater and water supplies would be less than significant.

[7] E-mail from Mr. Brian King, Carpinteria Valley Water District, dated September 26, 2016.

Required Mitigation Measures:

WQ-1 Implementation of Low Impact Design (LID) Development Measures. The following LID measures will be incorporated with the stormwater treatment design for the project:

- *Limitation of development envelope.* The project development footprint will be limited to provide areas for treatment and retention of stormwater runoff by means of a treatment swale along the southerly boundary, high groundwater, and preservation of historic drainage patterns.
- *Preservation of natural drainage features.* The drainage runoff from the northerly adjacent properties is currently draining along the western side of the property in a drainage swale. This drainage pattern is proposed to be preserved. A 50-foot setback from the existing drainage swales will be accommodated and depicted on project designs.
- *Incorporation of existing drainage into stormwater treatment design/treatment wetland.* The stormwater treatment system for the project will be so designed to direct all stormwater runoff into the existing drainages and into a stormwater treatment swale along the southern property line. The vegetated stormwater treatment will act as an aesthetic feature at the entry to the property. A freshwater treatment wetland will also be created at the end of the detention basin, to further clarify water and to provide a habitat for wildlife.
- *Minimization of imperviousness.* The project will utilize porous pavement within the northwesterly parking lot to reduce the amount of impervious material.
- *Use of permeable pavements.* The project utilizes porous asphalt concrete pavement at various locations on the site to allow infiltration of the parking areas, treat stormwater, and minimize runoff.
- *Dispersal of runoff to pervious areas.* To meet the Tier 3 requirement for retaining 95th percentile rainfall intensity on the site, a large percentage of roof water will be discharged to bioretention devices. The remaining drainage runoff will be directed to the existing swales along the eastern and western sides of the project site, which will then be routed through the treatment swale and wetlands, before it discharges off-site. In addition to the stormwater treatment, the vegetated swale will be designed to promote infiltration of water during rainfall events.

Plan Requirements: The set back from the existing drainage, LID and all storm water treatment design features shall be depicted on all building and grading plans. A final copy of the design plans showing these features will be submitted to CDD and Public Works for review and approval.

Timing: All stormwater treatment measures shall be completed prior to occupancy clearance.

Monitoring: City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

WQ-2. Compliance with NPDES Permit Requirements. The project shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Since the project would disturb one or more acres from construction activities, the construction operators must obtain coverage under a NPDES permit, which is administered by the State, prior to the start of construction. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The following measures are examples of construction Best Management Practices (BMPs) that may be included in the SWPPP:

- Stockpiling of Soil. City Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

- Protecting Construction Materials from Run-On and Runoff. At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants.
- Designating Waste Disposal Areas. Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.
- Installing Perimeter Controls on Downhill Lot Line. Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.
- Maintaining a Stabilized Exit Pad. Minimize sediment track-out from vehicles exiting the site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track- out occurs, remove deposited sediment by the end of the same workday.

Plan Requirements: The BMPs will be depicted on all building and grading plans and will be submitted to the CDD and Public Works for review and approval. The Applicant shall prepare a SWPPP and provide a copy of the document and a copy of the project's NPDES Construction General Permit to the CDD and Public Works Department.

Timing: All stormwater treatment measures and structural BMPs shall be in place prior to commencement of construction.

Monitoring: City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

WQ-3. Soil Erosion & Sediment Control Plan. To control erosion and potential discharge of soil during construction into the drainage swales, the applicant shall prepare a Soil Erosion and Sediment Control Plan. This plan can be part of the SWPPP.

Plan Requirements: Specific BMPs that would be implemented from the Soil and Erosion Control Plan that are not otherwise covered under the SWPPP shall also be depicted on all grading plans.

Timing: All Soil Erosion & Sediment Control BMPs shall be in place prior to commencement of construction.

Monitoring: City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.

WQ-4. Minimum ~~Finished~~ Lowest Floor Elevation. The project shall be designed to have a minimum ~~finished~~ lowest floor elevation of 17.0. Applicant shall obtain a Letter of Map Revision based on fill from FEMA to remove the new structure built on the property from the Special Flood Hazard Area (SFHA).

Plan Requirements: Project plans submitted for Building and Engineering Permits shall depict a minimum ~~finished~~ lowest floor elevation of 17.0 feet. A copy of the Letter of Map Revision based on fill shall be submitted to the City for review and approval prior to submittal to the Federal Emergency Management Agency (FEMA) for approval and issuance of a Letter of Map Revision Based on Fill Determination Document (LOMR).

Timing: Project plans depicting the minimum required ~~finished~~ lowest floor elevation shall be submitted prior to Building and Engineering Permit approvals. A copy of the application for LOMR shall be submitted to City prior to submittal to FEMA. A copy of the approved LOMR shall be submitted to the City following FEMA approval.

Monitoring: CDD and Public Works shall review building and engineering plans for conformance with this Measure. Public Works staff shall review and approve submittal of LOMR request to FEMA prior to submittal.

WS-1. Compliance for Carpinteria Valley Water District Requirements. The Project will comply with the requirements of the Carpinteria Valley Water District (District) to ensure domestic water supply for the project. The following items shall be submitted to the District for their review and approval:

- Final design plan set that shows profiles for water, sewer, and storm drainage
- Signed plans set by the City of Carpinteria planning department and public work department.
- The City completed Plan Set shall include all of the District's comments
- All required fees (including the Capital Cost Recovery Fee [CCRF], and any fees associated with inspection of the installation or cost to cover any system improvement required by the project shall be paid prior to Plan set submittal.
- Main Extension Agreement with the District for the Construction of any new water mains or other facilities requiring upgrades or improvements to meet the demand for the project shall be completed prior to final Plan set submittal.
- Construction deposits and bonds per the main extension agreement shall also be paid prior to final Plan set submittal

Plan Requirements: Profiles for water, sewer, and storm drainage shall be depicted on all final Plan set for submittal to the District.

Timing: Final Plan set, and applicable fees shall be submitted to the District, prior to obtaining a grading permit for the project.

Monitoring: The Applicant shall provide proof of District approval/sign-off prior to issuance of building permits.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to water resource impacts. However, based on the analysis above, the project's contribution to cumulative water resource impacts would not be considerable. In addition, The City's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable and is less than significant.

Residual Impact:

With the incorporation of the proposed Mitigation Measures, residual impacts would be less than significant.

11. LAND USE AND PLANNING **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Physically divide an established community?				X
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?				X

Environmental Thresholds

The City of Carpinteria's Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (1997) do not provide thresholds related to land use and planning. The CEQA Guidelines Appendix G thresholds in the checklist above are applied in this analysis.

Existing Environmental Setting:

The subject property of approximately 2.61 acres, is located toward the northwest end of the City on the north side of Via Real, roughly equidistant between the intersections with Santa Monica Road to the east and Cravens Lane to the west. A portion of the City limit is contiguous with the northwest boundary of the project site. Existing use of the property is as a church. Adjacent land uses include multi-family housing developments immediately to the east and west, single family residential development to the northeast, open field agriculture, located outside of the City limits, to the northwest, and U.S. Highway 101 to the south, across Via Real. The property is presently served by all utilities and Via Real is considered an arterial street, developed with standard street improvements (curb, gutter, sidewalks, and class II bicycle lanes).

The property is designated in the City's General Plan/Coastal Land Use Plan land use map for General Commercial (GC). GC land uses are "*characterized by a mixture of retail, wholesale, service, and office uses, usually located along major transportation corridors. This category includes a variety of commercial intensities.*" The site has a corresponding zoning designation of Commercial Planned Development with a Residential Overlay (CPD/R). The CPD zoning district provides "*appropriately located areas for office uses, retail stores, service establishments, and wholesale businesses, offering commodities and services required by residents of the City and its surrounding market area.*" The Residential (R) Overlay allows for the opportunity for the site to be developed with a residential-only development in an otherwise commercial zoning district. Permissible commercial land uses, subject to Development Plan approval in the CPD zoning district, include hotels and motels.

The property is also located in the Flood Hazard (FH) Overlay due to its designation on the current FIRM panel as being located within the 100-year floodplain (Zone A), and the Coastal Appeals (CA) Overlay due to the presence of the "creek" drainage feature onsite. The CA Overlay requires the project to obtain a discretionary Coastal Development Permit that would be appealable to the California Coastal Commission.

Project Specific Impacts:

a. *Would the project physically divide an established community?*

No Impact

The proposed project involves the redevelopment of an existing developed property in an urbanized part of the City into a 72-guestroom hotel. The project is consistent with the types and intensities of land uses anticipated in this part of the City, and no improvements are included in the project description, such as new roads, that would divide an established community. Therefore, 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?*

Potentially Significant Impact Unless Mitigation Incorporated

The site is designated General Commercial (GC) by the City of Carpinteria General Plan/Coastal Land Use Plan. The project has a corresponding zoning designation of CPD/R which allows for commercial development, including hotels and motels, subject to approval of a Development Plan and Coastal Development Permit. Additionally, the site is subject to the FH and CA Overlay Districts, which include specific development standards (for the FH Overlay) and permit process requirements (for the CA Overlay) that the project would be required to comply with. The proposed project would be consistent with the land use designation and zoning for the site, as well as the applicable development standards outlined in the City's Municipal Code.

The General Plan/Coastal Land Use Plan contains a number of policies in the Land Use, Community Design, Circulation, Open Space/Conservation/Recreation, Safety, Noise, and Public Facilities/Services Elements that any proposed development must comply with in order to be approved. Incorporation of the identified mitigation measures in the MND would ensure that all potential inconsistencies with the policy requirements of the City's General Plan/Coastal Land Use Plan would be mitigated to less than significant levels.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to land use impacts. However, based on the analysis above, the project's contribution to cumulative land use impacts would not be considerable.

Required Mitigation Measures:

The identified mitigation measures for Aesthetics, Agriculture/Forestry Resources, Biological Resources, Cultural Resources, Geology/Soils, Hydrology/Water Quality, Noise, and Tribal Cultural Resources would reduce all potentially significant environmental effects to less than significant levels.

Residual Impact:

The project will have no residual impacts on mineral resources or mineral recovery sites.

12. MINERAL RESOURCES **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?				X
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?				X

Existing Environmental Setting:

Oil is the only mineral resource known in the Carpinteria area in significant quantities. Historically in the Carpinteria area, oil mining and extraction activities have been limited to offshore drilling and extraction platforms, onshore oil storage facilities, a crew boat base, product transportation terminal and an oil and natural gas processing plant; many of these activities have been discontinued at this time. No other mineral resources are known to exist in the project area.

Environmental Thresholds

The City of Carpinteria's Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (1997) does not provide thresholds related to mineral resources. The CEQA Guidelines Appendix G thresholds in the checklist above are applied in this analysis.

Project Specific Impacts:

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?*

No Impact

The California Department of Conservation website was accessed to review potential mineral resources and mineral recovery sites within the project area (https://maps.conservation.ca.gov/mineralresources/). The web site revealed no such resources within the project area. Therefore, the project would not result in the loss of available mineral resources or a mineral recovery site. No impacts to mineral resources would occur.

Cumulative Impacts:

The project will have no impact, cumulatively, on mineral resources or mineral recovery site.

Recommended/Required Mitigation Measures:

No mitigation measures required.

Residual Impact:

The project will have no residual impacts on mineral resources or mineral recovery sites.

13. NOISE	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS	LESS THAN SIGNIFICANT IMPACT	NO IMPACT

Would the project result in:		MITIGATION INCORPORATED		
a) 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?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

In 2016, a 45dB.com conducted a Noise Assessment study for this project (45dB.com, 2016). A copy of the assessment report is provided in Appendix G. The findings from the analysis are incorporated into the discussion of potential noise impacts, by reference.

Environmental Thresholds

The City's CEQA Threshold Guidelines provide thresholds for the analysis of noise impacts. The Guidelines establish both interior and exterior thresholds for noise compatibility, as well as thresholds for construction-related noise generation. The maximum interior noise exposure for residential uses is 45 Decibels Adjusted (dBA) Community Noise Equivalent Level (CNEL) when doors and windows are closed. The exterior noise level threshold is 65 dBA CNEL for exterior living space. Exterior living space includes yards and patios, pool areas, balconies, and recreation areas. Exterior usable areas do not include residential front yards or balconies unless the balconies are part of the usable open space calculation for multi-family units. Temporary construction noise which exceeds 75 dBA CNEL for 12 hours within a 24-hour period at residences would be considered significant.

Existing Environmental Setting:

The project site is located between the 55 to 60 dBA noise contours, according to the City's Existing Noise Contour Map. The predominant noise source impacting the site is U.S. Highway 101 traffic. To ascertain the existing sound levels at and adjacent to the project site, field monitoring was conducted for a 24-hour period during June 21/22, 2016 (45dB.com, 2016). Sound levels were measured continuously near the Via Real boundary of the property, south of the proposed building site. By observation it was noted that ambient noise within the project area is characterized and heavily dominated by U.S. Highway 101 traffic running parallel to the boundary south of the proposed building site.

Sensitive receptors in the vicinity of the project site include residential development immediately to the east, west and north of the project site. The nearest multi-family development is located to the west of the project site, approximately 92 feet, and to the east of the project site, approximately 105 feet. Single family residential housing exists immediately to the north and northeast of the of the project site, along Trieste Lane, less than

10 feet from the edge of the property boundary to the north. The nearest school, Aliso Elementary, is located more than 2,873 feet southeast of the project site. The nearest Medical Facility, Sansum Clinic Carpinteria Family Medicine, is located approximately 1.2 miles southeast of the project site.

Noise Background

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while areas adjacent to arterial streets are the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5-10 dBA (Federal Transit Administration [FTA], 2006). The way homes in California are constructed generally provides a reduction of exterior-to-interior noise levels of about 25 dBA with closed windows (FTA, 2006).

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks, and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses. The City of Carpinteria defines noise-sensitive receptors to be land uses that are sensitive to noise, with the most-sensitive uses generally considered residences, schools, churches, hospitals, and convalescent care facilities (City of Carpinteria, 2003). These uses are considered sensitive because the presence of excessive noise may interrupt normal activities typically associated with their use.

Project Specific Impacts:

Sound level monitoring was performed using a Larson Davis Model 820, Type 1 integrating sound level meter. The Larson Davis meter was programmed in A-weighted "slow" mode to record the sound pressure level at Leq = 10-second intervals. The sound level meter and microphone were mounted approximately five feet above the ground and equipped with a windscreen during all measurements. Weather data was collected periodically at the measurement locations. Weather data was also correlated with weather conditions at the closest weather station. The sound level monitoring location was selected in order to measure the existing noise source impacting the project site and to provide a baseline for any potential noise impact that may be created by construction, development and operation of the proposed project. The existing sound level measurement includes a typical workday commute time period. Recorded sound level data consist of average Leq 1 hour sound levels, dBA. (45dB.com, 2016).

a) *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?*

Short-term Construction Noise Impacts

Potentially Significant Impact Unless Mitigation Incorporated

Short-term noise impacts could potentially occur during project construction activities from either the noise impacts created from the transport of workers and movement of construction materials to and from the project site, or from the noise generated on-site during demolition and ground clearing activities; excavation, grading, and similar ground-disturbing activities; and construction activities. Project construction is anticipated to utilize a mix of construction equipment on the project site, including tractors for excavation and grading activities, backhoes for trenching, earth rollers for compaction, and asphalt rollers for paving. The Federal Highway Administration (FHWA) Roadway Construction Model (RCNM Version 1.1), allows the preliminary prediction of construction noise levels for a variety of construction operations based on a compilation of empirical data and the application of acoustical propagation formulas.

Table 13-1 Construction Equipment Noise Levels, shows the calculated noise levels at 150 feet for typical items of equipment to be utilized on the project site. The results of modeling show that the average (Leq) noise level of the backhoe, paver, and roller are less than 60 dBA. The tractor will generate a noise level of 64 dBA Leq, just below the 65 dBA standard for sensitive receptors.

Table 13-1. Construction Equipment Noise Levels

Equipment	*calculated dBA at 150 feet from source*	
	Lmax	Leq
Backhoe	62	58
Paver	61	57
Roller	65	57
Tractor	69	64
Total	69	65
Source: FHWA Roadway Construction Model, RCNM ver. 1.1, 2012		

A typical eight-hour construction day may generate 84 dBA CNEL at a distance of 50 feet from the noise source. Typical operating cycles may involve a short period of full power operation followed by a longer period at lower power settings. Although there would be potential for a relatively high single-event noise exposure, resulting in potential short-term intermittent annoyances, the effect on long-term ambient noise levels would be nominal when averaged over a longer period. The noise assessment study identified that the maximum ambient noise levels in the project vicinity are already up to 82 dBA Lmax.

The Noise Study assessment calculated noise levels at 150 feet for typical items of equipment to be utilized on the project site. The results of modeling show that the average (Leq) noise level of the backhoe, paver, and roller are less than 60 dBA. The tractor was estimated to generate a noise level of 64 dBA Leq, below the 65 dBA standard for sensitive receptors (45dB.com, 2016). Although the modeling was calculated on noise levels 150 feet away, there are receptors closer to the site than 150 feet, including both adjacent multi-family and single family residences. For this reason, the mitigation measures N-1 through N-5, below, would be implemented to ensure impacts would be reduced to less than significant levels.

Future Noise Levels

Future traffic noise on U.S. Highway 101 is expected to increase by the year 2035 at a 1.25 percent annual growth rate. The resulting sound level will be one to two decibels above existing sound level. The increase in surrounding traffic flow attributable to the proposed project would result in an increase in sound level less than one dBA and is therefore judged to be a less than significant increase. Improvements underway as part of the South Coast Highway 101 HOV Lanes project in the area of the subject project may also help to mitigate future traffic noise on U.S. Highway 101. These improvements include repaving the highway travel lanes with "quiet paving" and periodic sections of soundwall to be constructed along the highway right-of-way line.

Operational Impacts

Potentially Significant Unless Mitigation Incorporated

The noise assessment study analysis indicated that the noise levels at the south elevation of the building are "conditionally acceptable." Potential noise levels during hotel operation could exceed 65 dBA, which could be considered as significant impacts. Therefore, the project will be required to incorporate protective measures in the design and construction of the building envelope or wall / roof-ceiling on the south side of the proposed hotel in order to meet requirements of the 2019 California Green Building Standards Code, which governs exterior noise transmission requirements for construction in areas above 65 dBA. The following Noise Mitigation Measures N-6 to N-8 are proposed, which when implemented, will reduce the

interior and exterior noise levels below a level of significance. Therefore, operational noise impacts would be less than significant.

b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact

Construction operations generally include a wide range of activities that can generate groundborne vibration. In general, blasting and demolition of structures generate the highest vibrations. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at distances within 200 feet of the vibration sources. Heavy trucks can also generate groundborne vibrations, which vary depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, etc., all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions. Trains generate substantial quantities of vibration due to the mass and momentum of their engines, vibration transmission from steel wheels to steel track, and heavy loads. Construction noise levels vary significantly based upon the size and topographical features of the active construction zone, duration of the workday, and types of equipment employed, as indicated in Table 13-2. Construction Equipment Vibration Levels.

Table 13-2. Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level (L_V) at 25 feet
Pile driver (impact)	1.518 (upper range) 0.644 (typical)	112 104
Pile driver (sonic)	0.734 upper range 0.170 typical	105 93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 in soil 0.017 in rock	66 75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

Potential construction vibration from the project would be a localized event. Vibration impacts would be significant if they exceed the following thresholds, which were taken from the Federal Railroad Administration (FRA):

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

Construction-related vibration impacts would be less than significant for residential receptors if they are below the threshold of physical damage to buildings and occur during the City's normally permitted hours of construction. Because these construction hours are during the daytime, construction activities would not normally interfere with sleep. Construction hours for projects subject to discretionary review are set by the Planning Commission pursuant to Municipal Code Chapter 15.16.180. For larger projects, such as what is proposed, hours of construction are typically limited to between 7:00 AM and 5:00 PM Monday through Friday, no weekends or holidays.

A vibration impact would be generally considered significant if it involves any construction-related or operations-related impacts in excess of 78 VdB at sensitive receptors. The construction and operations-related vibration impacts have been analyzed separately below. Construction activities can produce vibration that may be felt by adjacent uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The project site is relatively small—approximately 2.20 acres—and will not utilize many pieces of construction equipment. The primary source of vibration during project construction would likely be from a bulldozer (tractor), which would generate 0.089 inch per second PPV at 25 feet with an approximate vibration level of 87 VdB.

The City of Carpinteria does not have any specific provisions regarding vibration that would be applicable to the project site as currently zoned; nonetheless, the increase in off-site vibration generated by on-site construction activities would represent only a nominal increase whose impact would not be considered significant. Therefore, impacts associated with construction vibration would be considered 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?*

No Impact

The project site is located over 17 miles from the nearest airport, the Santa Barbara Municipal Airport. Noise related to airplanes would not be significant at the project site and people residing at the project site would not be exposed to excessive airport-related noise levels. There would be no impact related to airports and private air strips.

Required Mitigation Measures:

The following mitigation measures would reduce exterior noise impacts on sensitive receptors.

N-1. Construction Hours. Construction activity for site preparation and for future development shall be limited to the hours between 7:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.

Plan Requirements: Two signs stating these restrictions shall be provided to the applicant and posted on site.

Timing: Signs shall be in place prior to the beginning of and throughout all grading and construction activities. Violations may result in suspension of permits.

Monitoring: Building Inspector shall spot check and respond to complaints.

N-2. Mechanical Equipment. Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. Equipment engine shrouds shall be closed during equipment operation. Whenever feasible, electrical power shall be used to run air compressors and similar power tools rather than diesel equipment. The developer shall require all contractors, as a condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions.

Plan Requirements: The notes on all building and grading plans shall include these requirements.

Timing/Monitoring: CDD shall monitor implementation of this measure throughout building and grading.

N-3. Construction Vehicles. Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.

Plan Requirements: The notes on all building and grading plans shall include these requirements.

Timing/Monitoring: CDD shall monitor implementation of this measure throughout building and grading.

N-4. Stationary Equipment. Stationary construction equipment that generates noise that exceeds 60 dBA Leq at the boundaries of the nearby residential uses shall be shielded.

Plan Requirements: Temporary noise barriers used during construction activity shall be made of noise resistant material sufficient to achieve a Sound Transmission Class (STC) rating of STC 40 or greater, based on sound transmission loss data taken according to ASTM Test Method E90. Such a barrier may provide as much as a 10 dB insertion loss, provided it is positioned as close as possible to the noise source or to the receptors. To be effective, the barrier must be long and tall enough (a minimum height of eight feet) to completely block the line-of-site between the noise source and the receptors. The gaps between adjacent panels must be filled-in to avoid having noise penetrate directly through the barrier. The recommended minimum noise barrier or sound blanket requirements would reduce construction noise levels by at least 10 dB.

Timing/Monitoring: The equipment area with appropriate acoustical shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.

N-4. Sound Curtains. Temporary sound curtains shall be installed for the closest sensitive receptors if construction-related noise would exceed City thresholds. A sound curtain shall be installed and maintained along the easterly and northerly property lines throughout the duration of all construction activities on the project site.

Plan Requirements: The notes on all building and grading plans shall include these requirements. Applicant shall provide an acoustical analysis prepared by a licensed acoustical engineer to demonstrate whether earthwork and/or construction activities would exceed City noise thresholds for nearby sensitive receptors.

Timing: The acoustical analysis shall be submitted prior to issuance of any building or engineering permits. If the use of a sound curtain is found to be necessary to mitigate construction-related noise, the sound curtain(s) shall be in place prior to the beginning of and throughout all demolition, grading, and construction activities.

Monitoring: CDD shall be responsible for receipt and review of the acoustical analysis. If sound curtains are required, CDD shall ensure sound curtains are in place prior to start of construction. Building inspector shall spot check and respond to complaints.

N-5. Noise Monitor. A disturbance coordinator shall be designated by the contractor. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g. starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem be implemented.

Plan Requirements: A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

Timing/Monitoring: CDD shall monitor implementation of this measure throughout building and grading.

N-6. Exterior Walls Construction. The exterior wall construction shall consist of wood frame, composed of 7/8" stucco, 30 lb felt vapor barrier, 6" studs with R-13 or thicker batt insulation and two layers of 5/8" type X gypsum board wall for the interior face, with a minimum Outside Inside Transmission Class (OITC) 40 (comparable to STC 50).

Plan Requirements: The exterior wall specifications shall be shown on all building construction plans.

Timing: Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities.

Monitoring: CDD/Building Inspector check plans prior to issuance of grading permit.

N-7. Ceiling/Roof Construction. Standard construction techniques shall be implemented (roofing, 30 lb. felt, truss or joists, R-30 insulation and 5/8" gypsum board) to provide the necessary 20 dBA noise reduction.

Plan Requirements: The construction techniques/specifications shall be shown on all building construction plans.

Timing: Construction techniques for ceiling/roof shall be provided to CDD for verification, prior to initiating project construction activities.

Monitoring: CDD/Building Inspector check construction techniques/specifications prior to issuance of grading permit.

N-8. Windows/Doors Specifications. Glazing for all sound rated windows shall be of unequal thickness, or with one glazing light of laminated glass, in order avoid harmonic resonance at certain low frequencies. The windows should have the performance characteristics listed below to provide the required (or recommended) noise reduction for the south elevation. In addition to specifying the required Sound Transmission Class of building assemblies, flanking paths for noise should be reduced by sealing all potential leaks in construction by use of acoustical sealant and putty pads. Notes and details shall be included on the design drawings to insure that the construction details achieve the sound insulation potential of the basic building assemblies. The following are recommended additional notes and details that shall be followed:

- Use permanently non-hardening acoustical sealant around perimeter of window frames and at joints of all wall and roof/ceiling building assemblies. Gypsum board seams and joints should be sealed with acoustical sealant to prevent all air leaks. If double-layer gypsum board is used, panels should be staggered.
- Select window assemblies with effective, airtight, nonporous gaskets or weatherstripping to minimize air infiltration and sound leakage.
- Provide airtight construction at all exterior walls with acoustical sealant at interior and exterior of sole plates and sill plates, headers and top plate, where warping and drying may open construction joints over time.
- Use door jamb and head gasketing and door bottom gasketing at entry doors to seal solid core doors against weather and sound. Caulk entry door thresholds as they are placed, provide rubber-seal door thresholds, such as those by Trademark Hardware.

Some of the above steps are also necessary for compliance with CCR Title 24 Thermal Insulation requirements.

Plan Requirements: The windows/doors specifications shall be shown on all building construction plans.
Timing: Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities.
Monitoring: CDD/Building Inspector check plans prior to issuance of grading permit.

Cumulative Impacts

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to noise impacts. However, the project's contribution to cumulative noise impacts would not be considerable and temporary noise impacts would be further reduced by the required mitigation measures.

Residual Impact:

With the incorporation of these mitigation measures, residual noise impacts would be less than significant.

14. POPULATION AND HOUSING Would the project:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT

		INCORPORATED		
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Environmental Thresholds

Neither the City of Carpinteria nor the County of Santa Barbara have identified significance thresholds for population and housing impacts. Therefore, the CEQA Guidelines Appendix G thresholds listed above are applied in this analysis.

Existing Environmental Setting:

The current (2020) population of Carpinteria is approximately 13,283. Carpinteria covers a land area approximately 2.6 square miles, with a density of approximately 5,132.80/square mile. The City's population is currently declining, with a growth rate of -0.38%, but it's population is projected to increase by 1.86 % (The City's population is projected to increase to 14,792 by 2040 (United States Census Bureau, accessed December 2021; https://www.census.gov/data/datasets/2016/demo/popest/total-cities-and-towns.html).

The project site is located on Via Real just north of the U.S. 101 Freeway as it transitions from residential to the east to hotels/inns and agricultural to the west and north, within unincorporated County of Santa Barbara. The project site is located within an urbanized part of the city zoned for commercial and residential uses and is currently developed as a church, which currently sits unused. The California Department of Conservation's California Important Farmland Finder (CIFF) Map designates the project site as "Urban and Built-Up Land." The northern (rear) property line boundary of the project site comprises the City of Carpinteria municipal boundary, and abuts agricultural lands zoned AG-I-5 in unincorporated Santa Barbara County. Water, sewer, electric, and telephone services are available to currently serve the parcel.

Project Specific Impacts:

a) *Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

Less Than Significant Impact

The project site is currently developed with a church, playground, and storage shed. The project proposes to construct a new 72-guestroom hotel, demolishing the existing church. None of the rooms proposed would be used as permanent dwelling units. Therefore, the project would result in a net addition of zero new residences. Minor population growth could be attributable to new employment opportunities at the proposed hotel. However, it is likely that both short-term construction employment and operational employment would draw

primarily from the local, existing labor pool, such that substantial population growth is not expected. Hotel staffing is anticipated at 12 employees per eight-hour shift, with three shifts occurring per day.

The proposed 72-guestroom hotel would increase the number of people within the city at any given time, but not the population of official full-time residents. The influx of visitors would be temporary with a consistently changing number of visitors who remain in the City for varying short periods of time. This increase in visitors, but not residents, will not pertain to the City's and Census Bureau population estimates and forecasts. This addition of transient guests is foreseen within the adopted General Plan/Coastal Land Use Plan.

Utility improvements required as part of the project include installation of a new eight-inch water line underneath the eastern hotel drive aisle to connect the existing main line in Via Real to the water line north of the project site in the Trieste Lane right-of-way. New water meters and connections for the building, irrigation system and fire protection system would tie the proposed hotel into the new water line. A new fire hydrant would be constructed toward the rear northeast corner of the hotel; the existing hydrant at the project's southeast corner would remain. A new eight-inch sewer line would run through the eastern drive aisle toward the northeast corner of the property and continue a northerly route up Trieste Lane, connecting to an existing main line on Venice Lane. A new underground pump station would be placed at the northeast corner of the hotel's parking lot, underneath a parking space. An existing sewer pump house and force main would be removed during site demolition and prep.Proposed offsite and frontage improvements include re-constructing the driveway curb cut and apron at the project entrance, new street lane striping to allow for left-hand turn movements into- and out of the project site and restriping the bicycle lane across the project frontage. Existing on-street parking spaces in front of the subject property would be eliminated to accommodate the proposed re-striping.

Although a new sewer main would be installed as part of the project, and the sewer capacity would be increased by the new larger main line, there are no planned/pending developments in the area that would access the extension and no population growth is anticipated beyond the project's nominal individual contribution. The sewer improvements would not place pressure on existing agricultural land to be converted to non-agricultural uses and would not induce or create potential growth induced impacts. Project impacts to population growth would be less than significant.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact

The project site is currently developed with a church building, which is not operating. The church building would be removed, and a 72-guestroom hotel would be built in its place. No one currently resides on this parcel; thus, the project would not displace any existing housing or people. This impact would be less than significant.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to population and housing impacts. However, the project's contribution to cumulative population and housing impacts would not be considerable.

Recommended/Required Mitigation Measures:

No mitigation measures required.

Residual Impact:

The project will have no impact, residually, on Population and Housing.

15. PUBLIC SERVICES **a) Would the project result in substantial adverse physical impacts associated with the need or provision of 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:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?			X	
Other public facilities?			X	

Environmental Thresholds

Neither the City of Carpinteria nor the County of Santa Barbara have identified significance thresholds for public services impacts. Therefore, the CEQA Guidelines Appendix G thresholds listed above are applied in this analysis.

Existing Environmental Setting:

This property is approximately 2.6 acres in area and consists of a church building, play structure, and a shed. The church is not currently operational. The parcel is currently served by the Carpinteria Valley Water District for municipal water service and the Carpinteria Sanitary District for municipal sewer service. The project is located within the boundaries of, and served by, the Carpinteria-Summerland Fire Protection District. The project site is also served by the Santa Barbara County Sherriff's Department. The project site is located within the Carpinteria Unified School District.

Project Specific Impacts:

a) *Would the project result in substantial adverse physical impacts associated with the need or provision of 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 fire protection?*

Less Than Significant Impact

As indicated under Section 14. Population and Housing, utility improvements for the project include installation of a new eight-inch water line, new water meters and connections for the building. Irrigation systems and a fire protection system would tie the proposed hotel into the new water line. A new fire hydrant would be constructed toward the rear northeast corner of the hotel, while an existing hydrant at the project's southeast corner would remain.

Fire services would continue to be provided by the Carpinteria-Summerland Fire Protection District, with auxiliary service from the Santa Barbara County Fire Department. The District is an "All Risk" emergency response agency, with experienced/trained personnel ready to respond 24 hours a day, 7 days a week. The operations division is composed of a Battalion Chief and six Fire Captains who deliver service through six engine companies (2016). The closest fire station to the property is the Carpinteria Fire Station, approximately 1.4 miles away. In a Standards of Response Cover and Headquarters Staffing Adequacy Study produced by Citygate Associates, the District is currently meeting some, but not all, of its needs through its own fire response resources (Citygate, 2016). Development of the project would incrementally increase demand for fire service to the site but would not expand the service area or create a need for new fire facilities.

As part of the City of Carpinteria Development Impact Mitigation Fees, new Resort/Hotel properties would be subject to open space, fire, city and school fees/taxes. These funds would go toward select capital improvements/programs as part of a mitigation process for the introduction of new development and residents to the City of Carpinteria. The required fees/taxes would ensure that the proposed development would marginalize its impacts on community infrastructure and bring potential impacts to a less than significant level.

a) *Would the project result in substantial adverse physical impacts associated with the need or provision of 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 police protection?*

Less Than Significant Impact

The Santa Barbara County Sheriff's Department currently provides police protection services to the site. The Patrol Division is commanded by a Police Captain, and staffed 24 hours a day, seven days a week. The Patrol Structure has seven teams of officers who continually serve the County and provide specialized service. The Carpinteria City Hall and Sheriff's sub-station is located approximately 2.2 miles southeast of the site. The project site is currently developed with a church, playground, and storage shed. Development of the project would incrementally increase demand for sheriff and police service to the site but would not expand the service area or create a need for new sheriff or police facilities. Therefore, impacts would be less than significant.

a) *Would the project result in substantial adverse physical impacts associated with the need or provision of 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 schools?*

No Impact

Carpinteria is served by the Carpinteria Unified School District. The project is a hotel and as such, the development of the project would entail only temporary patrons of the hotel, occupying the facility on a short-term basis. Employment by the hotel would be minimal (estimated at twelve employees per eight-hour shift), with most employees being drawn from the local, existing labor force. The project would therefore not contribute to a substantial increase in student numbers and therefore, there would be few or no new students that would attend the local schools, including Aliso Elementary School, Carpinteria Middle School and Carpinteria High School, resulting from this project. The Carpinteria Unified School District would not need to make accommodations for an influx of students because no hotel guests will be attending Carpinteria schools unless said guests dwell in a permanent residence within the city. New construction fees of $0.56 per new square foot are required to be paid to Carpinteria Unified School District. Based on these conditions and the payment of the new construction fee, there would be no impacts.

a) *Would the project result in substantial adverse physical impacts associated with the need or provision of 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 parks?*

Less Than Significant Impact

Refer to Section 16, Recreation, for objectives for parks and recreation space. Impacts would be less than significant.

a) *Would the project result in substantial adverse physical impacts associated with the need or provision of 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 other public facilities?*

Less Than Significant Impact

The Carpinteria Library is located at 5141 Carpinteria Avenue and is operated by the City of Carpinteria. Based on numbers from the City's General Plan/Coastal Land Use Plan and population estimates, (referenced in Section 14, Population and Housing), the city will maintain acceptable service ratios, response times, and other performance objectives for public facilities. Impacts would be less than significant.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to public service impacts. However, the project's contribution to cumulative public service impacts would not be considerable partially due to the payment of Development Impact Fees (DIFs). Conditions of approval will require the applicant to pay DIFs and all special district fees. Any fees required as part of a new development would reduce the project's cumulative impacts to a less than significant level.

Recommended/Required Mitigation Measures:

No mitigation measures required.

Residual Impact:

The project will have no impact, residually, on Public Services.

16. RECREATION	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?			X	
b) 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?			X	

Environmental Thresholds

The City of Carpinteria's and County of Santa Barbara Guidelines for the implementation of CEQA do not provide specific thresholds related to impacts to recreation from development projects. The CEQA guidelines Appendix G thresholds listed above are to be used to determine impact significance.

Existing Environmental Setting:

The City of Carpinteria has a total of 97.6 acres of City Parks, along with Carpinteria State Beach. As of 2020, City population is approximately 13,283 and with approximately 28.8 acres of parks and 80.81 acres of open space in the city inventory, there are approximately 7 acres of space per 1,000 residents (City of Carpinteria, 2003).[8] The region's other public open spaces (e.g. beaches and mountains) available to the public also provide recreational areas.

Project Specific Impacts:

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?
b) 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 Impact

The project includes the demolition of an existing church, and the construction of a 72-guestroom hotel with various amenities. The City of Carpinteria is home to many parks and other outdoor recreational services. Located just across the U.S. 101 Freeway is the Carpinteria Salt Marsh Nature Park Nature Preserve. Approximately 1.5 miles away, is Memorial Park, a public area for children's play and outdoor activities. The increase in visitors to the city could result in an increase in the demand for parks and other recreational facilities. However, since the guests at the proposed hotel are only temporary visitors and not permanent community members, parks and other recreational services will not see a permanent influx of users that would cause degradation to recreational services. Additionally, the hotel will offer features that would provide onsite recreational space for project guests, such as an outdoor pool. In addition, as part of a required mitigation measure to offset impacts to protected onsite biological resources and to improve storm water runoff, the project proposes to construct a small wetland habitat along a greenway belt, in the front of the facility and restore the protected 50-foot creek buffer with riparian habitat. This wetland feature and "greenbelt" would provide a small-scale recreational opportunity for hotel visitors as well. As stated in Section 14, Public Services, the applicant would also be required to pay the Development Impact Fees for Land Acquisition for additional Parks and Recreational Facilities, Parks and Recreational Facilities Development and Aquatics Facilities. Thus, the project would have less than significant impact on recreational resources.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to recreation impacts. However, the project's contribution to cumulative recreation impacts would not be considerable especially considering the Development Impact Fees that would be paid to support additional recreational facilities throughout the City.

Recommended/Required Mitigation Measures:

[8] Source: City of Carpinteria Parks and Recreation Department, information gathered by phone call, December 13, 2021.

No mitigation measures are necessary.

Residual Impact:

The project would not have any residual impacts to recreational resources.

[1] Source: City of Carpinteria Parks and Recreation Department, information gathered by phone call, December 13, 2021.

17. TRANSPORTATION **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?				X

Associated Transportation Engineers conducted a Vehicle Miles Traveled (VMT) Analysis for the project (Associated Transportation Engineers, 2021). A copy of the report is attached in Appendix H. The analysis and results contained in the report is incorporated in this section, by reference.

On December 28, 2018, the California Natural Resources Agency certified and adopted proposed revisions to the 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 (VMT) is the most appropriate measures of transportation impacts." Therefore, the following thresholds reflect the specific guidance set forth in CEQA Guidelines Section 15064.3 regarding the estimating of VMT and developing thresholds of significance for VMT and the significance of transportation impacts. According to the Appendix G thresholds, a significant transportation impact will occur when:

(a) **Potential Conflict with a Program, Plan, Ordinance, or Policy.** A significant 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).
(b) **Potential Impact to VMT.** The Office of Planning and Research (OPR) Technical Advisory and Caltrans guidelines contain screening criteria for land use transportation projects. Land use or transportation projects meeting any of the screening criteria, absent substantial evidence to the

contrary will have less than significant VMT impacts and will not require further analysis. A single component project (e.g., residential, office, or retail) needs to meet one of the screening criteria. The screening criteria for a small project is a project that generates 110 or fewer average daily trips.

(c) **Design Features and Hazards.** A significant impact occurs if a project will increase roadway hazards. An increase could result from existing or proposed uses, or geometric design features.

(d) **Emergency Access.** A significant impact occurs if a project will potentially impede emergency vehicle access.

Existing Environmental Setting

The Project site is currently zoned Commercial Planned Development District with a Residential Overlay (CPD/R) and has a General Plan/Coastal Land Use Plan designation of General Commercial (GC). The current Project includes the demolition of an existing church building and the construction of a 72-room hotel with guest amenities and support services. The hotel will operate with 12 employees daily working the following 3 shifts: Morning from 7:00 AM to 3:00 PM; Evening 3:00 PM to 11:00 PM; Overnight 11:00 PM to 7:00 AM. The Project is located along the Metropolitan Transit District route 20. An existing bus stop is located adjacent to the Project frontage on Via Real. The bus head ways during the PM (5:00 - 6:00) peak commute period are 15 minutes.

Carpinteria is served by a network of roadways, bikeways, the Santa Barbara Metropolitan Transportation District and the Carpinteria Area Rapid Transit. The city is considered the gateway to recreational beaches within the County. Recreational traffic is a major element of transportation demand which must be served by the circulation system.

Project Specific Impacts:

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less Than Significant Impact

CEQA Guidelines section 15064.3(b) indicates that vehicle miles traveled (VMT) is the most appropriate measure for transportation impacts. In December 2018, the Office of Planning and Research (OPR) provided an updated Technical Advisory to provide guidance regarding the evaluation of transportation impacts under CEQA. In particular, the advisory suggests that a project generating or attracting fewer than 110 one-way trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). If the above thresholds or policies are exceeded, construction of improvements or project modifications to reduce the levels of significance to insignificance are required.

The Project does not include any new or modified land uses that may create long-term demand for transportation facilities and would not conflict with local or regional transportation planning. The Project is forecasted to generate 602 ADT, 34 AM peak hour trips and 43 PM peak hour trips. The estimated trip generation includes employee, hotel guest and miscellaneous delivery trips that support the hotel operation. The 12 daily employees generate 24 ADT, these work-based employee trips are used to evaluate the Project's

VMT impacts. The Project would therefore have a have a less-than-significant VMT impact based on the Caltrans screening criteria.

Hotel developments are unique in that most trips are generated by hotel guests from outside the community coming to visit the area for work and leisure purposes. These work and leisure trips would occur without the development of the hotel since the destination (Carpinteria/Southern Santa Barbara County) is the trip attractor not the hotel. The hotel is in effect capturing those work and leisure trips by providing lodging for travelers. This type of land use is not specifically identified in the State or Caltrans guidelines which address per capita home base (residential) and employee work base (office) trips. Therefore, the VMT analysis addressed only the hotel work-based employee trips. The Project's 12 employees would generate 24 average daily trips. The Project would therefore have a have a less-than-significant VMT impact based on the screening criteria.

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?

Less than Significant Impact

The Project driveway connection to Via Real will be designed and constructed to City and Fire department standards and therefore will not increase roadway hazards. Adequate sight distances are provided along Via Real at the driveway location. Levels of service calculations completed for the Project driveway show that vehicles turning into and out of the site would experience delays in the LOS A-B range (driveway). The driveway analysis shows that the site access system would accommodate project traffic and not impact operations along Via Real (Associated Transportation Engineers, 2021).

As part of the project, a new left-turn lane would be added to Via Real, to accommodate southbound left-turn movements into the project site. The new left turn lane in the center median will necessitate the shifting of the northbound travel lane to the north, eliminating existing on-street public parking in front of the project frontage. West of the project site, the westbound travel lane would return to its typical alignment. This change in traffic patterns would be designed in compliance with traffic and engineering standards.

Cumulative Impacts:

Although the project would add vehicle trips compared to the existing setting, no cumulatively considerable impacts would occur. The City of Carpinteria has established a Development Impact Fee (DIF) mitigation program to collect funds to implement long term improvements. The project would be required to contribute to future improvements via the fees. Impacts regarding cumulative impacts and levels of service would be less than significant.

Recommended/Required Mitigation Measures:

No mitigation measures are necessary.

Residual Impact:

The project would not have any residual impacts to transportation resources.

18. TRIBAL CULTURAL RESOURCES	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Would the project cause a substantial adverse change in the significance or 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Existing Environmental Setting:

The project site has been previously disturbed by both agricultural and building development. Since the site was previously developed, any surficial cultural, archaeological, geological, or paleontological resources that may have been present at one time have likely been disturbed. Therefore, the topmost layers of soil in the project area are not likely to contain intact cultural resources. The possibility of encountering previously undisturbed cultural resources during project construction or impacting historical, or archaeological, resources is remote. However, due to large areas of the project site that are unpaved and undeveloped, intact cultural deposits could potentially be present.

Project Specific Impacts:

a) *Would the project cause a substantial adverse change in the significance or 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Potentially Significant Impact Unless Mitigation Incorporated

Tribal cultural resources are defined in Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

Letters in support of AB52 consultation were sent by the City of Carpinteria on July 14, 2020 to the following Tribal representatives:

- Julie Tumamait-Stenslie, Barbareno/Ventureno Band of Mission Indians
- Gino Altamirano, Coastal Bank of the Chumash Nation
- Julio Quair, Chumash Council of Bakersfield
- Mona Tucker, *yak tityu tityu yak tiłhini-* Northern Chumash Tribe
- Fred Collins, Northern Chumash Tribal Council
- Mark Vigil, San Luis Obispo County Chumash Council
- Kenneth Kahn, Santa Ynez Band of Chumash Indians

No comments indicating concerns regarding potential Tribal Cultural resources were received for the project site.

In addition to consultation regarding AB52, a request for records search was submitted to the Central Coast Information Center (CCIC), as indicated in Section 5-Cultural Resources. CCIC search indicated that the project site has no previously mapped archaeological resources for the site, but the parcel has a low to moderate potential for cultural resources.

The project involves construction and demolition which would require excavation and ground disturbing activities. Since the project involves ground disturbance and general construction activity, the potential to disturb tribal cultural resources is unknown, and this impact remains potentially significant. With incorporation of the mitigation measures CR-1, also discussed in Section 5- Cultural Resources; impacts to Tribal Cultural resources would be reduced to less than significant levels.

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to public service impacts. However, the project's contribution to cumulative public service impacts would not be considerable partially due to the payment of Development Impact Fees (DIFs). Conditions of approval will require the applicant to pay DIFs and all special district fees. Any fees required as part of a new development would reduce the project's cumulative impacts to a less than significant level.

Required Mitigation Measures:

Mitigation Measure CR-1, previously identified for Cultural Resources, would satisfactorily address and mitigate any potential impacts to Tribal Cultural Resources to a less than significant level.

Residual Impact:

The project will have no impact, residually, on Tribal Cultural resources.

19. UTILITIES AND SERVICE SYSTEMS **Would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) 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?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
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?			X	
e) Comply with federal, state and local management and reduction statutes and regulations related to solid waste?			X	

Environmental Thresholds

Neither the City of Carpinteria's nor County of Santa Barbara Guidelines for the implementation of the California Environmental Quality Act (CEQA) provide thresholds related to utilities and service systems. The CEQA Guidelines Appendix A thresholds listed above are applied in this analysis.

Existing Environmental Setting:

Wastewater collection and treatment services are managed by the Carpinteria Sanitary District (CSD) and solid waste generated at the site is taken to the Gold Coast Recycling and Transfer Station in Ventura. Further discussion of the existing facilities, water supply, and applicable plans/policies are embedded within the analysis below.

Wastewater collection and treatment services are managed by the 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. 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.

Water Reliability is a major issue with water systems anticipating success when dealing with water shortages, especially in California. In four year drought scenarios, the City of Carpinteria has implemented management practices to safeguard against dry years. The Carpinteria Valley Water District adopted Ordinance No. 21-1 in October 2021 declaring a Stage Two (2) Drought Condition with mandatory water use restrictions to cut usage by 20 percent (CVWD, 2021).

Electrical service is provided by Southern California Edison and natural gas is provided by the Southern California Gas Company.

The subject site is presently served by all of the above-described utilities and utility providers.

Project Specific Impacts:

a) *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?*

Less than Significant Impact

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Less than Significant Impact

The proposed project requires upgrades to the existing water and wastewater facilities that serve the property, and new onsite stormwater infrastructure. The new upgraded water facilities include, but are not limited to,

replacing the existing two-inch water meter and service line for the subject property with a new three-inch meter and line; replacing the existing two-inch meter with a new one-inch irrigation meter; and constructing a new eight-inch water line to connect existing water lines in Via Real and Trieste Lane. Proposed wastewater facility upgrades include, but are not limited to, installing a new six-inch sewer line to serve the subject property; constructing a new eight-inch sewer main line to tie into the existing main line in Venice Lane; and installing a new sewer pump station to serve the subject project. The new onsite stormwater infrastructure is intended to serve the proposed project and includes, but is not limited to, a new onsite stormwater detention basin and storm drain system. All of the proposed improvements would serve the new hotel project. The new eight-inch water line would improve connectivity within CVWD's existing network of water main lines. The new eight-inch sewer line in Trieste Lane would address existing capacity issues with the existing wastewater collection system in this area. None of these new facilities would be growth-inducing in that the area affected by the proposed improvements is already fully developed. Construction of these facilities would occur either within the development footprint on the project site or within already developed public rights-of-way. Therefore, the provision of new or expanded water, wastewater, and stormwater facilities would result in less than significant impacts. The Carpinteria Valley Water District's 2020 Urban Water Management Plan (UWMP) reports total district water demand for 2020 was 4,105 acre feet (CVWD, 2020). Total district demand is projected to increase by 347-acre feet (or 8.45%) to 4,452 acre feet in 2040. The UWMP reports that projected water supply for 2040 is 5,586 acre feet, leaving a 1,134 acre feet per year surplus. Therefore, there would be adequate water supplies to meet future demand. Project water demand is estimated to be 120 percent of the wastewater generated. Based on the project's estimated wastewater generation, project water demand is estimated at 10,368 gpd, while the existing use requires 0 gpd. This is an increase of 10,368 gpd or 11.62 acre feet per year, which is within the District's water supply surplus projections. Project water demand would represent approximately 3.35% percent of the forecast districtwide increase in water demand. Based on the project's incremental contribution to future demand, new sources of water supply would be not required to meet project water needs. The project would comply with applicable water use restrictions and water conservation requirements, including but not limited to state WELO requirements. Impacts to water supply would be less than significant.

c) *Result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less than Significant Impact

The Carpinteria Sanitary District (CSD) owns and operates a municipal wastewater treatment plant capable of treating up to 2.5 million gallons of wastewater a day. Based on wastewater generation rates developed by the Sanitation Districts of Los Angeles County, and shown below in Table 19-1, the proposed project would generate an estimated 8,640 gallons per day (gpd) of wastewater.

Table 19-1. Estimated Wastewater Generation

Land Use	Quantity	Generation Factor	Amount (gpd)
Proposed Hotel to Be Constructed			
Guestrooms	72	120/du	8,640
Existing Church to be Demolished			

Church	1	0 (N/A: Abandoned building)	0
Net Change (Proposed – Existing)			8,640

gpd = gallons per day
Source: Los Angeles County Sanitation District Loadings for Each Class of Land Use

The Carpinteria Sanitary District currently treats approximately 1.2 million gpd. The proposed hotel project's increase of 8,640 gpd constitutes about 0.66 percent of the remaining available 1.3 million gpd wastewater treatment capacity. Thus, the project's wastewater generation would not exceed the capacity of the City's wastewater systems or require the construction of new wastewater treatment facilities. This impact would be less than significant.

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?

Less than Significant Impact

The proposed project involves demolition of an existing church building and the construction of a 72-guestroom hotel. The Santa Barbara County Environmental Thresholds and Guidelines Manual Guide contains solid waste generation rates for residences. The waste generation rates and totals are shown in Table 19-2.

Table 19-2. Estimated Solid Waste Generation

Land Use	Quantity Guestrooms	Number of People Per Guestroom (Average)	Generation Factor (tons/guest/year)	Total Amount (tons/year)
Proposed Hotel	72	2	0.80	115
Total Proposed				115
Existing Church to be Demolished	N/A	N/A	0 (Abandoned)	0
Net Change (Proposed – Existing)				115

Based on these rates, the project would generate an estimated 115 tons of solid waste per year and a net increase in waste of approximately 115 tons per year. In addition, the demolition phase of the project would generate debris in addition to the typical construction waste generated during a commercial project. The project would comply with all State waste diversion requirements including ensuring that at least 65% of the waste would be recycled.

Waste generated at the site is taken to the Gold Coast Recycling and Transfer Station in Ventura. It is then transferred to Toland Road Landfill in Santa Paula, a Class II municipal facility, which is managed by the

Ventura Regional Sanitation District (Cal Recycle, 2016). The proposed project would generate 115 tons a year or approximately 0.3 tons per day, while the Toland Landfill has a maximum permitted throughput of 1,500 tons per day. The project would contribute about 0.01 percent to the current throughput capacity. Expansion in recent years has extended the lifespan of the landfill to 2027 and the landfill has a remaining capacity of 5.9 million tons. Based on the disposal capacity of the landfill serving the project site, the incremental increase in waste generation would not affect the availability of solid waste disposal capacity. This impact would be less than significant (Cal Recycle, 2016).

Cumulative Impacts:

Cumulative impacts have been addressed in the EIR prepared for the City's General Plan and Coastal Plan (April 2003), herein incorporated by reference. Cumulative development throughout the Carpinteria Valley would incrementally contribute to utility and service impacts. However, based on the analysis above, the project's contribution to cumulative utility and service impacts would not be considerable.

Recommended/Required Mitigation Measures

No mitigations measures are recommended or required.

Residual Impacts

No residual Impacts were discovered.

20. WILDFIRE **If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:**	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
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?			X	
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?			X	
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?			X	

Environmental Threshold

Carpinteria-Summerland Fire Protection District standards are applied in evaluating impacts associated with the proposed development. These standards may be located at the Carpinteria-Summerland Fire Protection District web site at https://www.carpfire.com/carpinteria-fire-department-standards. The web site provides standards for private roads and driveways, fire hydrant spacing and flow rates, stored water fire protection systems, automatic fire sprinklers, automatic alarm systems, and vegetation management.

Existing Environmental Setting:

Wildfires or "wildland" or "brush fires" are defined as those fires typically occurring in undeveloped areas commonly covered by heavy vegetation, typically in hills and canyons. This project site consists of approximately 2.6 acres in an urbanized setting, and includes a church, play area, garden, and storage sheds. The parcel is currently served by the Carpinteria Valley Water District and lies in the Local Responsibility Area (LRA), where neither the state nor the federal government has responsibility for providing fire protection. The project site is not located within a Fire Hazard Severity Zone (FHSZ), according to the Fire Hazard Severity Zone Map adopted by Cal Fire in 2007. However, 1.5 miles to the north lies a moderate severity zone, and over 2.5 miles further to the north lies a very high fire severity zone ([VHFHSZ] Cal Fire – Fire Hazard Severity Zone Map, 2007). The proposed Project is not located within lands mapped as VHFHSZ (CAL FIRE FHSZL MAP, Source: Office of the State Fire Marshal (https://osfm.fire.ca.gov/).

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. The proposed project, which is situated on Via Real adjacent to the 101 Freeway, is not located within or adjacent to a high fire hazard area of the County. The project site and area are serviced by two fire stations, one located in the City of Carpinteria on Walnut Avenue, approximately 1.4 miles from the project site and another located in Summerland, approximately 1.2 miles from the project site. Current response times range from three to five minutes. All fire fighters (full-time and reserves) have EMT-1 training (City of Carpinteria, 2003).

Project Specific Impacts:

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?*

Less Than Significant Impacts

The project is designed to meet all applicable Carpinteria-Summerland Fire Protection District development standards, including those for access, water supply, building standards, and defensible space. The property is currently served by an existing two-inch Carpinteria Valley Water District meter that will need to be upgraded to a three-inch meter to serve the proposed project. A dedicated fire service line and new onsite fire hydrant will also be installed. The project site is not located in a very high, high or moderate fire hazard area, according to the most recent fire hazard severity zone maps published by the Office of the State Fire Marshall. As such, development of the proposed project would not hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas. Emergency access to the site is easily available from Via Real Avenue. Additionally, the proposed project would be required to comply with Carpinteria-Summerland Fire Protection conditions. Impacts would be less than significant.

Emergency response and evacuation plans are typically considered to be impacted because of lane closures associated with construction activity. The project would not require lane closures thus emergency response and evacuation plans would not be affected.

CEQA requires an analysis of a project's impact on the environment rather than the environment's potential impact on a project. Because the nature of the project does not include any aspect that could make wildfire more likely upon project implementation, wildlife risks would not be exacerbated during either construction or operations.

All drainage changes on the site would be approved by the City and regulated with permanent BMPs as detailed in a SWPPP, as discussed above. As a result, impacts would be less than significant.

Cumulative Impacts

Since the project would not create significant fire hazards, it would not have a cumulatively considerable effect on fire safety within the County.

Recommended/Required Mitigation Measures

No mitigation is required.

Residual Impacts

Residual impacts would be less than significant.

21. MANDATORY FINDINGS OF SIGNIFICANCE	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history?		X		
b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Project Specific Impacts

a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history?*

b) *Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).*

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Potentially Significant Impact Unless Mitigation Incorporated

As presented in this Initial Study, development of the Via Real Hotel Project has the potential to degrade the quality of the environment in several issue areas without the incorporation of mitigation measures. The following resources which have the potential to result in significant impacts and applicable proposed mitigation measures are discussed:

Aesthetics – Project architecture, colors, materials, and placement of mechanical equipment all have the potential to significantly degrade the aesthetics of the area and detract from public mountain views available

in the area. Lighting and glare from the new hotel construction may also have a significant impact on aesthetics. Implementation of Mitigation Measures (MMs) AES-1 to AES-4 would reduce potential aesthetic impacts to less than significant.

Agricultural & Forestry Resources – The proposed development of the hotel is immediately adjacent to agricultural lands in unincorporated Santa Barbara County. Therefore, the potential exists for land use compatibility conflicts to occur with respect to odors, dust, noise or similar impacts associated with typical agricultural activities, which could threaten the long-term viability of agriculture on this property. With the implementation of MM AG-1, entailing the recordation of a disclosure notice against the title of the property and publication of the disclosure notice to all hotel guests and staff, the potential impact would be reduced to a less than significant level.

Biological Resources - The project site supports riparian trees which could potentially have nesting birds, including raptors, protected under the California Fish and Game Codes (CFGC) and the Migratory Bird Treaty Act (MBTA). The project could adversely affect raptors and other nesting birds if construction occurs while they are present on or adjacent to the site, through direct mortality or abandonment of nests. Implementation of MM BIO-1 would reduce this potential impact to a less than significant level. The project site also supports two drainage swales that support native riparian vegetation, recognized as ESH or Environmentally Sensitive Habitat. In addition, one of the swales meets the California Coastal Commission's definition of a "Creek". Project development could potentially have direct and indirect impacts on these protected habitats. Implementation of measures BIO-2 and BIO-3 entail a 50-foot protective setback, habitat restoration of these riparian habitats, and creation of a stormwater wetland feature, that ensures protection of these habitats, and which would reduce potential impacts to less than significant levels.

Cultural Resources – The CCIC records search indicated that the project site has low to moderate potential for cultural resources. The project has the potential to uncover and disturb cultural resources during construction. Therefore, based on CCIC recommendations and a request from Chumash Elder, Julie Tumamait, MM CR-1, is proposed, entailing ~~stoppage of work and conducting further consultation by a CDD qualified archaeologist and Native American Representative; if cultural resources are encountered during grading. With the implementation of this measure, potential impacts to cultural resources would be less than significant~~ development and implementation of a construction monitoring program to be overseen by a qualified archaeologist and Chumash Native American observer during periods of initial ground disturbances (e.g., rough grading and excavation).

Geology & Soils – Geotechnical studies indicated that the soils on the project site have a potential for liquefaction. Even though the study concluded a low risk to humans occupying the hotel, mitigation measure GEO-1 is proposed, entailing compliance with all recommended measures from the geotechnical report. Stormwater runoff has the potential to cause significant erosion and sedimentation impacts given the size of the property and quantity of estimated earthwork. Measures WQ-1 through WQ-3 (discussed below) would address both construction phase and post-construction water quality impacts associated with the project.

Hydrology and Water Quality – Project development would increase net impervious surfaces and would contribute to stormwater runoff, which could potentially contribute to significant water quality impacts off-site to receiving waters. To reduce potential impacts from post development storm water runoff, and to comply with the City of Carpinteria's Stormwater Management Plan (CMC 8.10) and Tier 3 Post-Construction Requirements (PCRs), the project will comply with Mitigation Measure WQ-1, which requires implementation of a variety of Low Impact Design (LID) measures. Measure WQ-2, requires conformance with NPDES permit requirements, and WQ-3, requires development and implementation of a Soil and Sediment Control Plan.

Measure WQ-4 requires the hotel ~~finished~~ lowest floor elevation to be at 17.0 feet, and for the applicant to obtain a Letter of Map Revision based on fill from FEMA. Finally, Measure WS-1 requires the project to comply with the project conditions and requirements imposed by the Carpinteria Valley Water District. Implementation of these measures would reduce potential storm water, flood hazard, and water supply/service impacts to levels below significance.

Noise – The noise analysis concluded that temporary construction noise could pose a significant impact to sensitive receptors located within 150 feet of the project site. Mitigation Measures N-1 through N-5 would address these impacts and reduce them to less than significant levels by limiting construction hours, requiring muffling and dampening of mechanical construction equipment, installing temporary noise curtains around the project boundary (if deemed necessary), and assigning a noise monitor to respond to and address any noise complaints. The noise assessment study conducted for the project also indicated that the noise levels at the south elevation of the building are "conditionally acceptable." This means that the noise levels could potentially exceed interior and exterior noise level thresholds in the southern portion of the project site facing Via Real and US Highway 101, which could be a significant impact. Therefore, measures N-6 to N-8 are proposed, entailing construction specifications for exterior walls, ceiling/roof and windows/doors. With the implementation of these measures, noise impacts would be reduced to a level below significance.

22. RECOMMENDATION BY STAFF

On the basis of this Initial Study, the staff of the City of Carpinteria:

_____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

X
_____ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial study finding for the preparation of an EIR may result.

_____ Finds that the proposed project WILL have a significant effect on the environment and recommends that an EIR be prepared.

Potentially significant unavoidable adverse impact areas:

_____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA §15162/15163/15164 should be prepared.

_____With Public Hearing _____Without Public Hearing

23. ATTACHMENTS

1. Mitigation Monitoring and Reporting Plan (MMRP)
2. Vicinity Map
3. Site Plan and Elevations
4. Engineering Design Plans

24. LITERATURE

Associated Transportation Engineers, 2021. *Vehicle Miles Traveled Analysis for the Via Real Hotel Project – City of Carpinteria.*

Cal Recycle, 2016. "Estimated Solid Waste Generation Rates." Estimated Solid Waste Generation Rates. <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates/>.

Cal Recycle, 2016. "Facility/Site Summary Details: Toland Road Landfill (56-AA-0005)." Department of Resources Recycling and Recovery (DRR). Cal Recycle. <http://www.calrecycle.ca.gov/SWFacilities/Directory/56-AA-0005/Detail/>.

California Department of Conservation's California Important Farmland Finder (CIFF) Map, 2016. https://maps.conservation.ca.gov/dlrp/ciff/. Website accessed December, 2021.

California Water Board GeoTracker, 2021. Clean Ups in my Community Map. Electronic database managed by the EPA. Website accessed November, 2021.

Carpinteria-Summerland Fire Protection District Standards, https://www.carpfire.com/carpinteria-fire-department-standards, website accessed November 2021.

Carpinteria-Summerland Fire Protection District. Operations Division, website accessed December 2016, http://www.carpfire.com/carpinteria-fire-department-operations.

CDFW (California Department of Fish and Wildlife), 2020. RAREFIND database. Electronic database managed by the *California Natural Diversity Data Base, Wildlife Data and Habitat Analysis Branch, California Department of Fish and Wildlife.* Sacramento, CA.

Central Coast Information Center (CCIC) records search, letter dated August 4, 2020.

Citygate Associates, 2016. Standards of Response Cover and Headquarters Staffing Adequacy Study. July 27, 2016. https://s3.amazonaws.com/siteninja/multitenant/assets/21381/files/original/2016-07-27_Vol_1-Carpinteria-Summerland-FPD-Exec-Summary-FINAL.pdf, website accessed December 20121.

City of Carpinteria Development Impact Mitigation Fee Schedule, 2021, https://carpinteriaca.gov/wp-content/uploads/2021/02/Admin-Procedures-Attachment-B-FY-2021-22-Development-Impact-Fees.pdf, Website accessed December, 2021.

City of Carpinteria, 2003. *General Plan/Local Coastal Land Use Plan & Environmental Impact Report.* April 2003.

City of Carpinteria, 2017. *Proposed Final Mitigated Negative Declaration -Green Heron Spring: 16-02960,* October 2017.

City of Carpinteria Creeks Preservation Program Final Document, Volume -1, September 2005.

CVWD (Carpinteria Valley Water District), 2020. Urban Water Management Plan, https://cvwd.net/doc/4265/. Website accessed December, 2021.

CVWD, 2015. Ordinance No. 15-2 https://cvwd.granicus.com/MetaViewer.php?view_id=1&clip_id=50&meta_id=3853. Website accessed December, 2021.

Department of Finance (DOF), https://www.dof.ca.gov/forecasting/demographics/estimates/, website accessed December 2021.

EPA (US Environmental Protection Agency), 2021. CERCLIS Database. Electronic database managed by the EPA, SEMS Search. Database accessed November, 2021.

Office of the State Fire Marshal, https://osfm.fire.ca.gov/, website accessed December 2021.

Pacific Materials Laboratory of Santa Barbara, Inc.; 2016. *Preliminary Geotechnical Investigation – Proposed Hotel Development, 4110 Via Real, City of Carpinteria, California.* October 23, 2014; Revised April 12, 2016.

Santa Barbara County Air Pollution Control District, https://www.sbcapcd.org, website accessed December 2021.

Santa Barbara County Flood Control and Water Conservation District & Water Agency, Flood Hazard Determination, 12/10/2015.

Stantec, 2016. *Via Real Hotel 4110 Via Real, Carpinteria Preliminary Drainage Report – Evaluation of BMPs and Drainage Improvements at 4110 Via Real in Carpinteria.* October 25, 2016 (Revised March 10, 2017).

Stantec, 2017. *Via Real Hotel Project Preliminary Jurisdictional Waters/Wetlands Delineation Report.*

Storrer Environmental Services, LLC, 2017. *Wetland Delineation and Jurisdictional Determination Report for the Via Real Hotel Development project, Carpinteria, California.*

United States Census Bureau, https://www.census.gov/data/datasets/2016/demo/popest/total-cities-and-towns.html), website accessed December 2021.

VHFHSZ Cal Fire FHSZL Map, https://osfm.fire.ca.gov/, Website Accessed December 2021.

Wolf Environmental, Inc. *Air Quality and Greenhouse Gas Assessment. Hotel Development Project.* December 2021.

25. APPENDICES

Appendix A – Proposed Project Plans
Appendix B – Vicinity Map
Appendix C – Air Quality and Greenhouse Gas Assessment
Appendix D – Wetland Delineation Reports and RECON's Tree Inventory Spreadsheet
Appendix E – Geotechnical Report
Appendix F – Drainage and Hydrology Reports
Appendix G – Noise Assessment Report
Appendix H – Traffic Study – VMT Analysis
Appendix I – Mitigation Monitoring and Reporting Program
Appendix J – Response to Comments

23. ATTACHMENTS

MITIGATION MONITORING AND REPORTING PLAN (MMRP)

Appendix I: Mitigation, Monitoring and Reporting Program

Mitigation Measure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Monitoring Compliance Complete (Name/Date)
1. AESTHETICS			
AES-1. Architectural Review Board (ARB) Review. The design, scale, character, colors, and materials of the project architecture shall be compatible with vicinity development and consistent with the City's "small beach town" character.	City of Carpinteria Community Development Department (CDD) staff	**Plan Requirement and Timing:** The applicant shall submit plans for the project for review by the Architectural Review Board prior to approval of any Building Permit for physical development. **Monitoring:** Community Development Department staff (CDD) shall review submitted plans, provide direction to the ARB regarding this mitigation measure and site inspect during the construction phase for compliance with the approved plans.	
AES-2. Equipment Screening. All mechanical equipment, including but not limited to, heating and air conditioning units, and trash receptacle areas, shall be completely screened from surrounding properties by use of a wall or fence, or shall be enclosed within a building or roof parapet/equipment well.	CDD staff Architectural Review Board (ARB) Building Inspector	**Plan Requirements:** The locations of all exterior mechanical equipment shall be depicted on a Roof and/or Mechanical Equipment Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and ARB shall review the Roof and/or Mechanical Equipment Plan for compliance with this measure prior to approval of a Building Permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that mechanical equipment has been installed consistent with the approved Plan.	
AES-3. Lighting. Any exterior night lighting installed on the project site shall be of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject parcel and	CDD staff ARB Building Inspector	**Plan Requirements:** Specifications for all selected exterior lighting fixtures shall be included in the plans. The locations of all exterior lighting fixtures and photometric exhibit showing the direction and	

prevent spill-over onto adjacent parcels and into the protected riparian habitats and their associated buffers. Applicant shall develop a Lighting Plan incorporating these requirements and provisions for dimming lights after 10:00 pm.		intensity of light being cast by each fixture and the height of the fixtures shall be depicted on a Lighting Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and ARB shall review a Lighting Plan for compliance with this measure prior to approval of a building permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that exterior lighting fixtures have been installed consistent with their depiction on the final Lighting Plan.	
AES-4. Illuminated Signs. Building and grounds signage shall be reviewed by the Architectural Review Board to ensure the size, design, colors, and intensity of signage is appropriate to the neighborhood setting and does not create distracting or intrusive impacts on surrounding uses.	CDD staff	**Plan Requirements:** Detailed sign plans, depicting the location, construction, size, and dimensions of all project-related signage shall be submitted to the Architectural Review Board for review and approval prior to Building Permit issuance. All illuminated signage shall be outfitted with dimmable controls to control light intensity. **Monitoring:** CDD staff shall ensure compliance with the Architectural Review Board-approved sign plans during Building Permit review and prior to occupancy clearance.	
2. AGRICULTURAL & FORESTRY RESOURCES			
AG-1. Right to Farm Notification. The following informational notice shall be recorded with the Santa Barbara County Clerk Recorder's office for appearance on any future property owners' Title Reports; shared with hotel employees; and disclosed to hotel guests prior to check-in:	CDD staff	**Plan Requirements:** The applicant shall prepare and submit to the Community Development Department for review and approval the informational notice containing the above disclosure statement. The notice shall be recorded prior to granting of occupancy clearance by the City of Carpinteria. Hotel operator shall	

IMPORTANT: PROPERTY OWNER, EMPLOYEE & HOTEL GUEST NOTIFICATION *This property is located adjacent to property zoned for agriculture and is located in an area that has been planned for agricultural uses. Existing agricultural growing operations are located north of the property. Vehicles associated with the agricultural use of this property utilize the adjacent driveway located immediately west and north of this property to access agricultural lands. While the Via Real Hotel project design includes landscape buffers and physical setbacks from the adjacent agricultural lands to reduce possible noise, light, odors and dust from impacting guests and employees of the Via Real Hotel project, property/business owners, employees and guests are to be notified that these are existing conditions and will not be considered by the City of Carpinteria to be a nuisance requiring extraordinary actions by the adjacent agricultural operators or landowners. It is in the public interest to preserve agricultural land and operations within the Carpinteria Valley and to specifically protect these lands for exclusive agricultural use. Any inconvenience or discomfort from properly conducted agricultural operations, including noise, lights, odors, dust, and chemicals, will not be deemed a nuisance.*		be made aware of this disclosure requirement in writing and shall provide a copy of the disclosure document(s) used to notify hotel guests and employees of the adjacent agricultural land's "right to farm" protections. **Monitoring:** Following recordation and prior to granting of occupancy clearance, CDD staff shall be provided with a conformed copy of the recorded informational notice, and a copy of the disclosure document that will be used to notify hotel guests and employees.	
4. BIOLOGICAL RESOURCES			
BIO-1. Nesting Bird Surveys. To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC, activities	CDD staff Project Biologist	**Plan Requirements:** The most suitable bird nesting habitat shall be identified on the building and grading plans. This Measure shall	

related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 30), if feasible. If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the Project Boundary, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/ nesting is completed, and the young have fledged the nest. Encroachment		be printed on all building and grading plans. **Timing:** A Qualified Biologist will conduct a pre-construction nesting bird survey, no more than 14 days prior to the initiation of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. The qualified biologist shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program. A report summarizing the results of the nesting bird survey and monitoring activities shall be prepared and submitted to the City, once all survey and monitoring activities are completed.	

into the buffer shall occur only at the discretion of the qualified biologist.			
BIO-2. Riparian Habitat Restoration Plan. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will restore and enhance the riparian habitat associated with drainage swales A and B. Enhancement would include removal of non-native plants and planting of native plants such as arroyo and red willows. As part of this MM, a Riparian Habitat Restoration / Enhancement Plan (Plan) will be prepared for the project. This Plan will provide details on the restoration of the riparian areas associated with swales A and B and will include such elements as a planting plan, location of enhancement/restoration, irrigation (if needed), and success and monitoring criteria. The Plan will also incorporate biological aspects of the stormwater wetland treatment system (see MM BIO-3); that will be created to enhance stormwater quality. Details such as design of the wetland treatment system, planting plan and monitoring of this water quality enhancement; will be included in the Plan.	CDD staff Project Biologist	**Plan Requirements/Timing:** The Applicant shall provide a copy of the Riparian Habitat Restoration Plan (Plan) to the CDD for review and approval, prior to issuance of building permits, and will require that the restoration work be completed prior to Occupancy clearance for the building. The Plan must also outline protective measures for the riparian habitats that must be implemented during construction (i.e., fencing, exclusion zones, etc.) to avoid potential impacts to sensitive riparian habitats. The Restoration Plan will also require approval from CDFW as a Streambed Alteration Agreement will be required. **Monitoring:** Following the enhancement/restoration of the riparian habitat, a qualified biologist will conduct one (1) annual inspection of Swales A and B and associated riparian habitat for 5 years, to document that the habitat is viable and providing the intended ecological functions and values. The monitoring frequency for the riparian habitat restoration/enhancement associated with Swales A and B may be conducted in tandem with the monitoring for the Stormwater Treatment Wetland Habitat (MM BIO-3). The monitoring & reporting elements will be detailed in the Plan. The Biologist will submit annual reports to CDD, based on the annual monitoring criteria. The CDD shall inspect the wetland	

		habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.	
BIO-3. Stormwater Treatment Wetland. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will design and construct a stormwater treatment wetland habitat as part of the proposed treatment swale to enhance stormwater quality. The small freshwater wetland will be designed to provide both enhancement of stormwater quality and serve as a wetland habitat for wildlife.	CDD staff	**Plan Requirements/Timing:** The Applicant will provide the final design plans showing the stormwater treatment wetland, on all grading plans submitted to the City, for review and approval prior to issuance of any permits for construction. The biological aspects of the stormwater treatment wetland habitat (including planting plan); will be detailed in the Riparian Habitat Restoration / Enhancement Plan (Plan), as identified in MM BIO-2. The Stormwater Treatment Wetland Plan will also require approval from the RWQCB, if a Section 402 water quality certification or other regulatory permitting is required. **Monitoring:** Following the construction of the treatment wetland, a qualified biologist will conduct one (1) annual inspection of the treatment wetland and swale, for 5 years, to document that the system is viable and providing the intended ecological functions and values. CDD shall review and approve the design, prior to the issuance of grading or building permits. The monitoring and reporting program for the treatment wetland can be integrated with the Riparian Habitat Enchantment/Creation program (MM BIO-2). The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.	

Appendix I: Mitigation, Monitoring and Reporting Program

5. CULTURAL RESOURCES			
CR-1. Cultural Resources Discovery. In the event archaeological remains are encountered during grading, work shall be stopped immediately or redirected until a CDD-qualified archaeologist and Native American representative are retained by the applicant to evaluate the significance of the find pursuant to Phase 2 investigation specifications of the City Archaeological Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with City Archaeological Guidelines and funded by the applicant.	CDD staff	**Plan Requirements/Timing:** This condition shall be printed on all building and grading plans. **Monitoring:** CDD shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. In the event that potentially significant cultural or archaeological resources are uncovered during ground-disturbing activities, all work on the site will cease and a qualified archaeologist will be contacted in addition to the Native American Heritage Commission.	
7. GEOLOGY & SOILS			
GEO-1. Geotechnical Report Compliance. Project construction and grading shall comply with all recommendations for Grading, Foundations and Retaining Walls, contained in the Geotechnical Engineering Report prepared by Pacific Materials Laboratory, to the satisfaction of the City Engineer.	City Engineer Building Inspector	**Plan Requirements:** Grading and building plans shall include all required measures as determined by the City Engineer. **Timing:** Prior to issuance of building and grading permits and during grading and construction. **Monitoring:** The City Engineer shall site inspect during grading. The City Building Inspector shall ensure that all recommendations are implemented during construction, by conducting periodic site inspections during and at the completion of construction.	
10. HYDROLOGY & WATER QUALITY			
WQ-1 Implementation of Low Impact Design (LID) Development Measures. The following LID measures will be incorporated with the stormwater treatment design for the project:	CDD staff Public Works (PW) staff	**Plan Requirements:** The set back from the existing drainage, LID and all storm water treatment design features shall be depicted on all building and grading plans. A final copy of the design plans showing these features will be	

• *Limitation of development envelope.* The project development footprint will be limited to provide areas for treatment and retention of stormwater runoff by means of a treatment swale along the southerly boundary, high groundwater, and preservation of historic drainage patterns. • *Preservation of natural drainage features.* The drainage runoff from the northerly adjacent properties is currently draining along the western side of the property in a drainage swale. This drainage pattern is proposed to be preserved. A 50-foot setback from the existing drainage swales will be accommodated and depicted on project designs. • *Incorporation of existing drainage into stormwater treatment design/treatment wetland.* The stormwater treatment system for the project will be so designed to direct all stormwater runoff into the existing drainages and into a stormwater treatment swale along the southern property line. The vegetated stormwater treatment will act as an aesthetic feature at the entry to the property. A freshwater treatment wetland will also be created at the end of the detention basin, to further clarify water and to provide a habitat for wildlife.		submitted to CDD and Public Works for review and approval. **Timing:** All stormwater treatment measures shall be completed prior to occupancy clearance. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	

• *Minimization of imperviousness.* The project will utilize porous pavement within the northwesterly parking lot to reduce the amount of impervious material. • *Use of permeable pavements.* The project utilizes porous asphalt concrete pavement at various locations on the site to allow infiltration of the parking areas, treat stormwater, and minimize runoff. • *Dispersal of runoff to pervious areas.* To meet the Tier 3 requirement for retaining 95th percentile rainfall intensity on the site, a large percentage of roof water will be discharged to bioretention devices. The remaining drainage runoff will be directed to the existing swales along the eastern and western sides of the project site, which will then be routed through the treatment swale and wetlands, before it discharges off-site. In addition to the stormwater treatment, the vegetated swale will be designed to promote infiltration of water during rainfall events.			
WQ-2. Compliance with NPDES Permit Requirements. The project shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Since the project would disturb one or more acres from construction activities, the construction	CDD staff PW staff	**Plan Requirements:** The BMPs will be depicted on all building and grading plans and will be submitted to the CDD and Public Works for review and approval. The Applicant shall prepare a SWPPP and provide a copy of the document and a copy of the project's NPDES Construction	

operators must obtain coverage under a NPDES permit, which is administered by the State, prior to the start of construction. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The following measures are examples of construction Best Management Practices (BMPs) that may be included in the SWPPP: • *Stockpiling of Soil.* City Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient. • *Protecting Construction Materials from Run-On and Runoff.* At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants. • *Designating Waste Disposal Areas.* Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff. • *Installing Perimeter Controls on Downhill Lot Line.* Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.		General Permit to the CDD and Public Works Department. **Timing:** All stormwater treatment measures and structural BMPs shall be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	

• *Maintaining a Stabilized Exit Pad*. Minimize sediment track-out from vehicles exiting the site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track- out occurs, remove deposited sediment by the end of the same workday.			
WQ-3. Soil Erosion & Sediment Control Plan. To control erosion and potential discharge of soil during construction into the drainage swales, the applicant shall prepare a Soil Erosion and Sediment Control Plan. This plan can be part of the SWPPP.	CDD staff PW staff	**Plan Requirements:** Specific BMPs that would be implemented from the Soil and Erosion Control Plan that are not otherwise covered under the SWPPP shall also be depicted on all grading plans. **Timing:** All Soil Erosion & Sediment Control BMPs shall be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	
WQ-4. Minimum Finished Floor Elevation. The project shall be designed to have a minimum finished floor elevation of 17.0. Applicant shall obtain a Letter of Map Revision based on fill from FEMA to remove the new structure built on the property from the Special Flood Hazard Area (SFHA).	CDD staff PW staff	**Plan Requirements:** Project plans submitted for Building and Engineering Permits shall depict a minimum finished floor elevation of 17.0 feet. A copy of the Letter of Map Revision based on fill shall be submitted to the City for review and approval prior to submittal to the Federal Emergency Management Agency (FEMA) for approval and issuance of a Letter of Map Revision Based on Fill Determination Document (LOMR). **Timing:** Project plans depicting the minimum required finished	

		floor elevation shall be submitted prior to Building and Engineering Permit approvals. A copy of the application for LOMR shall be submitted to City prior to submittal to FEMA. A copy of the approved LOMR shall be submitted to the City following FEMA approval. **Monitoring:** CDD and Public Works shall review building and engineering plans for conformance with this Measure. Public Works staff shall review and approve submittal of LOMR request to FEMA prior to submittal.	
WS-1. Compliance for Carpinteria Valley Water District Requirements. The Project will comply with the requirements of the Carpinteria Valley Water District (District) to ensure domestic water supply for the project. The following items shall be submitted to the District for their review and approval: • Final design plan set that shows profiles for water, sewer, and storm drainage • Signed plans set by the City of Carpinteria planning department and public work department. • The City completed Plan Set shall include all of the District's comments • All required fees (including the Capital Cost Recovery Fee [CCRF], and any fees associated with inspection of the installation or cost to cover any system improvement required by the project shall be paid prior to Plan set submittal.	Carpinteria Valley Water District (CVWD) staff CDD staff	**Plan Requirements:** Profiles for water, sewer, and storm drainage shall be depicted on all final Plan set for submittal to the District. **Timing:** Final Plan set, and applicable fees shall be submitted to the District, prior to obtaining a grading permit for the project. **Monitoring:** The Applicant shall provide proof of District approval/sign-off prior to issuance of building permits.	

• Main Extension Agreement with the District for the Construction of any new water mains or other facilities requiring upgrades or improvements to meet the demand for the project shall be completed prior to final Plan set submittal. • Construction deposits and bonds per the main extension agreement shall also be paid prior to final Plan set submittal			
13. NOISE			
N-1. Construction Hours. Construction activity for site preparation and for future development shall be limited to the hours between 7:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.	Building Inspector	**Plan Requirements:** Two signs stating these restrictions shall be provided to the applicant and posted on site. **Timing:** Signs shall be in place prior to the beginning of and throughout all grading and construction activities. Violations may result in suspension of permits. **Monitoring:** Building Inspector shall spot check and respond to complaints.	
N-2. Mechanical Equipment. Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. Equipment engine shrouds shall be closed during equipment operation. Whenever feasible, electrical power shall be used to run air compressors and similar power tools rather than diesel equipment. The developer shall require all contractors, as a	CDD staff	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	

condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions.			
N-3. Construction Vehicles. Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.	CDD staff	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	
N-4. Stationary Equipment. Stationary construction equipment that generates noise that exceeds 60 dBA Leq at the boundaries of the nearby residential uses shall be shielded.	CDD staff	**Plan Requirements:** Temporary noise barriers used during construction activity shall be made of noise resistant material sufficient to achieve a Sound Transmission Class (STC) rating of STC 40 or greater, based on sound transmission loss data taken according to ASTM Test Method E90. Such a barrier may provide as much as a 10 dB insertion loss, provided it is positioned as close as possible to the noise source or to the receptors. To be effective, the barrier must be long and tall enough (a minimum height of eight feet) to completely block the line-of-site between the noise source and the receptors. The gaps between adjacent panels must be filled-in to avoid having noise penetrate directly through the barrier. The recommended minimum noise barrier or sound blanket requirements would reduce construction noise levels by at least 10 dBA. **Timing/Monitoring:** The equipment area with appropriate acoustical shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the	

		designated location throughout construction activities.	
N-5. Sound Curtains. Temporary sound curtains shall be installed for the closest sensitive receptors if construction-related noise would exceed City thresholds. A sound curtain shall be installed and maintained along the easterly and northerly property lines throughout the duration of all construction activities on the project site.	CDD staff Building Inspector	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. Applicant shall provide an acoustical analysis prepared by a licensed acoustical engineer to demonstrate whether earthwork and/or construction activities would exceed City noise thresholds for nearby sensitive receptors. **Timing:** The acoustical analysis shall be submitted prior to issuance of any building or engineering permits. If the use of a sound curtain is found to be necessary to mitigate construction-related noise, the sound curtain(s) shall be in place prior to the beginning of and throughout all demolition, grading, and construction activities. **Monitoring:** CDD shall be responsible for receipt and review of the acoustical analysis. If sound curtains are required, CDD shall ensure sound curtains are in place prior to start of construction. Building inspector shall spot check and respond to complaints.	
N-6. Noise Monitor. A disturbance coordinator shall be designated by the contractor. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g. starting too early, bad muffler, etc.) and shall require that	CDD staff	**Plan Requirements:** A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	

reasonable measures warranted to correct the problem be implemented.			
N-7. Exterior Walls Construction. The exterior wall construction shall consist of wood frame, composed of 7/8" stucco, 30 lbs. felt vapor barrier, 6" studs with R-13 or thicker batt insulation and two layers of 5/8" type X gypsum board wall for the interior face, with a minimum Outside Inside Transmission Class (OITC) 40 (comparable to STC 50).	CDD staff Building Inspector	**Plan Requirements:** The exterior wall specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of grading permit.	
N-8. Ceiling/Roof Construction. Standard construction techniques shall be implemented (roofing, 30 lb. felt, truss or joists, R-30 insulation and 5/8" gypsum board) to provide the necessary 20 dBA noise reduction.	CDD staff Building Inspector	**Plan Requirements:** The construction techniques/specifications shall be shown on all building construction plans. **Timing:** Construction techniques for ceiling/roof shall be provided to CDD for verification, prior to initiating project construction activities. **Monitoring:** CDD/Building Inspector check construction techniques/specifications prior to issuance of grading permit.	
N-9. Windows/Doors Specifications. Glazing for all sound rated windows shall be of unequal thickness, or with one glazing light of laminated glass, in order avoid harmonic resonance at certain low frequencies. The windows should have the performance characteristics listed below to provide the required (or recommended) noise reduction for the south elevation. In addition to specifying the required Sound Transmission Class of building assemblies, flanking paths for	CDD staff Building Inspector	**Plan Requirements:** The windows/doors specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of grading permit.	

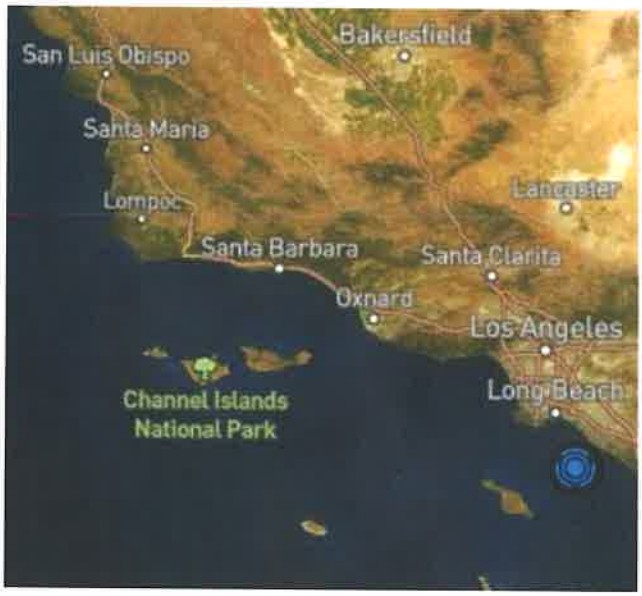
noise should be reduced by sealing all potential leaks in construction by use of acoustical sealant and putty pads. Notes and details shall be included on the design drawings to insure that the construction details achieve the sound insulation potential of the basic building assemblies. The following are recommended additional notes and details that shall be followed: • Use permanently non-hardening acoustical sealant around perimeter of window frames and at joints of all wall and roof/ceiling building assemblies. Gypsum board seams and joints should be sealed with acoustical sealant to prevent all air leaks. If double-layer gypsum board is used, panels should be staggered. • Select window assemblies with effective, airtight, nonporous gaskets or weather stripping to minimize air infiltration and sound leakage. • Provide airtight construction at all exterior walls with acoustical sealant at interior and exterior of sole plates and sill plates, headers and top plate, where warping and drying may open construction joints over time. • Use door jamb and head gasketing and door bottom gasketing at entry doors to seal solid core doors against weather and sound. Caulk entry door thresholds as they are placed, provide rubber-seal door thresholds,			

such as those by Trademark Hardware. Some of the above steps are also necessary for compliance with CCR Title 24 Thermal Insulation requirements.			

23. ATTACHMENTS

FIGURES

Project Location



ELEVATED
ENTITLEMENTS

N

Figure 1

Vicinity Map

4110 Via Real, Carpinteria, CA 93013



ELEVATED ENTITLEMENTS

Figure 2

Project Location Map

4110 Via Real, Carpinteria, CA 93013



SITE COVERAGE		
TOTAL LOT AREA	113,839 SQ.FT.	(100%)
BUILDING FOOTPRINT	22,511 SQ.FT.	(20%)
DRIVEWAYS/ PARKING (INCLUDES 18,713 SQ.FT. EASEMENT)	43,496 SQ.FT.	(38%)
LANDSCAPE (INCLUDES TERRACE & WALKWAYS) TERRACE & WALKWAYS	47,832 SQ.FT. 8,111 SQ.FT.	(42%) (5%)

PROPOSED SITE PLAN

0' 30'
15' 60'
SCALE: 1" = 30'-0"

ELEVATED ENTITLEMENTS

Figure 3

Project Site Plan

4110 Via Real, Carpinteria, CA 93013

25. APPENDIX A

PROPOSED PROJECT PLANS

25. APPENDIX A

PROPOSED PROJECT PLANS






RAM HOTELS
VIA REAL HOTEL
PROPOSED LANDSCAPE PLAN-COLOR
EXHIBIT
A4


RAM HOTELS
VIA REAL HOTEL
PROPOSED LEVEL 01 PLAN
EXHIBIT
A5


RAM HOTELS
VIA REAL HOTEL
PROPOSED LEVEL 02 PLAN
EXHIBIT
A6


RAM HOTELS
VIA REAL HOTEL
PROPOSED EXTERIOR ELEVATIONS
EXHIBIT
A7



MEL DUNIVER, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR ELEVATIONS	EXHIBIT A8



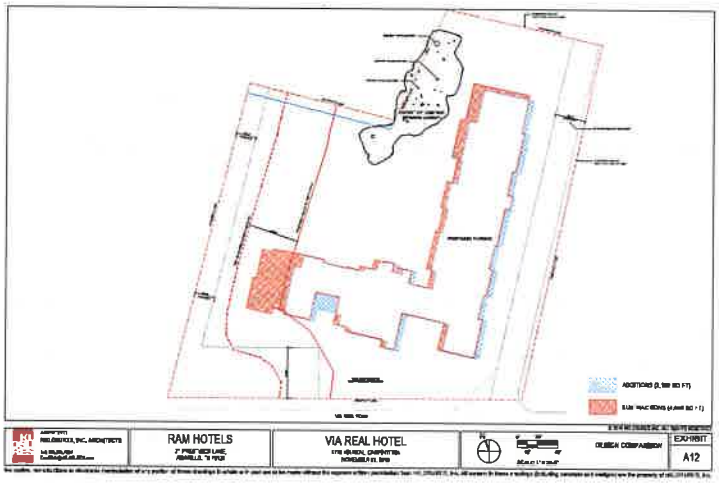
MEL DUNIVER, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	BUILDING AND SITE SECTIONS	EXHIBIT A9



MEL DUNIVER, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT A10

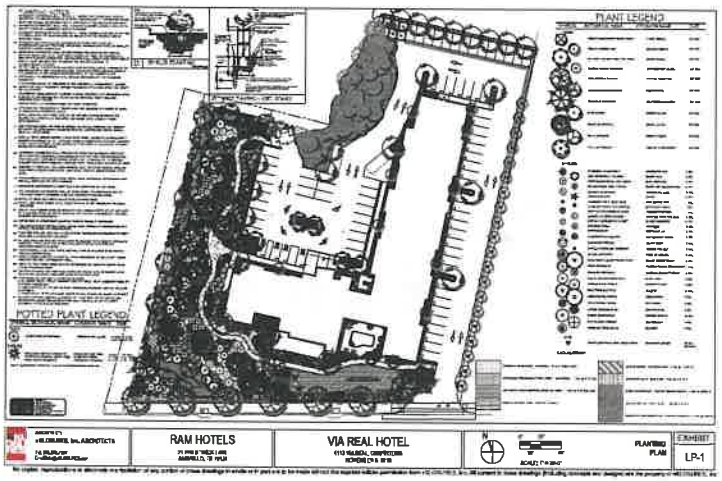


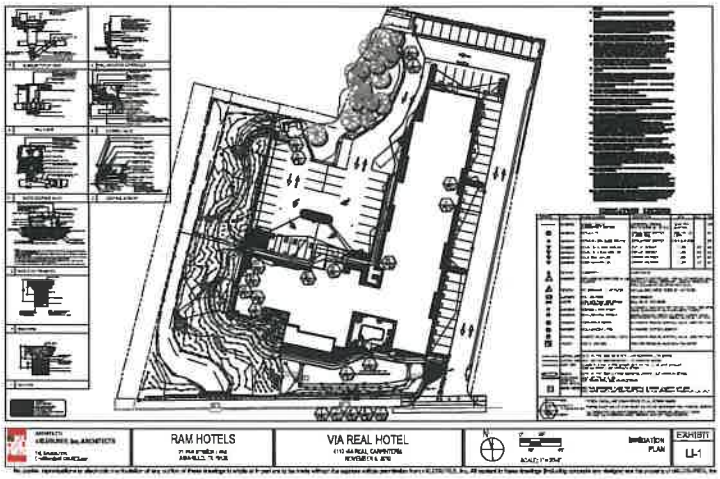
MEL DUNIVER, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT A11

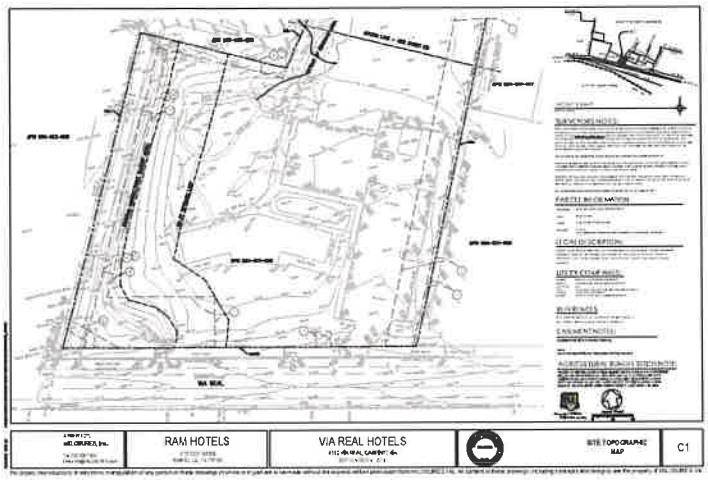

RAM HOTELS
VIA REAL HOTEL
EXHIBIT
A12

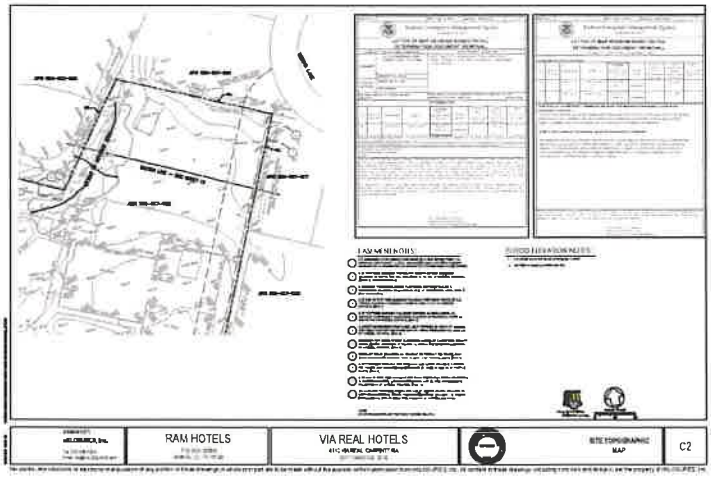

RAM HOTELS
VIA REAL HOTEL
EXHIBIT
A13

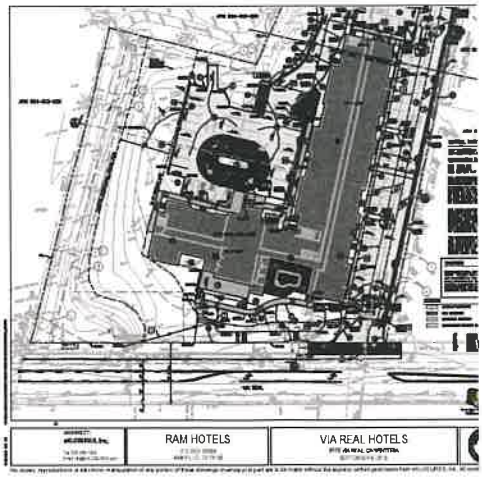

RAM HOTELS
VIA REAL HOTEL

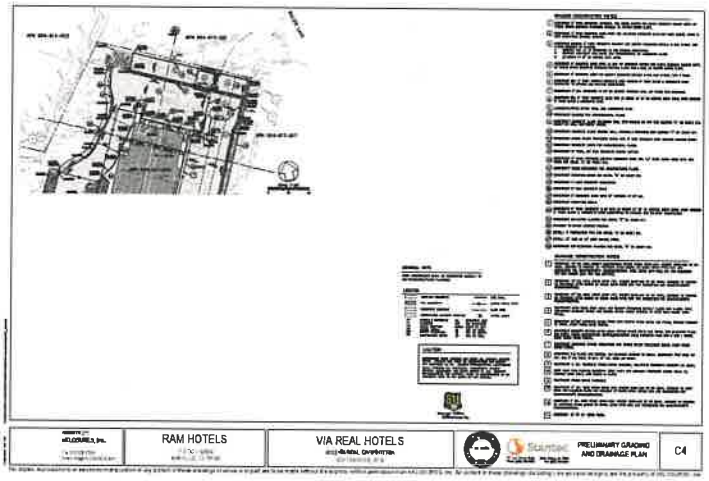

PLANT LEGEND
POTTED PLANT LEGEND
RAM HOTELS
VIA REAL HOTEL
EXHIBIT
LP-1

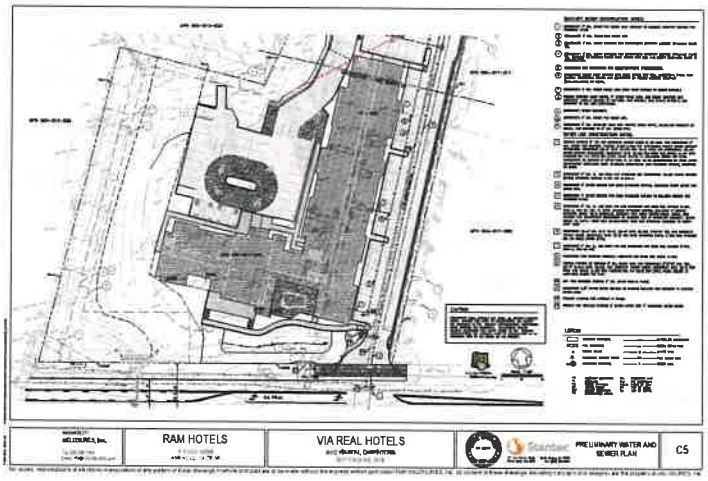

RAM HOTELS
VIA REAL HOTEL
EXHIBIT
LI-1

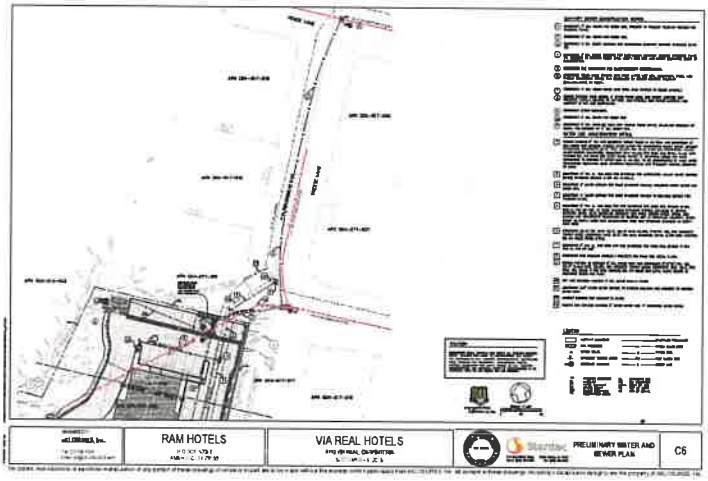

RAM HOTELS
VIA REAL HOTELS
C1


RAM HOTELS
VIA REAL HOTELS
C2

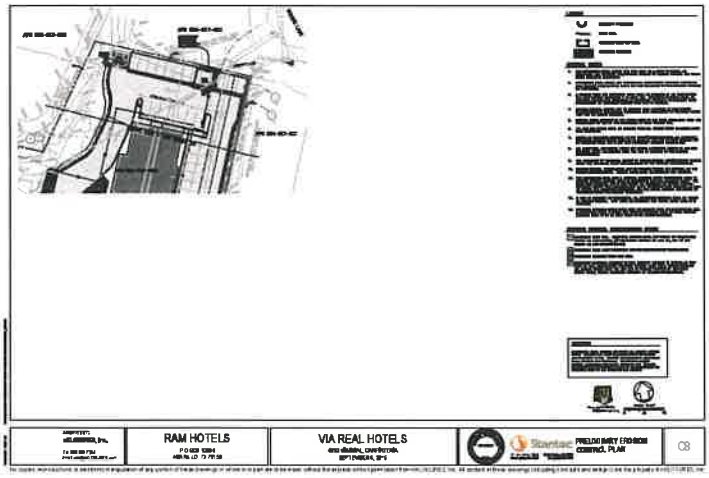

RAM HOTELS
VIA REAL HOTELS

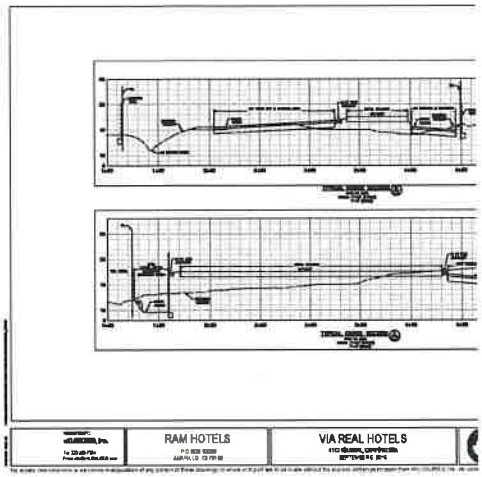

RAM HOTELS
VIA REAL HOTELS
PRELIMINARY GRADING AND DRAINAGE PLAN
C4

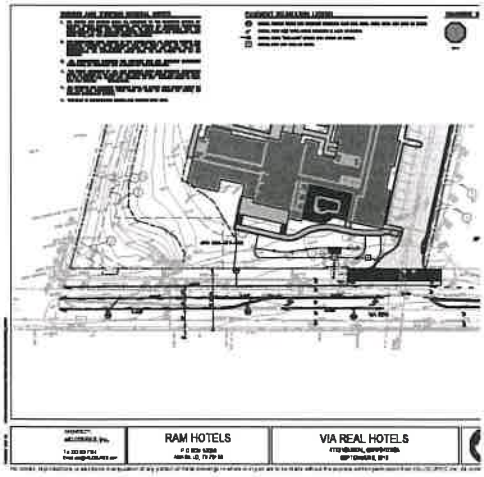

RAM HOTELS
VIA REAL HOTELS
PRELIMINARY WATER AND SEWER PLAN
C5

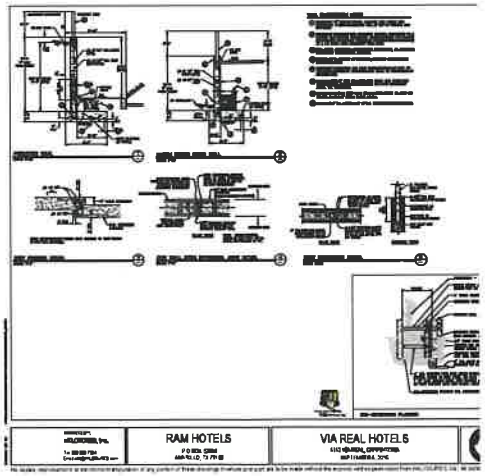

RAM HOTELS
VIA REAL HOTELS
PRELIMINARY WATER AND SEWER PLAN
C6


VIA REAL HOTELS
PRELIMINARY EROSION CONTROL PLAN
C7


RAM HOTELS
VIA REAL HOTELS
Stantec
PRELIMINARY EROSION CONTROL PLAN
C8


RAM HOTELS
VIA REAL HOTELS


RAM HOTELS
VIA REAL HOTELS


RAM HOTELS
VIA REAL HOTELS



MCLENNAN, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR ELEVATIONS	EXHIBIT OP-1A



MCLENNAN, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR ELEVATIONS	EXHIBIT OP-1B



MCLENNAN, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT OP-1C



MCLENNAN, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT OP-1D



MCCLENDON, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR ELEVATIONS	EXHIBIT OP-2A



MCCLENDON, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR ELEVATIONS	EXHIBIT OP-2B



MCCLENDON, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT OP-2C



MCCLENDON, INC. ARCHITECTS	RAM HOTELS	VIA REAL HOTEL	EXTERIOR RENDERING	EXHIBIT OP-2D

25. APPENDIX B

VICINITY MAP

Project Location



ELEVATED

N

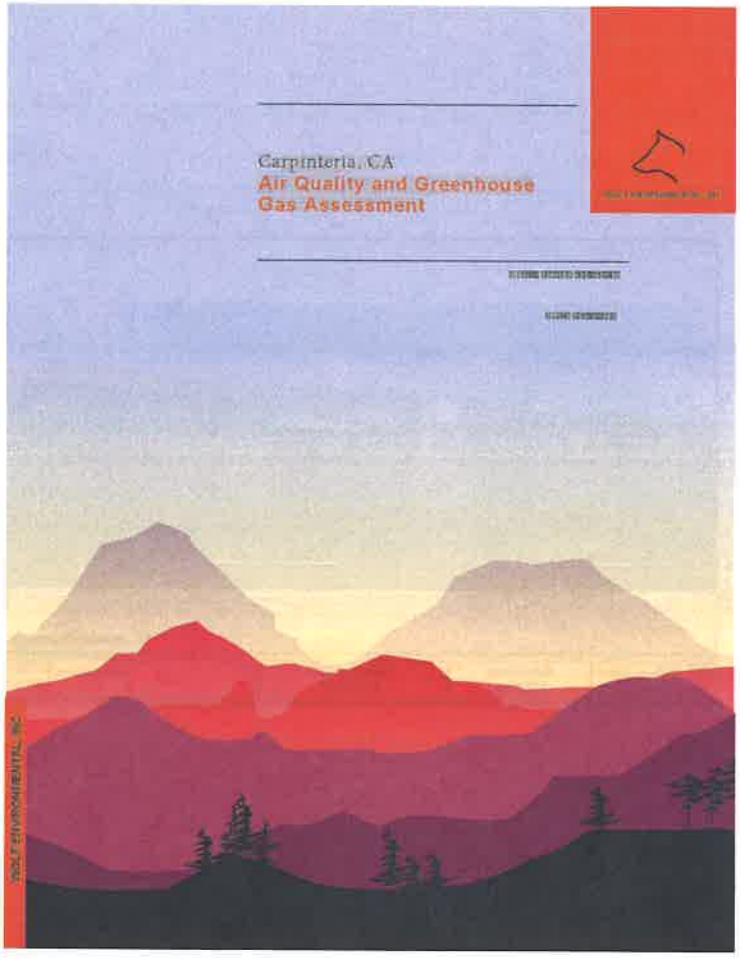
Figure 1

Vicinity Map

4110 Via Real, Carpinteria, CA 93013

25. APPENDIX C

AIR QUALITY AND GREENHOUSE GAS ASSESSMENT



1.0 Introduction

The Project Applicant is proposing to develop a 105 or 106 room hotel in the City of Carpinteria (project). For this analysis, the higher figure of 106 rooms was used. The project is proposed at 4110 Via Real on APN 004-017-022.

1.1 Air District

This Air Quality & Greenhouse Gas Impact Assessment has been prepared for the purpose of identifying potential project-specific or site-specific air quality impacts that may result from the Project.

Santa Barbara County (County) is located in the South Central Coast Air Basin and the local agency management of the Santa Barbara County Air Pollution Control District (SBCAPCD or, air district). The air district is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the County. The air district also has responsibility for monitoring air quality and setting and enforcing limits for source emissions.

1.2 Regulatory

Air quality within the Project area is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. The agencies primarily responsible for improving the air quality within the project area are discussed below along with their individual responsibilities.

1.2.1 *Federal Agencies*

- **U.S. Environmental Protection Agency (EPA)**

  The Federal Clean Air Bill first adopted in 1967 and periodically amended since then, established federal ambient air quality standards. A 1987 amendment to the Bill set a deadline for the attainment of these standards. That deadline has since passed. The other Clean Air Act (CAA) Bill Amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources. The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the 1990 amendments.

  The CAA and the national ambient air quality standards identify levels of air quality for six "criteria" pollutants, which are considered the maximum levels of ambient air pollutants considered safe, with an adequate margin of safety, to protect public health and welfare. The six criteria pollutants include ozone, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide, particulate matter, and lead.

  CAA Section 176(c) (42 U.S.C. 7506(c)) and EPA transportation conformity regulations (40 CFR

93 Subpart A) require that each new RTP and Transportation Improvement Program (TIP) be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the Metropolitan planning organization (MPO) or accepted by the U.S. Department of Transportation (DOT). The conformity analysis is a federal requirement designed to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS). However, because the State Implementation Plan (SIP) for particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM2.5), and Ozone address attainment of both the State and federal standards, for these pollutants, demonstrating conformity to the federal standards is also an indication of progress toward attainment of the State standards. Compliance with the State air quality standards is provided on the pages following this federal conformity discussion. The County is located in a nonattainment area for the 8-hour ozone standard and PM10 standard but complies with federal standards.

1.2.2 *Federal Regulations*

- **State Implementation Plan (SIP)/ Air Quality Management Plans (AQMPs)**

  To ensure compliance with the NAAQS, EPA requires states to adopt SIP aimed at improving air quality in areas of nonattainment or a Maintenance Plan aimed at maintaining air quality in areas that have attained a given standard. New and previously submitted plans, programs, district rules, state regulations, and federal controls are included in the SIPs. Amendments made in 1990 to the federal CAA established deadlines for attainment based on an area's current air pollution levels. States must enact additional regulatory programs for nonattainment's areas in order to adhere with the CAA Section 172. In California, the SIPs must adhere to both the NAAQS and the California Ambient Air Quality Standards (CAAQS).

  To ensure that State and federal air quality regulations are being met, Air Quality Management Plans (AQMPs) are required. AQMPs present scientific information and use analytical tools to identify a pathway towards attainment of NAAQS and CAAQS. The Santa Barbara County Air Pollution Control District (SBCAPCD) develops the AQMPs for the region where the Santa Barbara Council of Governments (SBCOG) operates. The regional air districts begin the SIP process by submitting their AQMPs to the California Air Resources Board (CARB). CARB is responsible for revising the SIP and submitting it to EPA for approval. EPA then acts on the SIP in the Federal Register. The items included in the California SIP are listed in the Code of Federal Regulations Title 40, Chapter 1, Part 52, Subpart 7, Section 52.220.

- **Transportation Control Measures**

  One particular aspect of the SIP development process is the assessment of available transportation control measures (TCMs) as a part of making progress towards clean air goals. TCMs are defined in Section 108(f)(1) of the CAA and are strategies designed to reduce vehicle miles traveled, vehicle idling, and associated air pollution. These goals are generally achieved by developing attractive and convenient alternatives to single-occupant vehicle use.

Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

- **Energy Policy Act of 1992 (EPAct)**

  The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of alternative fueled vehicles (AFVs). States are also required by the act to consider a variety of incentive programs to help promote AFVs.

1.2.3 *State Agencies*

- **California Air Resources Board (CARB)**

  CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing its own air quality legislation called the California Clean Air Act (CCAA), adopted in 1988. CARB was created in 1967 from the merging of the California Motor Vehicle Pollution Control Board and the Bureau of Air Sanitation and its Laboratory.

  CARB has primary responsibility in California to develop and implement air pollution control plans designed to achieve and maintain the NAAQS established by the EPA. Whereas CARB has primary responsibility and produces a major part of the SIP for pollution sources that are statewide in scope, it relies on the local air districts to provide additional strategies for sources under their jurisdiction. CARB combines its data with all local district data and submits the completed SIP to the EPA. The SIP consists of the emissions standards for vehicular sources and consumer products set by CARB, and attainment plans adopted by the Air Pollution Control Districts (APCDs) and Air Quality Management District's (AQMDs) and approved by CARB.

  States may establish their own standards, provided the State standards are at least as stringent as the NAAQS. California has established California Ambient Air Quality Standards (CAAQS) pursuant to California Health and Safety Code (CH&SC) [§39606(b)] and its predecessor statutes.

  The CH&SC [§39608] requires CARB to "identify" and "classify" each air basin in the State on a pollutant-by-pollutant basis. Subsequently, CARB designated areas in California as nonattainment based on violations of the CAAQSs. Designations and classifications specific to the SJVAB can be found in the next section of this document. Areas in the State were also

classified based on severity of air pollution problems. For each nonattainment class, the CCAA specifies air quality management strategies that must be adopted. For all nonattainment categories, attainment plans are required to demonstrate a five percent-per-year reduction in nonattainment air pollutants or their precursors, averaged every consecutive three-year period, unless an approved alternative measure of progress is developed. In addition, air districts in violation of CAAQS are required to prepare an Air Quality Attainment Plan (AQAP) that lays out a program to attain and maintain the CCAA mandates.

CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

Other CARB duties include monitoring air quality. CARB has established and maintains, in conjunction with local APCDs and AQMDs, a network of sampling stations (called the State and Local Air Monitoring [SLAMS] network), which monitor the present pollutant levels in the ambient air.

Federal and State standards for criteria pollutants are provided in Table 1.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[5,6]	Secondary[5,7]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry		Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³				
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour			35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)				
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (338 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	–	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour				0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean			0.030 ppm (for certain areas)[11]		
Lead[12][13]	30 Day Average	1.5 µg/m³	Atomic Absorption			High Volume Sampler and Atomic Absorption
	Calendar Quarter			1.5 µg/m³ (for certain areas)[13]	Same as Primary Standard	
	Rolling 3 Month Average			0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page

Footnotes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and 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.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone 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 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration is expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon 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.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 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 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (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.
11. 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 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-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 for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB 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.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-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.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

1.2.4 *State Regulations*

- **CARB Mobile-Source Regulation**

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollutant per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved.

- **California Clean Air Act**

The CCAA was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. The CCAA establishes more stringent ambient air quality standards than those included in the Federal CAA. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the CH&SC [§39606(b)], which are similar to the federal standards.

- **Tanner Air Toxics Act**

California regulates Toxic Air Contaminants (TACs) primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act 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. To date, CARB has identified more than 21 TACs and has adopted EPA's list of Hazardous Air Pollutants (HAPs) as TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators).

These rules and standards provide for:

- More stringent emission standards for some new urban bus engines, beginning with 2002 model year engines.
- Zero-emission bus demonstration and purchase requirements applicable to transit agencies
- Reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

- **AB 1493 (Pavley)**

AB 1493 (Pavley) enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB would apply to 2009 and later model year vehicles. CARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicles by an estimated 18 percent in 2020 and by 27 percent in 2030 [Association of Environmental Professionals (AEP) 2007)]. In 2005, the CARB requested a waiver from U.S. EPA to enforce the regulation, as required under the CAA. Despite the fact that no waiver had ever been denied over a 40-year period, the then Administrator of the EPA sent Governor Schwarzenegger a letter in December 2007, indicating he had denied the waiver. On March 6, 2008, the waiver denial was formally issued in the Federal Register. Governor Schwarzenegger and several other states immediately filed suit against the federal government to reverse that decision. On January 21, 2009, CARB requested that EPA reconsider denial of the waiver. EPA scheduled a re-hearing on March 5, 2009. On June 30, 2009, EPA granted a waiver of CAA preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year.

- **Assembly Bill 32 (California Global Warming Solutions Act of 2006)**

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. December 31, 2020, is the deadline for achieving the 2020 GHG emissions cap. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has

discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions.

CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the Initial Scoping Plan adopted in December of 2008. The current plan has identified new policies and actions to accomplish the State's 2030 GHG limit.

- **Senate Bill 375**

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

This law also extends the minimum time period for the regional housing needs allocation cycle from five years to eight years for local governments located within an MPO that meets certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

- **Executive Order B-30-15**

Executive Order B-30-15, which was signed by Governor Brown in 2016, establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. Executive Order B-30-15 requires MPO's to implement measures that will achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.

- **California Global Warming Solutions Act of 2006: emissions limit, or SB 32**

SB 32 is a California Senate bill expanding upon AB 32 to reduce greenhouse gas (GHG) emissions. The lead author is Senator Fran Pavley, and the principal co-author is Assembly member Eduardo Garcia. SB 32 was signed into law on September 8, 2016, by Governor Brown. SB 32 sets into law the mandated reduction target in GHG emissions as written into Executive Order B-30-15. SB 32 requires that there be a reduction in GHG emissions to 40% below the 1990 levels by 2030. Greenhouse gas emissions include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The California

Air Resources Board (CARB) is responsible for ensuring that California meets this goal. The provisions of SB 32 were added to Section 38566 of the Health and Safety Code subsequent to the bill's approval. The bill went into effect January 1, 2017. SB 32 builds onto Assembly Bill (AB) 32 written by Senator Fran Pavley and Assembly Speaker Fabian Nunez passed into law on September 27, 2006. AB 32 required California to reduce greenhouse gas emissions to 1990 levels by 2020 and SB 32 continues that timeline to reach the targets set in Executive Order B-30-15. SB 32 provides another intermediate target between the 2020 and 2050 targets set in Executive Order S-3-05.

1.2.5 *Regional Agencies*

- **Santa Barbara County Air Pollution Control District**

The air district is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the County. The air district also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The air district is precluded from such activities under State law.

Activities of the air district include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

1.2.6 *Local Plans*

- **City of Carpinteria General Plan**

California State Law requires every city and county to adopt a comprehensive General Plan to guide its future development. The General Plan essentially serves as a "constitution for development"— the document that serves as the foundation for all land use decisions. The City's General Plan Update includes various elements, including air quality and greenhouse gases, which address local concerns and provides goals and policies to achieve its development goals.

2.0 Environmental Setting

2.1 Climate Conditions

The City of Carpinteria and Santa Barbara County are located in the South Central Coast Air Basin (Basin), composed of Ventura County, Santa Barbara County and San Luis Obispo County; development activities potentially impacting the Basin are under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD).

2.2 Anthropogenic (Man-made) Sources

In addition to climatic conditions (wind, lack of rain, etc.), air pollution can be caused by anthropogenic or man-made sources. Air pollution in the air district can be directly attributed to human activities, which cause air pollutant emissions. Human causes of air pollution in the Valley consist of population growth, urbanization (gas-fired appliances, residential wood heaters, etc.), mobile sources (i.e., cars, trucks, airplanes, trains, etc.), oil production, agriculture, and other socioeconomic activities.

Carbon monoxide emissions come from mobile sources in the County. Motor vehicles account for significant portions of regional gaseous and particulate emissions. Local large employers such as industrial plants can also generate substantial regional gaseous and particulate emissions. In addition, construction and agricultural activities can generate significant temporary gaseous and particulate emissions (dust, ash, smoke, etc.).

Ozone is the result of a photochemical reaction between oxides of nitrogen (NOx) and Reactive Organic Gases (ROG). Mobile sources contribute the majority of all NOx emitted from anthropogenic sources in the County.

The principal factors that affect air quality in Santa Barbara County are:

1. Automobile and truck travel
2. Increases in mobile and stationary pollutants generated by local urban growth

Automobiles, trucks, buses, and other vehicles using hydrocarbon (HC) fuels release exhaust products into the air. Each vehicle by itself does not release large quantities; however, when considered as a group, the cumulative effect is significant.

Other sources may not seem to fit into any one of the major categories or they may seem to fit in a number of them. These could include agricultural uses, dirt roads, animal shelters; animal feed lots, chemical plants and industrial waste disposal, which may be a source of dust, odors, or other pollutants.

2.2.1 *Motor Vehicles*

Automobiles, trucks, buses, and other vehicles using hydrocarbon fuels release exhaust products into the air. Each vehicle by itself does not release large quantities; however, when considered as a group, the cumulative effect is significant.

2.2.2 *Agricultural and Other Miscellaneous Activities*

Other sources may not seem to fit into any one of the major categories or they may seem to fit in a number of them. These could include agricultural uses, dirt roads, animal shelters, animal feed lots, chemical plants and industrial waste disposal, which may be a source of dust, odors, or other pollutants.

2.2.3 *Industrial Plants*

Industrial contaminants and their potential to produce various effects depend on the size and type of industry, pollution controls, local topography, and meteorological conditions.

2.3 Air Basin Monitoring

The air district and the CARB maintain numerous air quality monitoring sites throughout each County in the Air Basin to measure ozone, PM2.5, and PM10. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards.

Table 2 identifies the County's attainment status.

Table 2
Santa Barbara County Attainment Status

Pollutant	Federal Standards	State Standards
Ozone – 1 Hour	Revoked in 2005	Nonattainment
Ozone – 8 Hour	-	Nonattainment
PM10	Unclassified	Nonattainment
PM2.5	Unclassified/Attainment	Unclassified
Carbon Monoxide	Unclassified/Attainment	Attainment
Nitrogen Dioxide	-	Attainment
Sulfur Dioxide	-	Attainment

2.4 Air Quality Standards

The FCAA, first adopted in 1963, and periodically amended since then, established National Ambient Air Quality Standards (NAAQS). A set of 1977 amendments determined a deadline for the attainment of these standards. That deadline has since passed. Other CAA amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources.

In 1988, the State of California passed the CCAA (State 1988 Statutes, Chapter 568), which set forth a program for achieving more stringent California Ambient Air Quality Standards. The CARB implements State ambient air quality standards, as required in the CCAA, and cooperates with the federal government in implementing pertinent sections of the FCAA Amendments (FCAAA). Further, CARB regulates vehicular emissions throughout the State. The SBCAPCD regulates stationary sources, as well as some mobile sources. Attainment of the more stringent State PM10 Air Quality Standards is not currently required.

The EPA uses six "criteria pollutants" as indicators of air quality and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called the NAAQS.

The air district operates regional air quality monitoring networks that provide information on average concentrations of pollutants for which State or federal agencies have established ambient air quality standards. Descriptions of nine pollutants of importance in the County follow.

2.4.1 Ozone (1-hour and 8-hour)

The most severe air quality problem in the Air Basin is the high level of ozone. Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. Here, ground level, or "bad" ozone, is an air pollutant that damages human health, vegetation, and many common materials. It is a key ingredient of urban smog. The troposphere extends to a level about 10 miles up, where it meets the second layer, the stratosphere. The stratospheric, or "good" ozone layer, extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays.

"Bad" ozone is what is known as a photochemical pollutant. It needs reactive organic gases (ROG), NOx, and sunlight. ROG and NOx are emitted from various sources throughout Tulare County. In order to reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Ozone is a regional air pollutant. It is generated over a large area and is transported and spread by wind. Ozone, the primary constituent of smog, is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, ozone is not emitted directly into the air by specific sources. Ozone is created by sunlight acting on other air pollutants (called precursors), specifically NOx and ROG. Sources of precursor gases to the photochemical reaction that form ozone number in the thousands. Common sources include consumer products, gasoline vapors, chemical solvents, and combustion products of various fuels. Originating from gas stations, motor vehicles, large industrial facilities, and small businesses such as bakeries and dry cleaners, the ozone-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins. Approximately 50 million people lived in counties with air quality levels above the EPA's health-based national air quality standard in 1994. The highest levels of ozone were recorded in Los Angeles, closely followed by the San Joaquin Valley. High levels also persist in other heavily populated areas, including the Texas Gulf Coast and much of the Northeast.

While the ozone in the upper atmosphere absorbs harmful ultraviolet light, ground-level ozone is damaging to the tissues of plants, animals, and humans, as well as to a wide variety of inanimate materials such as plastics, metals, fabrics, rubber, and paints. Societal costs from ozone damage include increased medical costs, the loss of human and animal life, accelerated replacement of industrial equipment, and reduced crop yields.

- ***Health Effects***

  While ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground-level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems, such as: forests and foothill communities; agricultural crops; and some man-made materials, such as rubber, paint, and plastic. High levels of ozone may negatively affect immune systems, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. Ozone accelerates aging and exacerbates pre-existing asthma and bronchitis and, in cases with high concentrations, can lead to the development of asthma in active children. Active people, both children and adults, appear to be more at risk from ozone exposure than those with a low level of activity. Additionally, the elderly and those with respiratory disease are also considered sensitive populations for ozone.

  People who work or play outdoors are at a greater risk for harmful health effects from ozone. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities. Research indicates that children under 12 years of age spend nearly twice as much time outdoors daily than adults. Teenagers spend at least twice as much time as adults in active sports and outdoor activities. In addition, children inhale more air per pound of body weight than adults, and they breathe more rapidly than

adults. Children are less likely than adults to notice their own symptoms and avoid harmful exposures.

Ozone is a powerful oxidant—it can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. Ozone can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of ozone above the current ambient air quality standard leads to lung inflammation and lung tissue damage and a reduction in the amount of air inhaled into the lungs.

2.4.2 Suspended PM (PM10 and PM2.5)

Particulate matter pollution consists of very small liquid and solid particles that remain suspended in the air for long periods. Some particles are large or concentrated enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter is emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. PM10 refers to particles less than or equal to 10 microns in aerodynamic diameter. PM2.5 refers to particles less than or equal to 2.5 microns in aerodynamic diameter and are a subset of PM10. Particulates of concern are those that are 10 microns or less in diameter. These are small enough to be inhaled, pass through the respiratory system and lodge in the lungs, possibly leading to adverse health effects.

In the western United States, there are sources of PM10 in both urban and rural areas. Because particles originate from a variety of sources, their chemical and physical compositions vary widely. The composition of PM10 and PM2.5 can also vary greatly with time, location, the sources of the material and meteorological conditions. Dust, sand, salt spray, metallic and mineral particles, pollen, smoke, mist, and acid fumes are the main components of PM10 and PM2.5. In addition to those listed previously, secondary particles can also be formed as precipitates from chemical and photochemical reactions of gaseous sulfur dioxide (SO2) and NOx in the atmosphere to create sulfates (SO4) and nitrates (NO3). Secondary particles are of greatest concern during the winter months where low inversion layers tend to trap the precursors of secondary particulates.

- ***Health Effects***

  PM10 and PM2.5 particles are small enough—about one-seventh the thickness of a human hair, or smaller—to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system's natural defenses. Health problems begin as the body reacts to these

foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non-health-related effects include reduced visibility and soiling of buildings. PM10 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 PM10 and PM2.5 can aggravate respiratory disease and cause lung damage, cancer, and premature death.

Although particulate matter can cause health problems for everyone, certain people are especially vulnerable to adverse health effects of PM10. These "sensitive populations" include children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis. Of greatest concern are recent studies that link PM10 exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM10 can also damage manmade materials and is a major cause of reduced visibility in many parts of the United States.

2.4.3 Carbon Monoxide (CO)

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive. CO is a byproduct of motor vehicle exhaust, contributes more than two thirds of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO.

- ***Health Effects***

  CO enters the bloodstream and binds more readily to hemoglobin than oxygen, reducing the oxygen-carrying capacity of blood and thus reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and in prolonged, enclosed exposure, death.

  The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin (COHb) in the blood. Health

effects observed may include an early onset of cardiovascular disease; behavioral impairment; decreased exercise performance of young, healthy men; reduced birth weight; sudden infant death syndrome (SIDS); and increased daily mortality rate.

Most of the studies evaluating adverse health effects of CO on the central nervous system examine high-level poisoning. Such poisoning results in symptoms ranging from common flu and cold symptoms (shortness of breath on mild exertion, mild headaches, and nausea) to unconsciousness and death.

2.4.4 Nitrogen Dioxide (NO2)

Nitrogen oxides (NOx) is a family of highly reactive gases that are primary precursors to the formation of ground-level ozone and react in the atmosphere to form acid rain. NOx is emitted from combustion processes in which fuel is burned at high temperatures, principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, NOx is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates. EPA regulates only nitrogen dioxide (NO2) as a surrogate for this family of compounds because it is the most prevalent form of NOx in the atmosphere that is generated by anthropogenic (human) activities.[1]

Health Effects

NOx is an ozone precursor that combines with Reactive Organic Gases (ROG) to form ozone. See the ozone section above for a discussion of the health effects of ozone.

Direct inhalation of NOx can also cause a wide range of health effects. NOx can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of nitrogen dioxide (NO2) may lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO2 may lead to increased susceptibility to respiratory infection and may cause irreversible alterations in lung structure. Other health effects associated with NOx are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NOx can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to production of particulate nitrates. Airborne NOx can also impair visibility. NOx is a major component of acid deposition in California. NOx may affect both terrestrial and aquatic ecosystems. NOx in the air is a potentially significant contributor to a number of environmental effects such as acid rain and eutrophication in coastal waters. Eutrophication occurs when a body of water suffers an increase in nutrients that reduce the amount of oxygen in the water, producing an environment that is destructive to fish and

1 United States Environmental Protection Agency (EPA), Nitrogen Oxides (NOx). Why and How They Are Controlled, 456/F-99-006R, November 2019

other animal life.

NO2 is toxic to various animals as well as to humans. Its toxicity relates to its ability to combine with water to form nitric acid in the eye, lung, mucus membranes, and skin. Studies of the health impacts of NO2 include experimental studies on animals, controlled laboratory studies on humans, and observational studies.

In animals, long-term exposure to NOx increases susceptibility to respiratory infections, lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO2, can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations between NO2 concentrations and daily mortality from respiratory and cardiovascular causes as well as hospital admissions for respiratory conditions.

NOx contributes to a wide range of environmental effects both directly and when combined with other precursors in acid rain and ozone. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication as discussed above. Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms.

2.4.5 Sulfur Dioxide (SO2)

The major source of sulfur dioxide (SO2) is the combustion of high-sulfur fuels for electricity generation, petroleum refining and shipping. High concentrations of SO2 can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO2 levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other effects that have been associated with longer-term exposures to high concentrations of SO2, in conjunction with high levels of PM, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO2 also is a major precursor to PM2.5, which is a significant health concern and a main contributor to poor visibility. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain.

2.4.6 Lead (Pb)

Lead, a naturally occurring metal, can be a constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Lead was used until recently to increase the octane rating in automobile fuel. Since the 1980s, lead has been phased out in gasoline, reduced in drinking water, reduced in industrial air pollution, and

banned or limited in consumer products. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels; however, the use of leaded fuel has been mostly phased out. Since this has occurred the ambient concentrations of lead have dropped dramatically.

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children. Effects on the nervous systems of children are one of the primary health risk concerns from lead. In high concentrations, children can even suffer irreversible brain damage and death. Children 6 years old and under are most at risk, because their bodies are growing quickly.

2.4.7 Toxic Air Contaminants (TACs)

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TAC is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination. The ten TAC are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM). Caltrans' guidance for transportation studies references the Federal Highway Administration (FHWA) memorandum titled "Interim Guidance on Air Toxic Analysis in NEPA Documents" which discusses emissions quantification of six "priority" compounds of 21 Mobile Source Air Toxics (MSAT) identified by the United States Environmental Protection Agency (USEPA). The six "priority" compounds are diesel exhaust (particulate matter and organic gases), benzene, 1,3-butadiene, acetaldehyde, formaldehyde, and acrolein.

Some studies indicate that diesel PM poses the greatest health risk among the TAC listed above. A 10-year research program (California Air Resources Board 1998) demonstrated that diesel PM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to diesel PM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Diesel PM differs from other TAC in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other TAC, however, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a diesel PM exposure method. This method uses the CARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of diesel PM. Table 4 depicts the CARB Handbook's recommended buffer distances associated with various types of common sources.

Existing air quality concerns within the air basin are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

2.4.8 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The Project does not propose any uses that would be potential odor sources.

2.4.9 Naturally Occurring Asbestos (NOA)

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Asbestos is commonly found in ultramafic rock and near fault zones. The amount of asbestos that is typically present in these rocks' ranges from less than 1% up to approximately 25% and sometimes more. It is released from ultramafic rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways, which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. Asbestos is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. Asbestos is hazardous and can cause lung disease and cancer dependent upon the level of exposure. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for a health problem.

The proposed Project's construction phase may cause asbestos to become airborne due to the construction activities that will occur on site. The Project would likely be required to submit a Dust Control Plan.

2.4.10 Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are often called greenhouse gases. Some greenhouse gases such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The principal greenhouse gases that enter the atmosphere because of human activities are:

- **Carbon Dioxide (CO2):** Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees, and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement, asphalt paving, truck trips). Carbon dioxide is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH4):** Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- **Nitrous Oxide (N2O):** Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- **Fluorinated Gases:** Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes.

Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (i.e., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases ("High GWP gases").

3.0 Air-Quality Impacts

3.1 Methodology

The impact assessment for air quality focuses on potential effects the Project might have on air quality within the region. The air district has established thresholds of significance for determining environmental significance. These thresholds separate a project's short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project, which are recognized to be short in duration. The long-term emissions are primarily related to the activities that will occur indefinitely as a result of Project operations. Impacts will be evaluated both on the basis of California Environmental Quality Act (CEQA) Appendix G criteria and SBCAPCD significance criteria. The impacts to be evaluated will be those involving construction and operational emissions of criteria pollutants.

3.1.1 CalEEMod

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as CEQA and NEPA documents, pre-project planning, compliance with local air quality rules and regulations, etc.

3.2 Environmental Thresholds

Air quality impacts are evaluated on both a short-term and long-term basis. Short-term impacts are generally considered to occur during project construction while long-term impacts are associated with project operation.

Air quality threshold criteria are developed and applied using federal, state, and local data and methodologies including computerized modeling techniques. State CEQA Guidelines state in Appendix G, that for air quality, a project will ordinarily have a significant effect on the environment if it will:

- Violate any ambient State or Federal air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial

pollutant concentrations.

In addition, the SBCAPCD has prepared criteria and thresholds for determining significance under CEQA. According to the SBCAPCD's Scope and Content of Air Quality Sections in Environmental Documents (SBCAPCD 2011a), a project would have a significant air quality effect on the environment if operation of the project would:

- Emit (from all project sources, both stationary and mobile) more than the daily trigger for offsets or air quality impact analysis set in the SBCAPCD New Source Review Rule, for any pollutant;
- Emit 25 pounds per day or more of NOX or ROC from motor vehicle trips only;
- Cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- Exceed the SBCAPCD health risk public notification thresholds adopted by the SBCAPCD Board for non-cancer risk;
- Be inconsistent with the latest adopted federal and state air quality plans for Santa Barbara County; or
- Expose new or existing receptors to objectionable odors.

Table 3
Project Construction Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Construction Emissions	1.34	1.29	1.93	2.67e-003	0.17	0.10	240.28

Due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health related air quality standards. Therefore, CO "hotspots" analyses are not required.

Quantitative thresholds of significance are not currently in place for short-term or construction emissions; however, the SBCAPCD uses 25 tons per year for ROG or NOX as a guideline for determining the significance of construction impacts. Under SBCAPCD Rule 202 D.16, if the combined emissions from all construction equipment used to construct a stationary source that requires an Authority to Construct permit will have the potential to exceed 25 tons of any pollutant, except CO, in a 12-month period, the owner of the stationary source shall provide offsets under the provisions of Rule 804 and shall demonstrate that no ambient air quality standard would be violated (APCD 2011a). Please note that this project is not a stationary source, and this latter threshold is not applicable.

Although quantitative thresholds of significance are not currently in place for short-term emissions, CEQA requires that short-term impacts such as exhaust emissions from construction

equipment and fugitive dust generation during grading be discussed in the environmental document. In the interest of public disclosure, the SBCAPCD recommends that construction-related NOX, ROC, PM10 and PM2.5 emissions from diesel and gasoline powered equipment, paving and other activities, be quantified.

Standard dust control measures must be implemented for any discretionary project involving earth-moving activities. Some projects have the potential for construction-related dust to cause a nuisance. Because Santa Barbara County is currently in nonattainment for the state PM10 standard, dust mitigation measures are required for all discretionary construction activities (regardless of the significance of the fugitive dust impacts) based on policies within the 1979 Air Quality Attainment Plan (APCD 2011a).

Due to the temporary, short-term nature of construction emissions, the SBCAPCD does not apply the quantitative operational emissions thresholds of 25 pounds per day for ROC and NOX to construction activities. As no quantitative emissions thresholds for maximum daily construction emissions are established, and the proposed project is under those thresholds in any event, the proposed project air quality impacts in relation to construction activity would be less than significant.

3.3 Long-Term Emissions

Long-Term emissions from the Project would be generated primarily by mobile source (vehicle) emissions from the Project site and area sources such as lawn maintenance equipment.

3.3.1 *Localized Operational Emissions*

Significance criteria have been established for criteria pollutant emissions as documented above would apply to the project regarding NOX or ROC emissions. Operational emissions have been estimated for the Project using the CalEEMod Model and detailed results are included in Appendix A of this report.

Results of the CalEEMod analysis are shown in Table 4. Results indicate that the annual operational emissions from the Project will be less than the air district emissions thresholds for criteria pollutants noted above.

Table 4
Project Operational Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Operational Emissions	3.03	0.67	1.19	6.15e-003	0.48	0.14	989.59

3.3.2 *Localized Operational Emissions*

✓ **Odors**

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the air district. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.

Air districts generally require that an analysis of potential odor impacts be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

The Project will not generate odorous emissions given the nature or characteristics of the Project. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions.

✓ **Naturally Occurring Asbestos (NOA)**

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Construction of the Project may cause asbestos to become airborne

due to the construction activities that will occur on site. The Project could be required to submit a Dust Control Plan to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities associated with the Project.

✓ **Greenhouse Gas Emissions**

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the California Natural Resource Agency, which noted in its Public Notice for the proposed CEQA amendments that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the Final Statement of Reasons for Regulatory Action for amendments to the CEQA Guidelines confirms that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b).

OPR's Technical Advisory titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects 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" (OPR 2008, p. 4). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact', individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008, p. 6).

In May 2015, the County of Santa Barbara Board of Supervisors adopted the Energy and Climate Action Plan (ECAP) (County of Santa Barbara Long Range Planning Division, 2015) and certified the accompanying EIR (SCH# 20144021021) (PMC, 2015). The ECAP includes a greenhouse gas emissions forecast for unincorporated Santa Barbara County to 2035 and otherwise meets the criteria in CEQA Guidelines Section 15183.5(b) for a "plan to reduce greenhouse gas emissions." The ECAP commits the County to reduce community-wide greenhouse gas emissions by 15 percent below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (AB 32) and the related Climate Change Scoping Plan (California Air Resources Board, 2008). The ECAP concludes that the County can meet this emission reduction target by implementing 53 existing and new County projects, policies, and programs ("emission reduction measures"), such as an energy checklist for residential building permits (BE 2), energy efficiency education and outreach programs (BE 4), and additional opportunities to recycle cardboard, glass, paper, and plastic products (WR

2). As a result, specific projects included in the ECAP's emission forecast are not currently required to incorporate emission reduction measures listed in the ECAP or any other mitigation measures to reduce greenhouse gas emissions. Concurrent with the ECAP, the Board of Supervisors also adopted an amendment to the Energy Element of the Comprehensive Plan that requires the County to monitor progress meeting the emission reduction target and, as necessary, update the ECAP.

The growth estimates used in the ECAP's greenhouse gas emissions forecast were based on the Santa Barbara County Regional Growth Forecast 2005-2040 (Santa Barbara County Association of Governments, 2007) and the 2010 U.S. Census. The growth estimates were based on factors such as population projections, vehicle trends, and planned land uses. The sources of greenhouse gas emissions included various sectors, such as transportation, residential energy, commercial energy, off-road, solid waste, agriculture, water and wastewater, industrial energy, and aircraft. As a result, most residential and commercial projects that are consistent with the County's zoning (in 2007) were included in the forecast, as were parks and recreation resources at levels to maintain adopted policies regarding ratios of recreation acreage to resident population. However, certain projects were not included in the emissions forecast, such as stationary source projects (e.g., large boilers, gas stations, auto body shops, dry cleaners, oil and gas production facilities, and water treatment facilities), Comprehensive Plan amendments, and community plans that exceed the County's projected population and job growth. A proposed project that was included in the ECAP's emissions forecast may tier from the ECAP's EIR for its CEQA analysis of greenhouse gas emissions. A project that tiers from the ECAP's EIR is considered to be in compliance with the requirements in the ECAP and, therefore, its incremental contribution to a cumulative effect is not cumulatively considerable (Class III).

Construction GHG Emissions

The County's approach to evaluating potential project impacts related to GHG emissions under CEQA is based on consistency with the ECAP, which does not require a quantitative evaluation of project generated GHG emissions. Nonetheless, GHG emissions resulting from construction of the project were estimated and included herein for disclosure purposes. Project-generated GHG emissions are estimated using CalEEMod consistent with the SBCAPCD recommendations for project-level review because CalEEMod has the ability to quantify indirect GHG emissions and GHG mitigation (SBCAPCD 2015a). Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activity were quantified using the CalEEMod. On-site sources of GHG emissions include off-road equipment, and off-site sources include hauling and vendor trucks and worker vehicles.

Operational GHG Emissions

Because the proposed project is consistent with the City of Carpinteria General Plan Land Use Map for the hotel use proposed on the site, and specific GHG operational impact thresholds have not been set by either SBCAPCD or the City of Carpinteria, operational GHG emissions would be less than significant.

In the event that a local air district's guidance for addressing GHG impacts does not use numerical GHG emissions thresholds, at the lead agency's discretion, a neighboring air district's GHG threshold may be used to determine impacts. In December 2008, the South Coast Air Quality Management District (SCAQMD) Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The SCAQMD guidance identifies a threshold of 3,000 MTCO2eq./year for GHG for construction emissions amortized over a 30-year project lifetime, plus annual operation emissions. This threshold is often used by agencies, such as the California Public Utilities Commission, to evaluate GHG impacts in areas that do not have specific thresholds (CPUC 2015)[2]. Though the Project is under SBCAPCD jurisdiction, the SCAQMD GHG threshold provides some perspective on the GHG emissions generated by the Project. Table 5 shows the yearly GHG emissions generated by the Project as determined by the CalEEMod model, which is significantly less than the threshold identified by the SCAQMD.

Table 5
Project Operational Greenhouse Gas Emissions

Summary	CO2e
Project Operational Emissions Per Year (plus amortized construction emissions)	997.59 MT/yr.

2 California Public Utilities Commission (CPUC). 2015. Section 4.7, "Greenhouse Gases." Final Environmental Impact Report for the Santa Barbara County Reliability Project. May 2015. Accessed January 18, 2018. http://www.cpuc.ca.gov/environment/info/aspen/sbcrp/FEIR.html

5.0 Impact Determinations and Recommended Mitigation*

In accordance with CEQA, when a proposed project is consistent with a General Plan for which an EIR has been certified, the effects of that project are evaluated to determine if they will result in project-specific significant adverse impacts on the environment. The criteria used to determine the significance of an air quality or greenhouse gas impact are based on the following thresholds of significance. Accordingly, air quality or greenhouse gas impacts resulting from the Project are considered significant if the Project would:

Air Quality

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?

Greenhouse Gas Emissions

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?

5.1 Air Quality

5.1.1 *Conflict with or obstruct implementation of the applicable air quality plan*

The primary way of determining consistency with the air quality plan's (AQP's) assumptions is determining consistency with the applicable General Plan to ensure that the Project's population density and land use are consistent with the growth assumptions used in the AQPs for the air basin.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth, and that designate locations for land uses to regulate growth. Existing and future pollutant emissions computed in the AQP are based on land uses from area general plans. AQPs detail the control measures and emission reductions required for reaching attainment of the air standards.

The applicable General Plan for the project is the City's General Plan Update. The Project is consistent with the currently adopted General Plan for the County as well as the County's CAP and is therefore consistent with the population growth and VMT applied in the plan. Therefore, the Project is consistent with the growth assumptions used in the applicable AQPs. As a result, the Project will not conflict with or obstruct implementation of any air quality plans. Therefore, no mitigation is needed.

5.1.2 *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*

Construction of the project would result in emissions of ozone precursors including reactive organic gasses (ROG), nitrous oxides (NOx), and fugitive dust emissions (PM10). During operation, the project would result in emissions of ozone precursors associated with mobile source emissions and other stationary sources. Inconsistency with any of the plans would be considered a cumulatively adverse air quality impact. As discussed above, the Project is consistent with the currently adopted General Plan for the City and is therefore consistent with the population growth and VMT applied in the plan.

Project specific emissions that exceed the thresholds of significance for criteria pollutants would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the County is in non-attainment under applicable federal or state ambient air quality standards. It should be noted that a project is not characterized as cumulatively insignificant when project emissions fall below thresholds of significance.

As discussed above, results of the analysis show that emissions generated from construction and operation of the Project will be less than the applicable air district emission thresholds for criteria pollutants. Therefore, no mitigation is required.

5.1.3 *Expose sensitive receptors to substantial pollutant concentrations*

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses that have the greatest potential to attract these types of sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities.

Although the Project site is adjacent to residential uses, the fact that no SBCAPCD criteria pollutant thresholds or GHG emissions thresholds would be exceeded as a result of either project construction or operations ensures this impact is less than significant and no mitigation is required. ***Although it is possible that the SBCAPCD may require a Toxic Air Contaminant (TAC) analysis due to the Project site being located directly adjacent to US Highway 101, that is not a***

part of the scope of this report.

5.1.4 *Result in other emissions such as those leading to odors adversely affecting a substantial number of people*

CEQA requires that an analysis of potential odor impacts be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people located near existing odor sources.

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Air districts throughout the state have identified some common types of facilities that have been known to produce odors. The types of facilities that are known to produce odors are typically associated with heavy industry or agriculture. The Project will not generate odorous emissions given the nature or characteristics of the Project. Therefore, no mitigation is required.

5.2 Greenhouse Gas Emissions

5.2.1 *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment*

In the event that a local air district's guidance for addressing GHG impacts does not use numerical GHG emissions thresholds, at the lead agency's discretion, a neighboring air district's GHG threshold may be used to determine impacts. In December 2008, the South Coast Air Quality Management District (SCAQMD) Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The SCAQMD guidance identifies a threshold of 3,000 MTCO2eq./year for GHG for construction emissions amortized over a 30-year project lifetime, plus annual operation emissions. Though the Project is under SBCAPCD jurisdiction, the SCAQMD GHG threshold provides some perspective on the GHG emissions generated by the Project. The tables above show the yearly GHG emissions generated by the Project as determined by the CalEEMod model, which is significantly less that SCAQMD thresholds.

There would be no increase in severity to the greenhouse gas impacts, and implementation of the Project will not result in Project-specific or site-specific significant adverse impacts from greenhouse gas emissions within the Project study area. Therefore, no mitigation measures are needed.

5.2.2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

California passed the California Global Warming Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. Under AB 32, CARB must adopt regulations by January 1, 2011, to achieve reductions in GHGs to meet the 1990 emission cap by 2020. On December 11, 2008, CARB adopted its initial Scoping Plan, which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan.

SB 375 requires MPOs to adopt a SCS or APS that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035.

Executive Order B-30-15 establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. Executive Order B-30-15 requires MPO's to implement measures that will achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth, and that designate locations for land uses to regulate growth.

The Project is consistent with the currently adopted General Plan for the City and the adopted SBCOG RTP/SCS and is therefore consistent with the population growth and VMT applied in those plan documents. Therefore, the Project is consistent with the growth assumptions used in the applicable AQP.

CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan. The current plan has identified new policies and actions to accomplish the State's 2030 GHG limit. Below is a list of applicable strategies in the Scoping Plan and the Project's consistency with those strategies.

- California Light-Duty Vehicle GHG Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs for long-term climate change goals.
  - The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to light-duty vehicles that would access the Project. The Project would not conflict or obstruct this reduction measure.
- Energy Efficiency – Pursuit of comparable investment in energy efficiency from all retail providers of electricity in California. Maximize energy efficiency building and appliance standards.
  - The Project is consistent with this reduction measure. Though this measure applies to the State to increase its energy standards, the Project would comply with this measure through existing regulation. The Project would not conflict or obstruct this reduction measure.
- Low Carbon Fuel – Development and adoption of the low carbon fuel standard.
  - The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to the fuel used by vehicles that would access the Project. The Project would not conflict or obstruct this reduction measure.

Based on the assessment above, the Project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, any impacts would be less than significant, and no mitigation would be required.

Carpinteria Hotel Project
Air Quality & Greenhouse Gas Impact Assessment

APPENDIX A

CalEEMod Output Files

Carpinteria Hotel Project - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Carpinteria Hotel Project
Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	106.00	Room	3.53	153,912.00	0
Parking Lot	113.00	Space	1.02	45,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use -
Construction Off-road Equipment Mitigation -
Area Mitigation - test

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1413	1.2975	1.3438	2.4000e-003	0.0797	0.0639	0.1436	0.0293	0.0588	0.0881	0.0000	217.8098	217.8098	0.0448	5.3400e-003	219.1837
2023	1.8322	1.1996	1.3438	2.8700e-003	0.0440	0.0639	0.1080	0.0133	0.0588	0.0720	0.0000	237.1695	237.1695	0.0438	6.1700e-003	240.3838
Maximum	1.8322	1.2975	1.3438	2.8700e-003	0.0797	0.0639	0.1436	0.0293	0.0588	0.0881	0.0000	237.1695	237.1695	0.0448	6.1700e-003	240.3838

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	0.1413	1.2975	1.3438	2.4000e-003	0.0797	0.0639	0.1436	0.0293	0.0588	0.0881	0.0000	217.8098	217.8098	0.0448	5.3400e-003	219.1837
2023	1.8322	1.1996	1.3438	2.8700e-003	0.0440	0.0639	0.1080	0.0133	0.0588	0.0720	0.0000	237.1695	237.1695	0.0438	6.1700e-003	240.3838
Maximum	1.8322	1.2975	1.3438	2.8700e-003	0.0797	0.0639	0.1436	0.0293	0.0588	0.0881	0.0000	237.1695	237.1695	0.0448	6.1700e-003	240.3838

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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
Percent Reduction	0.00	0.00	0.00	0.00	59.65	0.00	17.72	39.47	0.00	14.83	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	7-1-2022	9-30-2022	2.1366	2.1366
2	10-1-2022	12-31-2022	2.0401	2.0401
3	1-1-2023	3-31-2023	2.0190	2.0190
4	4-1-2023	6-30-2023	2.0817	2.0817
5	7-1-2023	9-30-2023	1.9818	1.9818
		Highest	2.1366	2.1366

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	0.7941	3.0000e-005	2.2100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5100	0.5100	1.0000e-005	0.0000	0.5102
Energy	0.0280	0.2548	0.2140	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	305.4961	305.4961	0.0257	7.3600e-003	308.5743
Mobile	0.2780	0.4139	0.8142	4.6100e-003	0.0824	3.9900e-003	0.0864	0.0220	3.7700e-003	0.0258	0.0000	429.7822	429.7822	0.0422	0.0000	430.8378
Waste						0.0000	0.0000		0.0000	0.0000	10.0927	0.0000	10.0927	0.5967	0.0000	25.0099
Water						0.0000	0.0000		0.0000	0.0000	0.5513	2.7957	3.3471	0.0568	2.1000e-003	4.8791
Total	1.1000	0.6690	1.0384	6.1400e-003	0.0824	0.0234	0.1059	0.0220	0.0232	0.0452	10.6440	738.5840	749.2280	0.6214	9.4600e-003	769.3313

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.7941	3.0000e-005	2.2100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.5100	0.5100	1.0000e-005	0.0000	0.5102
Energy	0.0280	0.2548	0.2140	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	305.4961	305.4961	0.0257	7.3600e-003	308.5743
Mobile	0.2780	0.4139	0.8142	4.6100e-003	0.0824	3.9900e-003	0.0864	0.0220	3.7700e-003	0.0258	0.0000	429.7822	429.7822	0.0422	0.0000	430.8378
Waste						0.0000	0.0000		0.0000	0.0000	10.0927	0.0000	10.0927	0.5967	0.0000	25.0099
Water						0.0000	0.0000		0.0000	0.0000	0.5513	2.7957	3.3471	0.0568	2.1000e-003	4.8791
Total	1.1000	0.6690	1.0384	6.1400e-003	0.0824	0.0234	0.1059	0.0220	0.0232	0.0452	10.6440	738.5840	749.2280	0.6214	9.4600e-003	769.3313

	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
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	Demolition	Demolition	7/1/2022	7/29/2022	5	20	
2	Site Preparation	Site Preparation	7/29/2022	8/5/2022	5	5	
3	Grading	Grading	8/5/2022	8/19/2022	5	10	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	8/19/2022	5/4/2023	5	200
5	Paving	Paving	5/5/2023	5/26/2023	5	15
6	Architectural Coating	Architectural Coating	5/26/2023	6/23/2023	5	18

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 230,868; Non-Residential Outdoor: 76,956; Striped Parking Area: 2,712 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	1	8.00	46	0.43

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
Demolition	6	15.00	0.00	3.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	18.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	15.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	84.00	33.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	30.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer
Replace Ground Cover
Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 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					
Off-Road	0.2294	2.2172	2.2059	3.9000e-004		0.0134	0.0134		0.0118	0.0118	0.0000	33.9662	33.9662	9.1900e-003	0.0000	34.2368
Total	0.2294	2.2172	2.2059	3.9000e-004		0.0134	0.0134		0.0118	0.0118	0.0000	33.9662	33.9662	9.1900e-003	0.0000	34.2368

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	4.1100e-004	3.1000e-004	3.1900e-003	1.0000e-005	5.3000e-004	2.0000e-006	5.5000e-004	2.5000e-004	2.0000e-006	2.6000e-004	0.0000	0.7178	0.7178	3.0000e-005	3.0000e-005	0.7182
Total	4.1100e-004	3.1000e-004	3.1900e-003	1.0000e-005	5.3000e-004	2.0000e-006	5.5000e-004	2.5000e-004	2.0000e-006	2.6000e-004	0.0000	0.7178	0.7178	3.0000e-005	3.0000e-005	0.7182

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	0.2294	2.2172	2.2059	3.9000e-004		0.0124	0.0124		0.0118	0.0118	0.0000	33.9662	33.9662	9.1900e-003	0.0000	34.2368
Total	0.2294	2.2172	2.2059	3.9000e-004		0.0124	0.0124		0.0118	0.0118	0.0000	33.9662	33.9662	9.1900e-003	0.0000	34.2368

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	4.1100e-004	3.1000e-004	3.1900e-003	1.0000e-005	5.3000e-004	2.0000e-006	5.5000e-004	2.5000e-004	2.0000e-006	2.6000e-004	0.0000	0.7178	0.7178	3.0000e-005	3.0000e-005	0.7182
Total	4.1100e-004	3.1000e-004	3.1900e-003	1.0000e-005	5.3000e-004	2.0000e-006	5.5000e-004	2.5000e-004	2.0000e-006	2.6000e-004	0.0000	0.7178	0.7178	3.0000e-005	3.0000e-005	0.7182

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 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					0.0481	0.0000	0.0481	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0837	0.0482	1.0000e-004		4.1300e-003	4.1300e-003		3.7700e-003	3.7700e-003	0.0000	8.3186	8.3186	2.7000e-003	0.0000	8.3874
Total	7.9300e-003	0.0837	0.0482	1.0000e-004	0.0481	4.1300e-003	0.0522	0.0253	3.7700e-003	0.0290	0.0000	8.3186	8.3186	2.7000e-003	0.0000	8.3874

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	7.2000e-004	5.4000e-004	5.5900e-003	2.0000e-005	9.2000e-004	3.0000e-006	9.5000e-004	4.4000e-004	3.0000e-006	4.5000e-004	0.0000	1.2571	1.2571	5.0000e-005	5.0000e-005	1.2576
Total	7.2000e-004	5.4000e-004	5.5900e-003	2.0000e-005	9.2000e-004	3.0000e-006	9.5000e-004	4.4000e-004	3.0000e-006	4.5000e-004	0.0000	1.2571	1.2571	5.0000e-005	5.0000e-005	1.2576

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

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					0.0180	0.0000	0.0180	9.3600e-003	0.0000	9.3600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8000e-003	0.0801	0.0492	1.0000e-004		4.3300e-003	4.3300e-003		3.9800e-003	3.9800e-003	0.0000	8.3098	8.3098	2.7000e-003	0.0000	8.3770
Total	7.8000e-003	0.0801	0.0492	1.0000e-004	0.0180	4.3300e-003	0.0223	9.3600e-003	3.9800e-003	0.0133	0.0000	8.3098	8.3098	2.7000e-003	0.0000	8.3770

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	1.2000e-004	9.0000e-005	0.0010	0.0000	2.8000e-004	2.0000e-006	3.0000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0163	0.0163	1.2000e-003	1.0000e-005	0.0166
Total	1.2000e-004	9.0000e-005	0.0010	0.0000	2.8000e-004	2.0000e-006	3.0000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0163	0.0163	1.2000e-003	1.0000e-005	0.0166

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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					0.0196	0.0000	0.0196	0.0151	0.0000	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0436	0.0311	7.2000e-004		1.9600e-003	1.9600e-003		1.8000e-003	1.8000e-003	0.0000	63.4318	63.4318	0.0195	0.0000	63.9182
Total	3.7900e-003	0.0436	0.0311	7.2000e-004	0.0196	1.9600e-003	0.0216	0.0151	1.8000e-003	0.0169	0.0000	63.4318	63.4318	0.0195	0.0000	63.9182

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	1.7000e-004	1.2000e-004	1.2700e-003	0.0000	3.7900e-004	3.0000e-006	3.7900e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0219	0.0219	1.6000e-003	1.0000e-005	0.0223
Total	1.7000e-004	1.2000e-004	1.2700e-003	0.0000	3.7900e-004	3.0000e-006	3.7900e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0219	0.0219	1.6000e-003	1.0000e-005	0.0223

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

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					0.0196	0.0000	0.0196	0.0151	0.0000	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0436	0.0311	7.2000e-004		1.9600e-003	1.9600e-003		1.8000e-003	1.8000e-003	0.0000	63.4318	63.4318	0.0195	0.0000	63.9182
Total	3.7900e-003	0.0436	0.0311	7.2000e-004	0.0196	1.9600e-003	0.0216	0.0151	1.8000e-003	0.0169	0.0000	63.4318	63.4318	0.0195	0.0000	63.9182

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	1.7000e-004	1.2000e-004	1.2700e-003	0.0000	3.7900e-004	3.0000e-006	3.7900e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0219	0.0219	1.6000e-003	1.0000e-005	0.0223
Total	1.7000e-004	1.2000e-004	1.2700e-003	0.0000	3.7900e-004	3.0000e-006	3.7900e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0219	0.0219	1.6000e-003	1.0000e-005	0.0223

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 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					
Off-Road	0.0439	0.4162	0.4018	1.2700e-003		0.0248	0.0248		0.0231	0.0231	0.0000	112.9494	112.9494	0.0273	0.0000	113.6324
Total	0.0439	0.4162	0.4018	1.2700e-003		0.0248	0.0248		0.0231	0.0231	0.0000	112.9494	112.9494	0.0273	0.0000	113.6324

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	2.1400e-003	0.0538	0.0208	3.1000e-004	8.4100e-003	6.9000e-004	9.1000e-003	2.7700e-003	6.4000e-004	3.4100e-003	0.0000	30.3804	30.3804	1.2200e-003	4.4700e-003	31.7609
Worker	0.0114	0.0436	0.0670	2.2900e-004	8.0700e-003	1.3000e-004	8.2000e-003	2.1400e-003	1.2000e-004	2.2600e-003	0.0000	19.9443	19.9443	8.4000e-004	1.7300e-004	20.0218
Total	0.0136	0.1026	0.1173	5.3900e-004	0.0165	8.2000e-004	0.0173	4.9100e-003	7.6000e-004	5.6700e-003	0.0000	50.3248	50.3248	2.0600e-003	4.6400e-003	51.7826

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	0.0438	0.4542	0.6018	1.1300e-003		0.0266	0.0266		0.0245	0.0245	0.0000	113.9432	113.9432	0.0370	0.0000	114.8703
Total	0.0438	0.4542	0.6018	1.1300e-003		0.0266	0.0266		0.0245	0.0245	0.0000	113.9432	113.9432	0.0370	0.0000	114.8703

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	3.4938e-003	0.0939	0.0330	3.1000e-004	6.4100e-003	6.9000e-004	7.0900e-003	1.8500e-003	3.5800e-004	2.2100e-003	0.0000	30.3874	30.3874	1.2300e-003	4.4700e-003	31.7958
Worker	0.0119	0.0429	0.0973	2.7000e-004	0.0194	1.3000e-004	0.0196	5.1600e-003	1.2000e-004	5.2800e-003	0.0000	19.8963	19.8963	9.4900e-004	1.9000e-004	20.0018
Total	0.0154	0.1368	0.1303	5.3900e-004	0.0258	8.2000e-004	0.0266	6.8100e-003	4.7800e-004	7.4900e-003	0.0000	50.3918	50.3918	2.1800e-003	4.6600e-003	51.8026

3.5 Building 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	0.1036	0.9484	1.0721	1.7700e-003		0.0482	0.0482		0.0443	0.0443	0.0000	152.8911	152.8911	0.0344	0.0000	153.6510
Total	0.1036	0.9484	1.0721	1.7700e-003		0.0482	0.0482		0.0443	0.0443	0.0000	152.8911	152.8911	0.0344	0.0000	153.6510

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	2.7900e-003	0.1094	0.0397	4.0000e-004	8.0127	8.1000e-004	8.0127	2.1231	3.8900e-003	2.1270	0.0000	39.1423	39.1423	1.5400e-003	5.9200e-003	41.0782
Worker	0.0143	0.0510	0.1283	3.9000e-004	0.0342	1.7000e-004	0.0344	9.1100e-003	1.6000e-004	9.2700e-003	0.0000	28.5779	28.5779	1.3200e-003	9.0000e-004	28.5981
Total	0.0171	0.1604	0.1680	4.3900e-004	8.0469	9.8000e-004	8.0471	2.1322	4.5400e-003	2.1363	0.0000	67.7202	67.7202	2.8600e-003	6.8200e-003	69.6763

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	0.1036	0.9484	1.0721	1.7700e-003		0.0482	0.0482		0.0443	0.0443	0.0000	152.8910	152.8910	0.0344	0.0000	153.6509
Total	0.1036	0.9484	1.0721	1.7700e-003		0.0482	0.0482		0.0443	0.0443	0.0000	152.8910	152.8910	0.0344	0.0000	153.6509

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	2.7900e-003	0.1094	0.0397	4.0000e-004	8.0127	8.1000e-004	8.0127	2.1231	3.8900e-003	2.1270	0.0000	39.1423	39.1423	1.5400e-003	5.9200e-003	41.0782
Worker	0.0143	0.0510	0.1283	3.9000e-004	0.0342	1.7000e-004	0.0344	9.1100e-003	1.6000e-004	9.2700e-003	0.0000	28.5779	28.5779	1.3200e-003	9.0000e-004	28.5981
Total	0.0171	0.1604	0.1680	4.3900e-004	8.0469	9.8000e-004	8.0471	2.1322	4.5400e-003	2.1363	0.0000	67.7202	67.7202	2.8600e-003	6.8200e-003	69.6763

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	9.2300e-003	0.0781	0.1097	1.7000e-004		3.9700e-003	3.9700e-003		3.6500e-003	3.6500e-003	0.0000	14.7457	14.7457	4.6800e-003	0.0000	14.8630
Paving	1.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0106	0.0781	0.1097	1.7000e-004		3.9700e-003	3.9700e-003		3.6500e-003	3.6500e-003	0.0000	14.7457	14.7457	4.6800e-003	0.0000	14.8630

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	4.6000e-004	3.3000e-004	4.2000e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.3418	0.3418	2.0000e-005	2.0000e-005	0.3481
Total	4.6000e-004	3.3000e-004	4.2000e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.3418	0.3418	2.0000e-005	2.0000e-005	0.3481

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

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	9.7620e-003	0.0781	0.1047	1.1100e-004		3.8300e-003	3.8300e-003		3.5400e-003	3.5400e-003	0.0000	10.7407	10.7407	4.9400e-003	0.0000	10.8643
Paving	1.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8960e-003	0.0781	0.1047	1.1100e-004		3.8300e-003	3.8300e-003		3.5400e-003	3.5400e-003	0.0000	10.7407	10.7407	4.9400e-003	0.0000	10.8643

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	4.9000e-004	3.9000e-004	3.5300e-003	0.0000e+000	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.0416	0.0416	3.0000e-006	2.0000e-005	0.0421
Total	4.9000e-004	3.9000e-004	3.5300e-003	0.0000e+000	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.0416	0.0416	3.0000e-006	2.0000e-005	0.0421

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	1.1990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7700e-003	0.0117	0.0163	3.0000e-005		4.9200e-004	4.9200e-004		4.5200e-004	4.5200e-004	0.0000	2.2979	2.2979	1.1000e-004	0.0000	2.3014
Total	1.1988	0.0117	0.0163	3.0000e-005		4.9200e-004	4.9200e-004		4.5200e-004	4.5200e-004	0.0000	2.2979	2.2979	1.1000e-004	0.0000	2.3014

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	5.9000e-004	3.9000e-004	2.9800e-003	1.0000e-005	8.4000e-004	6.0000e-006	8.5000e-004	2.3000e-004	6.0000e-006	2.3000e-004	0.0000	0.0748	0.0748	3.0000e-006	2.0000e-005	0.0753
Total	5.9000e-004	3.9000e-004	2.9800e-003	1.0000e-005	8.4000e-004	6.0000e-006	8.5000e-004	2.3000e-004	6.0000e-006	2.3000e-004	0.0000	0.0748	0.0748	3.0000e-006	2.0000e-005	0.0753

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

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	1.1990					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7700e-003	0.0117	0.0163	3.0000e-005		4.9200e-004	4.9200e-004		4.5200e-004	4.5200e-004	0.0000	2.2979	2.2979	1.1000e-004	0.0000	2.3014
Total	1.1988	0.0117	0.0163	3.0000e-005		4.9200e-004	4.9200e-004		4.5200e-004	4.5200e-004	0.0000	2.2979	2.2979	1.1000e-004	0.0000	2.3014

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	5.9000e-004	3.9000e-004	2.9800e-003	1.0000e-005	8.4000e-004	6.0000e-006	8.5000e-004	2.3000e-004	6.0000e-006	2.3000e-004	0.0000	0.0748	0.0748	3.0000e-006	2.0000e-005	0.0753
Total	5.9000e-004	3.9000e-004	2.9800e-003	1.0000e-005	8.4000e-004	6.0000e-006	8.5000e-004	2.3000e-004	6.0000e-006	2.3000e-004	0.0000	0.0748	0.0748	3.0000e-006	2.0000e-005	0.0753

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.3180	0.4138	3.8143	9.2120e-003	0.4436	3.9800e-003	0.4476	0.1139	3.7300e-003	0.1176	0.0000	429.7632	429.7632	0.0408	0.0248	434.1843
Unmitigated	0.3180	0.4138	3.8143	9.2120e-003	0.4436	3.9800e-003	0.4476	0.1139	3.7300e-003	0.1176	0.0000	429.7632	429.7632	0.0408	0.0248	434.1843

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Hotel	868.16	868.16	630.72	1,225,868	1,225,868
Parking Lot	0.00	0.00	0.00		
Total	868.16	868.16	630.72	1,225,868	1,225,868

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
Hotel	8.40	5.50	6.40	19.40	61.90	18.70	66	34	4
Parking Lot	8.40	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	2.462111	0.032879	0.208838	0.152803	0.026753	0.007148	0.015854	0.038151	0.000965	0.000561	0.040834	0.002352	0.004373
Parking Lot	2.462111	0.032879	0.208838	0.152803	0.026753	0.007148	0.015854	0.038151	0.000964	0.000561	0.040834	0.002352	0.004373

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	241.8620	241.8620	0.0214	2.4730e-003	242.4868
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	241.8620	241.8620	0.0214	2.4730e-003	242.4868
NaturalGas Mitigated	0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998
NaturalGas Unmitigated	0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998

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																
Hotel	5.27531e+006	0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998
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		0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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																
Hotel	5.27531e+006	0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998
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		0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998

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																
Hotel	5.27531e+006	0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998
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		0.0262	0.2341	0.2152	1.3400e-003		0.0185	0.0185		0.0185	0.0185	0.0000	276.8438	276.8438	5.3400e-003	5.1100e-003	280.4998

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.34473e+006	238.6038	0.0212	2.4430e-003	240.9997
Parking Lot	19720	3.2582	3.0000e-004	3.0000e-005	3.2901
Total		241.8620	0.0214	2.4730e-003	242.4868

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	1.34473e+006	238.6038	0.0212	2.4430e-003	240.9997
Parking Lot	19720	3.2582	3.0000e-004	3.0000e-005	3.2901
Total		241.8620	0.0214	2.4730e-003	242.4868

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

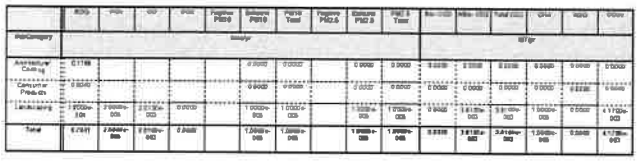
6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior
Use Low VOC Paint - Non-Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	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	0.1340	2.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.9100e-003	3.9100e-003	1.0000e-005	0.0000	4.1700e-003
Unmitigated	0.1340	2.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.9100e-003	3.9100e-003	1.0000e-005	0.0000	4.1700e-003

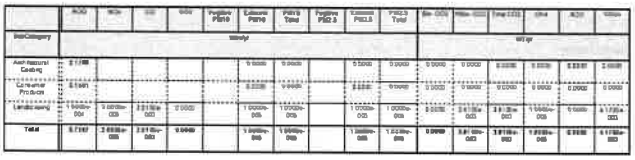
6.2 Area by SubCategory

Unmitigated



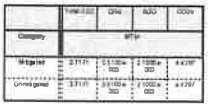
6.2 Area by SubCategory

Mitigated



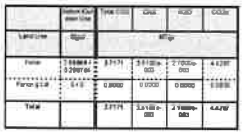
7.0 Water Detail

7.1 Mitigation Measures Water



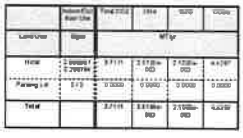
7.2 Water by Land Use

Unmitigated



7.2 Water by Land Use

Mitigated



8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year



EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	58.03	12.0917	0.5678	0.0000	26.9883
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		12.0917	0.5678	0.0000	26.9883

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	58.03	12.0917	0.5678	0.0000	26.9883
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		12.0917	0.5678	0.0000	26.9883

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Santa Barbara County APCD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

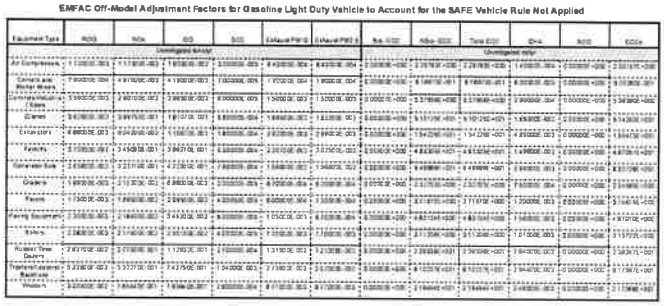
Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	2	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Compactor Units	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

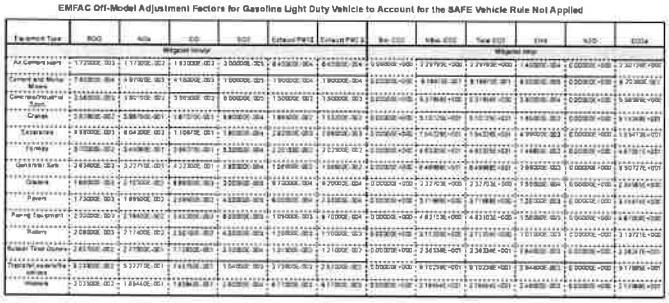
Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied



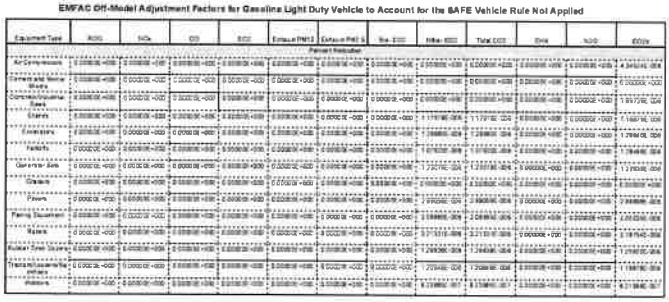
Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied



Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied



Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input

Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	15.00	PM2.5 Reduction	15.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Percent Reduction							
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	Yes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.05	0.24		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			

Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use Subtotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			

Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.50
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
Yes	Use Low VOC Paint (Non-residential Interior)	250.00
Yes	Use Low VOC Paint (Non-residential Exterior)	250.00
Yes	Use Low VOC Paint (Parking)	250.00
No	0% Electric Lawnmower	0.00
No	0% Electric Leafblower	0.00
No	0% Electric Chainsaw	0.00

Energy Mitigation Measures

Carpinteria Hotel Project

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
Dishwasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	

No	Water Efficient Landscape

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Carpinteria Hotel Project

Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	106.00	Room	3.53	153,912.00	0
Parking Lot	113.00	Space	1.02	45,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics

Land Use

Construction Off-road Equipment Mitigation -

Area Mitigation - test

Table Name	Column Name	Default Value	New Value
tblFireMitigation	UseLowVOCPaintParkingCheck	False	True

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	3.2188	23.1171	20.8364	0.0388	1.9151	1.0132	2.9283	0.7129	0.9321	1.6450	0.0000	3,878.599 2	3,878.599 2	1.1958	0.1137	3,933.798 7
2023	200.1434	18.0961	18.3963	0.0374	0.7726	0.0119	0.7845	0.1975	0.0109	0.2084	0.0000	3,642.859 6	3,642.859 6	0.8813	0.1110	3,664.632 3
Maximum	200.1434	23.1171	20.8364	0.0388	1.9151	1.0132	2.9283	0.7129	0.9321	1.6450	0.0000	3,878.599 2	3,878.599 2	1.1958	0.1137	3,933.798 7

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	3.2188	23.1171	20.8364	0.0388	1.2002	1.0132	2.2134	0.4980	0.9321	1.4301	0.0000	3,878.599 2	3,878.599 2	1.1958	0.1137	3,933.798 7
2023	200.1434	18.0961	18.3963	0.0374	0.7261	0.0119	0.7380	0.1675	0.0109	0.1784	0.0000	3,642.859 6	3,642.859 6	0.8813	0.1110	3,664.632 3
Maximum	200.1434	23.1171	20.8364	0.0388	1.2002	1.0132	2.2134	0.4980	0.9321	1.4301	0.0000	3,878.599 2	3,878.599 2	1.1958	0.1137	3,933.798 7

	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
Percent Reduction	0.00	0.00	0.00	0.00	36.77	0.00	24.77	29.17	0.00	14.94	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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															
Area	4.7618	7.0000e-004	0.0736	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.3000e-004		0.0511
Energy	0.1566	1.4235	1.1796	8.4700e-003		0.1067	0.1067		0.1067	0.1067		1,684.236 4	1,684.236 4	0.0323	0.0309	1,694.256 8
Mobile	0.2238	2.2150	15.2368	0.0298	2.7168	0.0239	2.7408	0.7296	0.0219	0.7516		2,738.263 3	2,738.263 3	0.2368	0.1626	2,793.714 3
Total	4.9384	3.6407	16.4900	0.0583	2.7168	0.1307	2.8476	0.7296	0.1287	0.8584		4,422.547 7	4,422.547 7	0.2715	0.1935	4,487.996 3

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															
Area	4.7618	7.0000e-004	0.0736	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.3000e-004		0.0511
Energy	0.1566	1.4235	1.1796	8.4700e-003		0.1067	0.1067		0.1067	0.1067		1,684.236 4	1,684.236 4	0.0323	0.0309	1,694.256 8
Mobile	0.2238	2.2150	15.2368	0.0298	2.7168	0.0239	2.7408	0.7296	0.0219	0.7516		2,738.263 3	2,738.263 3	0.2368	0.1626	2,793.714 3
Total	4.9384	3.6407	16.4900	0.0583	2.7168	0.1307	2.8476	0.7296	0.1287	0.8584		4,422.547 7	4,422.547 7	0.2715	0.1935	4,487.996 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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
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	Demolition	Demolition	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/18/2022	5	8	
4	Building Construction	Building Construction	2/19/2022	1/4/2023	5	250	
5	Paving	Paving	1/5/2023	1/18/2023	5	10	
6	Architectural Coating	Architectural Coating	1/19/2023	2/23/2023	5	10	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 230,868; Non-Residential Outdoor: 76,956; Striped Parking Area: 2,712 (Architectural Coating – sqft)

Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Excavators	1	8.00	158	0.38	
Building Construction	Forklifts	3	8.00	89	0.20	
Building Construction	Generator Sets	1	8.00	84	0.74	
Grading	Graders	1	8.00	187	0.41	
Paving	Pavers	1	8.00	130	0.42	
Paving	Paving Equipment	2	8.00	132	0.36	
Paving	Rollers	2	8.00	80	0.38	
Demolition	Rubber Tired Dozers	2	8.00	247	0.40	
Grading	Rubber Tired Dozers	1	8.00	247	0.40	
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40	
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37	
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37	
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37	
Building Construction	Welders	1	8.00	46	0.45	

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	Vendor Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	84.00	33.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	20.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 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															
Off-Road	2.8182	25.7794	20.5841	0.0298		1.3437	1.3437		1.1163	1.1163		2,748.791 2	2,748.791 2	1.0534		2,773.092 9
Total	2.8182	25.7794	20.5841	0.0298		1.3437	1.3437		1.1163	1.1163		2,748.791 2	2,748.791 2	1.0534		2,773.092 9

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															
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
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
Worker	0.0439	0.0298	0.3144	5.1000e-004	0.0047	4.9000e-004	0.0052	0.0012	4.5000e-004	0.0016		51.7992	51.7992	3.1400e-003	3.1700e-003	52.8766
Total	0.0439	0.0298	0.3144	5.1000e-004	0.0047	4.9000e-004	0.0052	0.0012	4.5000e-004	0.0016		51.7992	51.7992	3.1400e-003	3.1700e-003	52.8766

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	2.6300	25.7184	20.5841	0.0298		1.2437	1.2437		1.1443	1.1443	0.0000	3,148.781 7	3,148.781 7	0.2934		3,171.540 0
Total	2.6300	25.7184	20.5841	0.0298		1.2437	1.2437		1.1443	1.1443	0.0000	3,148.781 7	3,148.781 7	0.2934		3,171.540 0

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	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
Worker	0.0439	0.0336	0.3744	9.1000e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		81.1863	81.1863	3.7100e-003	3.7200e-003	81.3765
Total	0.0439	0.0336	0.3744	9.1000e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		81.1863	81.1863	3.7100e-003	3.7200e-003	81.3765

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 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					19.8572	0.0000	19.8572	10.1875	0.0000	10.1875		0.0000	0.0000			0.0000
Off-Road	3.1700	33.0824	19.6978	0.0380		1.6139	1.6139		1.4839	1.4839		3,886.091 0	3,886.091 0	1.1922		3,916.856 9
Total	3.1700	33.0824	19.6978	0.0380	19.8572	1.6139	21.4711	10.1875	1.4839	11.6714		3,886.091 0	3,886.091 0	1.1922		3,916.856 9

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	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
Worker	0.0491	0.0376	0.4170	9.7000e-004	0.1137	5.9000e-004	0.1143	0.0302	5.4000e-004	0.0307		88.1464	88.1464	3.7800e-003	3.7900e-003	88.3705
Total	0.0491	0.0376	0.4170	9.7000e-004	0.1137	5.9000e-004	0.1143	0.0302	5.4000e-004	0.0307		88.1464	88.1464	3.7800e-003	3.7900e-003	88.3705

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

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					7.2839	0.0000	7.2839	3.7438	0.0000	3.7438		0.0000	0.0000			0.0000
Off-Road	3.1700	33.0824	19.6978	0.0380		1.6139	1.6139		1.4839	1.4839	0.0000	3,886.091 0	3,886.091 0	1.1922		3,916.856 9
Total	3.1700	33.0824	19.6978	0.0380	7.2839	1.6139	8.8978	3.7438	1.4839	5.2276	0.0000	3,886.091 0	3,886.091 0	1.1922		3,916.856 9

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	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
Worker	0.0491	0.0376	0.4170	9.7000e-004	0.1137	5.9000e-004	0.1143	0.0302	5.4000e-004	0.0307		88.1464	88.1464	3.7800e-003	3.7900e-003	88.3705
Total	0.0491	0.0376	0.4170	9.7000e-004	0.1137	5.9000e-004	0.1143	0.0302	5.4000e-004	0.0307		88.1464	88.1464	3.7800e-003	3.7900e-003	88.3705

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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					7.5838	0.0000	7.5838	3.4197	0.0000	3.4197		0.0000	0.0000			0.0000
Off-Road	1.9488	20.3561	13.3717	0.0291		0.9439	0.9439		0.8678	0.8678	0.0000	2,827.398 4	2,827.398 4	0.8298		2,848.196 8
Total	1.9488	20.3561	13.3717	0.0291	7.5838	0.9439	8.5276	3.4197	0.8678	4.2875	0.0000	2,827.398 4	2,827.398 4	0.8298		2,848.196 8

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	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
Worker	0.0418	0.0320	0.3544	9.1000e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		81.1863	81.1863	2.1000e-003	2.1000e-003	81.8762
Total	0.0418	0.0320	0.3544	9.1000e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		81.1863	81.1863	2.1000e-003	2.1000e-003	81.8762

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

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					2.9241	0.0000	2.9241	1.2488	0.0000	1.2488						
Off-Road	1.9436	20.0361	13.2717	0.0281		0.9439	0.9439		0.8686	0.8686	0.0000	2,812.040 6	2,812.040 6	0.5760		2,899.796 4
Total	1.9436	20.0361	13.2717	0.0281	2.9241	0.9439	3.8680	1.2488	0.8686	2.1174	0.0000	2,812.040 6	2,812.040 6	0.5760		2,899.796 4

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	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
Worker	0.0439	0.0286	0.3144	8.1000e-004	0.0947	4.6000e-004	0.0952	0.0251	4.2000e-004	0.0256		81.7960	81.7960	3.7400e-003	2.7200e-003	82.6768
Total	0.0439	0.0286	0.3144	8.1000e-004	0.0947	4.6000e-004	0.0952	0.0251	4.2000e-004	0.0256		81.7960	81.7960	3.7400e-003	2.7200e-003	82.6768

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 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					
Off-Road	1.7082	15.8158	18.3454	0.0286		0.8096	0.8096		0.7612	0.7612		2,914.333 0	2,914.333 0	0.4128		2,924.632 0
Total	1.7082	15.8158	18.3454	0.0286		0.8096	0.8096		0.7612	0.7612		2,914.333 0	2,914.333 0	0.4128		2,924.632 0

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	0.0439	0.0286	0.3144	8.1000e-004	0.0947	4.6000e-004	0.0952	0.0251	4.2000e-004	0.0256		81.7960	81.7960	3.7400e-003	2.7200e-003	82.6768
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
Worker	0.0439	0.0286	0.3144	8.1000e-004	0.0947	4.6000e-004	0.0952	0.0251	4.2000e-004	0.0256		81.7960	81.7960	3.7400e-003	2.7200e-003	82.6768
Total	0.0439	0.0286	0.3144	8.1000e-004	0.0947	4.6000e-004	0.0952	0.0251	4.2000e-004	0.0256		81.7960	81.7960	3.7400e-003	2.7200e-003	82.6768

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	1.7082	15.8158	18.3454	0.0286		0.8096	0.8096		0.7612	0.7612		2,914.333 0	2,914.333 0	0.4128		2,924.632 0
Total	1.7082	15.8158	18.3454	0.0286		0.8096	0.8096		0.7612	0.7612		2,914.333 0	2,914.333 0	0.4128		2,924.632 0

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	0.0000
Vendor	0.0101	1.9572	0.6042	6.2500e-003	0.1957	2.6100e-003	0.1983	0.0499	2.5000e-003	0.0524		682.4808	682.4808	0.0376	0.1006	714.7225
Worker	0.0338	0.0198	0.2424	6.2000e-004	0.0729	3.5000e-004	0.0733	0.0193	3.2000e-004	0.0197		63.0768	63.0768	2.8800e-003	2.1000e-003	63.7443
Total	0.0439	1.9770	0.8466	6.8700e-003	0.2686	2.9600e-003	0.2716	0.0692	2.8200e-003	0.0721		745.5576	745.5576	0.0405	0.1027	778.4668

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building 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	1.5728	14.3468	18.3445	0.0286		0.6897	0.6897		0.6484	0.6484		2,914.298 6	2,914.298 6	0.4076		2,924.438 7
Total	1.5728	14.3468	18.3445	0.0286		0.6897	0.6897		0.6484	0.6484		2,914.298 6	2,914.298 6	0.4076		2,924.438 7

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	0.0000
Vendor	0.0101	1.9572	0.6042	6.2500e-003	0.1957	2.6100e-003	0.1983	0.0499	2.5000e-003	0.0524		682.4808	682.4808	0.0376	0.1006	714.7225
Worker	0.0312	0.0174	0.2229	5.9000e-004	0.0729	3.3000e-004	0.0732	0.0193	3.0000e-004	0.0196		58.8279	58.8279	2.6800e-003	1.9000e-003	59.4077
Total	0.0413	1.9746	0.8271	6.8400e-003	0.2686	2.9400e-003	0.2715	0.0692	2.8000e-003	0.0720		741.3087	741.3087	0.0403	0.1025	774.1302

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	1.8726	14.3845	16.3443	0.0258		0.6667	0.6667		0.6134	0.6134	0.0000	2,504.2988	2,504.2988	0.8076		2,524.4180
Total	1.8726	14.3845	16.3443	0.0258		0.6667	0.6667		0.6134	0.6134	0.0000	2,504.2988	2,504.2988	0.8076		2,524.4180

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
Vendor	0.0471	1.7636	0.5335	8.6120e-003	0.1196	4.2700e-003	0.1240	0.0343	4.0900e-003	0.0384		838.4218	838.4218	0.0274	0.0870	865.3571
Worker	0.2736	0.1689	1.4182	4.1900e-003	0.0329	3.9600e-003	0.0368	8.7400e-003	3.6400e-003	0.0124		390.3278	390.3278	0.0190	0.0161	395.5799
Total	0.3206	1.8325	1.9518	0.0130	0.1525	8.2300e-003	0.1608	0.0431	7.7300e-003	0.0508		1,228.7496	1,228.7496	0.0464	0.1030	1,260.9370

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	2.0191	9.7402	12.1883	0.0188		0.4337	0.4337		0.4029	0.4029		1,829.4364	1,829.4364	0.5876		1,844.1071
Paving	0.1439					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.8466	9.7402	12.1883	0.0188		0.4337	0.4337		0.4029	0.4029		1,829.4364	1,829.4364	0.5876		1,844.1071

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
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
Worker	0.0908	0.0563	0.4727	1.3900e-003	0.0110	9.2000e-004	0.0119	2.9100e-003	8.4000e-004	3.7500e-003		129.4526	129.4526	6.3200e-003	5.3700e-003	131.1933
Total	0.0908	0.0563	0.4727	1.3900e-003	0.0110	9.2000e-004	0.0119	2.9100e-003	8.4000e-004	3.7500e-003		129.4526	129.4526	6.3200e-003	5.3700e-003	131.1933

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

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	2.0191	9.7402	12.1883	0.0188		0.4337	0.4337		0.4029	0.4029		1,829.4364	1,829.4364	0.5876		1,844.1071
Paving	0.1439					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.8466	9.7402	12.1883	0.0188		0.4337	0.4337		0.4029	0.4029		1,829.4364	1,829.4364	0.5876		1,844.1071

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
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
Worker	0.0908	0.0563	0.4727	1.3900e-003	0.0110	9.2000e-004	0.0119	2.9100e-003	8.4000e-004	3.7500e-003		129.4526	129.4526	6.3200e-003	5.3700e-003	131.1933
Total	0.0908	0.0563	0.4727	1.3900e-003	0.0110	9.2000e-004	0.0119	2.9100e-003	8.4000e-004	3.7500e-003		129.4526	129.4526	6.3200e-003	5.3700e-003	131.1933

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	1.6e-0078					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1911	1.3030	1.8111	2.8710e-003		0.0799	0.0799		0.0799	0.0799		291.4481	291.4481	0.0188		291.9185
Total	2.6e-0067	1.3030	1.8111	2.8710e-003		0.0799	0.0799		0.0799	0.0799		291.4481	291.4481	0.0188		291.9185

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
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
Worker	0.0432	0.0281	0.2277	6.9000e-004	5.1e-004	5.2000e-004	0.0079	0.0019	4.8000e-004	0.0024		64.7263	64.7263	3.1600e-003	2.6900e-003	65.5967
Total	0.0432	0.0281	0.2277	6.9000e-004	5.1e-004	5.2000e-004	0.0079	0.0019	4.8000e-004	0.0024		64.7263	64.7263	3.1600e-003	2.6900e-003	65.5967

3.7 Architectural Coating - 2023

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	1.6E-03					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1813	1.3E-03	1.8E-01	2.8130e-004		2.2E-03	2.2E-03		2.1E-03	2.1E-03	0.0000	29.1449	29.1449	2.2E-03		29.1993
Total	2.8E-02	1.2E-03	1.8E-01	2.8130e-004		2.2E-03	2.2E-03		2.1E-03	2.1E-03	0.0000	29.1449	29.1449	2.2E-03		29.1993

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
Vendor	3.2E-03	0.0003	0.0018	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	9.6E-03	6.0E-03	0.0211	6.9000e-004	6.1E-03	5.2000e-004	6.7E-03	5.7E-03	4.8000e-004	6.2E-03		69.8678	69.8678	5.2000e-003	2.8000e-003	70.7918
Total	0.0129	6.3E-03	0.0229	6.9000e-004	6.1E-03	5.2000e-004	6.7E-03	5.7E-03	4.8000e-004	6.2E-03		69.8678	69.8678	5.2000e-003	2.8000e-003	70.7918

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	0.2536	0.2150	1.9.2869	0.0036	0.7198	0.0029	0.7228	0.1908	0.0019	0.1927		0.0.38.245.5	0.7.34.565.3	0.2380	0.1639	0.7.61.714.9
Unmitigated	0.2536	0.2150	1.9.2869	0.0036	0.7198	0.0029	0.7228	0.1908	0.0019	0.1927		0.0.38.245.5	0.7.34.565.3	0.2380	0.1639	0.7.61.714.9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	844.16	868.14	892.70	1,225,964	1,225,964
Parking Lot	0.00	0.00	0.00		
Total	844.16	868.14	892.70	1,225,964	1,225,964

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Hotel	8.60	5.50	6.40	19.40	61.60	19.00	38	38	4
Parking Lot	8.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MCY	LHD1	LHD2	MDV	MHD	OBUS	UBUS	SBUS	MH
Hotel	0.442113	0.032978	0.206838	0.152610	0.029150	0.007148	0.011208	0.008713	0.000368	0.000357	0.000529	0.004372
Parking Lot	0.442113	0.032978	0.206838	0.152610	0.029150	0.007148	0.011208	0.008713	0.000368	0.000357	0.000529	0.004372

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					
NaturalGas Mitigated	0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9
NaturalGas Unmitigated	0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9

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					
Hotel	7473.9	0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9
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		0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9

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					
Hotel	14.9748	0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9
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		0.1344	1.4E-03	1.1E-03	8.4700e-003		1.1E-03	1.1E-03		1.1E-03	1.1E-03		1.894.236.4	1.894.236.4	0.0.33	0.0.36	1.894.236.9

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior
Use Low VOC Paint - Non-Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	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	4.2519	2.0000e-004	0.0238	0.0000		0.0000	0.0000		0.0000	0.0000		0.0478	0.0478	1.5000e-004		0.0511
Unmitigated	4.2519	2.0000e-004	0.0238	0.0000		0.0000	0.0000		0.0000	0.0000		0.0478	0.0478	1.5000e-004		0.0511

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.9458					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0001	2.0000e-004	0.0238	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.5000e-004		0.0511
Total	4.2517	2.0000e-004	0.0238	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.5000e-004		0.0511

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.9458					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0001	2.0000e-004	0.0238	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.5000e-004		0.0511
Total	4.2517	2.0000e-004	0.0238	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0478	0.0478	1.5000e-004		0.0511

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Carpinteria Hotel Project

Santa Barbara County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	108.00	Room	3.53	153,972.00	0
Parking Lot	113.00	Space	1.02	45,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use -
Construction Off-road Equipment Mitigation -
Area Mitigation - test

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	3.2736	23.1718	25.6353	0.0396	18.7757	1.6132	20.3889	5.1329	1.4841	6.6170	0.0000	3,826.997 8	3,826.997 8	1.1993	0.1173	3,884.182 6
2023	290.1442	18.1369	19.4371	0.0373	0.7281	0.5118	1.2399	0.1970	0.4887	0.6857	0.0000	3,593.419 4	3,593.419 4	0.8536	0.1136	3,622.791 4
Maximum	290.1442	23.1718	25.6353	0.0396	18.7757	1.6132	20.3889	5.1329	1.4841	6.6170	0.0000	3,826.997 8	3,826.997 8	1.1993	0.1173	3,884.182 6

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					
2023	3.2736	23.1718	25.6353	0.0396	3.0988	1.6132	4.7120	0.8730	1.4841	2.3570	0.0000	3,826.997 8	3,826.997 8	1.1993	0.1173	3,884.182 6
2023	290.1442	18.1369	19.4371	0.0373	0.7281	0.5118	1.2399	0.1970	0.4887	0.6857	0.0000	3,593.419 4	3,593.419 4	0.8536	0.1136	3,622.791 4
Maximum	290.1442	23.1718	25.6353	0.0396	3.0988	1.6132	4.7120	0.8730	1.4841	2.3570	0.0000	3,826.997 8	3,826.997 8	1.1993	0.1173	3,884.182 6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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
Percent Reduction	0.00	0.00	0.00	0.00	84.37	0.00	76.83	82.99	0.00	64.38	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	4.2978	2.0000e-004	0.0238	0.0000		0.0000e-005	0.0000e-005		0.0000e-005	0.0000e-005		0.0478	0.0478	1.3000e-004		0.0511
Energy	0.1544	1.4036	1.1796	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,684.238 4	1,684.238 4	0.0323	0.0309	1,694.234 8
Mobile	2.1690	2.4074	19.5160	0.0295	2.7189	0.0328	2.7518	0.7266	0.0319	0.7585		2,899.800 0	2,899.800 0	0.2657	0.1732	2,958.097 4
Total	6.6213	3.8111	20.7193	0.0380	2.7189	0.1395	2.8584	0.7266	0.1386	0.8652		4,584.086 3	4,584.086 3	0.2981	0.2041	4,653.383 3

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	4.2978	2.0000e-004	0.0238	0.0000		0.0000e-005	0.0000e-005		0.0000e-005	0.0000e-005		0.0478	0.0478	1.3000e-004		0.0511
Energy	0.1544	1.4036	1.1796	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,684.238 4	1,684.238 4	0.0323	0.0309	1,694.234 8
Mobile	2.1690	2.4074	19.5160	0.0295	2.7189	0.0328	2.7518	0.7266	0.0319	0.7585		2,899.800 0	2,899.800 0	0.2657	0.1732	2,958.097 4
Total	6.6213	3.8111	20.7193	0.0380	2.7189	0.1395	2.8584	0.7266	0.1386	0.8652		4,584.086 3	4,584.086 3	0.2981	0.2041	4,653.383 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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
Percent Reduction	5.71	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	Demolition	Demolition	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/18/2022	5	8	
4	Building Construction	Building Construction	2/17/2022	11/7/2023	5	220	
5	Paving	Paving	11/8/2023	11/28/2023	5	16	
6	Architectural Coating	Architectural Coating	11/29/2023	12/19/2023	5	16	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 230,868; Non-Residential Outdoor: 76,956; Striped Parking Area: 2,712 (Architectural Coating – sqft)

Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Demolition	6	19.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	84.00	33.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	20.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	8.50	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 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					
Off-Road	0.0162	23.7784	20.5941	0.0388		1.2437	1.2437		1.1443	1.1443		3,748.781 2	3,748.781 2	1.0534		3,775.060 8
Total	0.0162	23.7784	20.5941	0.0388		1.2437	1.2437		1.1443	1.1443		3,748.781 2	3,748.781 2	1.0534		3,775.060 8

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
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
Worker	0.0436	0.0238	0.3283	7.9500e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1166	80.1166	3.4600e-003	2.9000e-003	81.0609
Total	0.0436	0.0238	0.3283	7.9500e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1166	80.1166	3.4600e-003	2.9000e-003	81.0609

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	0.0162	23.7784	20.5941	0.0388		1.2437	1.2437		1.1443	1.1443		3,748.781 2	3,748.781 2	1.0534		3,775.060 8
Total	0.0162	23.7784	20.5941	0.0388		1.2437	1.2437		1.1443	1.1443	0.0000	3,748.781 2	3,748.781 2	1.0534		3,775.060 8

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
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
Worker	0.0436	0.0238	0.3283	7.9500e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1166	80.1166	3.4600e-003	2.9000e-003	81.0609
Total	0.0436	0.0238	0.3283	7.9500e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1166	80.1166	3.4600e-003	2.9000e-003	81.0609

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 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					18.6573	0.0000	18.6573	10.1023	0.0000	10.1023			0.0000			0.0000
Off-Road	3.1791	33.5823	19.6977	0.0340		1.6126	1.6126		1.4839	1.4839		3,696.561 9	3,696.561 9	1.1622		3,715.656 5
Total	3.1791	33.5823	19.6977	0.0340	18.6573	1.6126	21.2699	10.1023	1.4839	11.5862		3,696.561 9	3,696.561 9	1.1622		3,715.656 5

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	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
Worker	0.0533	0.0394	0.5915	9.9000e-004	0.1137	9.1100e-004	0.1146	0.0302	8.3800e-004	0.0311		89.1400	89.1400	4.1800e-003	3.1700e-003	90.2067
Total	0.0533	0.0394	0.5915	9.9000e-004	0.1137	9.1100e-004	0.1146	0.0302	8.3800e-004	0.0311		89.1400	89.1400	4.1800e-003	3.1700e-003	90.2067

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

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					7.7639	0.0000	7.7639	3.7439	0.0000	3.7439			0.0000			0.0000
Off-Road	3.1791	33.5823	19.6977	0.0340		1.6126	1.6126		1.4839	1.4839		3,696.561 9	3,696.561 9	1.1622		3,715.656 5
Total	3.1791	33.5823	19.6977	0.0340	7.7639	1.6126	9.3765	3.7439	1.4839	5.2278		3,696.561 9	3,696.561 9	1.1622		3,715.656 5

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	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
Worker	0.0533	0.0394	0.5915	9.9000e-004	0.1137	9.1100e-004	0.1146	0.0302	8.3800e-004	0.0311		89.1400	89.1400	4.1800e-003	3.1700e-003	90.2067
Total	0.0533	0.0394	0.5915	9.9000e-004	0.1137	9.1100e-004	0.1146	0.0302	8.3800e-004	0.0311		89.1400	89.1400	4.1800e-003	3.1700e-003	90.2067

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 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					7.5639	0.0000	7.5639	3.4347	0.0000	3.4347			0.0000			0.0000
Off-Road	1.8498	20.8561	15.2727	0.0297		0.8439	0.8439		0.8039	0.8039		2,872.046 4	2,872.046 4	0.8288		2,893.296 4
Total	1.8498	20.8561	15.2727	0.0297	7.5639	0.8439	8.4078	3.4347	0.8039	4.2386		2,872.046 4	2,872.046 4	0.8288		2,893.296 4

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	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
Worker	0.0444	0.0328	0.4929	7.9200e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1199	80.1199	3.4800e-003	2.9000e-003	81.0563
Total	0.0444	0.0328	0.4929	7.9200e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1199	80.1199	3.4800e-003	2.9000e-003	81.0563

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

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					2.8341	0.0000	2.8341	1.2988	0.0000	1.2988			0.0000			0.0000
Off-Road	1.8498	20.8561	15.2727	0.0297		0.8439	0.8439		0.8039	0.8039		2,872.046 4	2,872.046 4	0.8288		2,893.296 4
Total	1.8498	20.8561	15.2727	0.0297	2.8341	0.8439	3.6780	1.2988	0.8039	2.1026	0.0000	2,872.046 4	2,872.046 4	0.8288		2,893.296 4

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	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
Worker	0.0444	0.0328	0.4929	7.9200e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1199	80.1199	3.4800e-003	2.9000e-003	81.0563
Total	0.0444	0.0328	0.4929	7.9200e-004	0.0947	4.9000e-004	0.0952	0.0251	4.5000e-004	0.0256		80.1199	80.1199	3.4800e-003	2.9000e-003	81.0563

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 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															
Off-Road	1.7282	15.8158	18.3804	0.0298		0.8080	0.8080		0.7913	0.7913		2,944.339 8	2,944.339 8	0.8139		2,965.832 7
Total	1.7282	15.8158	18.3804	0.0298		0.8080	0.8080		0.7913	0.7913		2,944.339 8	2,944.339 8	0.8139		2,965.832 7

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															
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
Vendor	0.0126	1.9834	0.4618	6.2903e-003	0.1897	0.0181	0.2078	0.0543	0.0173	0.0716		665.7619	665.7619	0.0275	0.1036	714.4399
Worker	0.2157	0.1781	1.9371	4.4433e-003	0.5305	3.7160e-003	0.5342	0.1407	3.4233e-003	0.1441		448.8532	448.8532	0.0139	0.0167	454.1311
Total	0.2283	2.0615	2.4089	0.0107	0.7202	0.0218	0.7419	0.1951	0.0208	0.2158		1,114.615 1	1,114.615 1	0.0414	0.1203	1,168.571 0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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															
Off-Road	1.7282	15.8158	18.3804	0.0298		0.8080	0.8080		0.7913	0.7913		2,944.339 8	2,944.339 8	0.8139		2,965.832 7
Total	1.7282	15.8158	18.3804	0.0298		0.8080	0.8080		0.7913	0.7913		2,944.339 8	2,944.339 8	0.8139		2,965.832 7

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															
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
Vendor	0.0126	1.9834	0.4618	6.2903e-003	0.1897	0.0181	0.2078	0.0543	0.0173	0.0716		665.7619	665.7619	0.0275	0.1036	714.4399
Worker	0.2157	0.1781	1.9371	4.4433e-003	0.5305	3.7160e-003	0.5342	0.1407	3.4233e-003	0.1441		448.8532	448.8532	0.0139	0.0167	454.1311
Total	0.2283	2.0615	2.4089	0.0107	0.7202	0.0218	0.7419	0.1951	0.0208	0.2158		1,114.615 1	1,114.615 1	0.0414	0.1203	1,168.571 0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building 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															
Off-Road	1.5738	14.3948	18.2445	0.0298		0.6997	0.6997		0.6594	0.6594		2,944.339 8	2,944.339 8	0.8139		3,013.438 1
Total	1.5738	14.3948	18.2445	0.0298		0.6997	0.6997		0.6594	0.6594		2,944.339 8	2,944.339 8	0.8139		3,013.438 1

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															
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
Vendor	0.0118	1.8836	0.5479	6.1720e-003	0.1898	0.0049	0.1948	0.0543	0.0045	0.0588		665.2048	665.2048	0.0275	0.0970	699.9736
Worker	0.2020	0.1691	1.6851	4.3092e-003	0.5305	3.5988e-003	0.5341	0.1407	3.3151e-003	0.1440		434.9808	434.9808	0.0177	0.0134	440.0114
Total	0.2138	2.0526	2.2331	0.0104	0.7202	0.0085	0.7289	0.1950	0.0078	0.2028		1,100.186 5	1,100.186 5	0.0452	0.1104	1,139.986 6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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															
Off-Road	1.5738	14.3948	18.2445	0.0298		0.6997	0.6997		0.6594	0.6594		2,944.339 8	2,944.339 8	0.8139		3,013.438 1
Total	1.5738	14.3948	18.2445	0.0298		0.6997	0.6997		0.6594	0.6594		2,944.339 8	2,944.339 8	0.8139		3,013.438 1

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															
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
Vendor	0.0118	1.8836	0.5479	6.1720e-003	0.1898	0.0049	0.1948	0.0543	0.0045	0.0588		665.2048	665.2048	0.0275	0.0970	699.9736
Worker	0.2020	0.1691	1.6851	4.3092e-003	0.5305	3.5988e-003	0.5341	0.1407	3.3151e-003	0.1440		434.9808	434.9808	0.0177	0.0134	440.0114
Total	0.2138	2.0526	2.2331	0.0104	0.7202	0.0085	0.7289	0.1950	0.0078	0.2028		1,100.186 5	1,100.186 5	0.0452	0.1104	1,139.986 6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0781	0.7605	1.1136e-003	2.2100e-004		0.0357	0.0357		0.0329	0.0329		19.8544	19.8544	3.5875e-003		19.9441
Paving	0.1485					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.2266	0.7605	1.1136e-003	2.2100e-004		0.0357	0.0357		0.0329	0.0329		19.8544	19.8544	3.5875e-003		19.9441

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
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
Worker	0.0210	0.0178	0.0410	1.2200e-003	0.1749	9.2000e-004	0.1758	0.0186	5.7000e-004	0.0191		132.3648	132.3648	4.2139e-003	3.8730e-003	133.7949
Total	0.0210	0.0178	0.0410	1.2200e-003	0.1749	9.2000e-004	0.1758	0.0186	5.7000e-004	0.0191		132.3648	132.3648	4.2139e-003	3.8730e-003	133.7949

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

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	0.0781	0.7605	1.1136e-003	2.2100e-004		0.0357	0.0357		0.0329	0.0329		19.8544	19.8544	3.5875e-003		19.9441
Paving	0.1485					0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.2266	0.7605	1.1136e-003	2.2100e-004		0.0357	0.0357		0.0329	0.0329		19.8544	19.8544	3.5875e-003		19.9441

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
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
Worker	0.0210	0.0178	0.0410	1.2200e-003	0.1749	9.2000e-004	0.1758	0.0186	5.7000e-004	0.0191		132.3648	132.3648	4.2139e-003	3.8730e-003	133.7949
Total	0.0210	0.0178	0.0410	1.2200e-003	0.1749	9.2000e-004	0.1758	0.0186	5.7000e-004	0.0191		132.3648	132.3648	4.2139e-003	3.8730e-003	133.7949

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	199.3579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1810	1.3030	1.8111	2.9700e-003		0.0736	0.0736		0.0736	0.0736		291.4481	291.4481	0.0189		291.9208
Total	199.5389	1.3030	1.8111	2.9700e-003		0.0736	0.0736		0.0736	0.0736		291.4481	291.4481	0.0189		291.9208

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
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
Worker	0.0476	0.0371	0.0918	2.7000e-004	0.1574	2.2000e-004	0.1576	0.0168	2.0000e-004	0.0170		29.3255	29.3255	9.3500e-003	8.5900e-003	29.6129
Total	0.0476	0.0371	0.0918	2.7000e-004	0.1574	2.2000e-004	0.1576	0.0168	2.0000e-004	0.0170		29.3255	29.3255	9.3500e-003	8.5900e-003	29.6129

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

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	199.3579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1810	1.3030	1.8111	2.9700e-003		0.0736	0.0736		0.0736	0.0736		291.4481	291.4481	0.0189		291.9208
Total	199.5389	1.3030	1.8111	2.9700e-003		0.0736	0.0736		0.0736	0.0736		291.4481	291.4481	0.0189		291.9208

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
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
Worker	0.0476	0.0371	0.0918	2.7000e-004	0.1574	2.2000e-004	0.1576	0.0168	2.0000e-004	0.0170		29.3255	29.3255	9.3500e-003	8.5900e-003	29.6129
Total	0.0476	0.0371	0.0918	2.7000e-004	0.1574	2.2000e-004	0.1576	0.0168	2.0000e-004	0.0170		29.3255	29.3255	9.3500e-003	8.5900e-003	29.6129

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	2.1998	3.4234	19.9183	0.0396	3.7188	0.0238	3.7426	0.7160	0.0219	0.7379		3,899.800 0	3,899.800 0	0.3597	0.1132	3,938.387 4
Unmitigated	2.1998	3.4234	19.9183	0.0396	3.7188	0.0238	3.7426	0.7160	0.0219	0.7379		3,899.800 0	3,899.800 0	0.3597	0.1132	3,938.387 4

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	866.16	866.16	693.70	1,225,906	1,225,906
Parking Lot	0.00	0.00	0.00		
Total	866.16	866.16	693.70	1,225,906	1,225,906

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
Hotel	9.60	5.60	9.40	19.40	61.60	19.00	57	38	4
Parking Lot	9.60	5.60	9.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.4851152	0.0320816	0.2388364	0.1129305	0.0397002	0.0071662	0.0210818	0.0361371	0.0003904	0.0003917	0.0040819	0.0003423	0.0042731
Parking Lot	0.4851152	0.0320816	0.2388364	0.1129305	0.0397002	0.0071662	0.0210818	0.0361371	0.0003904	0.0003917	0.0040819	0.0003423	0.0042731

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	0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8
NaturalGas Unmitigated	0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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			
Hotel	14.5109	0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8
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		0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8

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			
Hotel	14.5109	0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8
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		0.1544	1.4036	1.1790	8.4200e-003		0.1067	0.1067		0.1067	0.1067		1,894.238 4	1,894.238 4	0.0325	0.0336	1,904.238 8

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

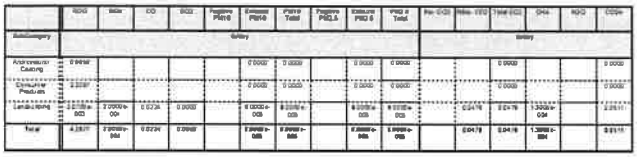
Use Low VOC Paint - Non-Residential Interior
Use Low VOC Paint - Non-Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	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	4.8518	2.0000e-004	0.0218	0.0000		8.0000e-005	8.0000e-005		0.0000e-005	0.0000e-005		0.0478	0.0478	1.3000e-004		0.0511
Unmitigated	4.8518	2.0000e-004	0.0218	0.0000		8.0000e-005	8.0000e-005		0.0000e-005	0.0000e-005		0.0478	0.0478	1.3000e-004		0.0511

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

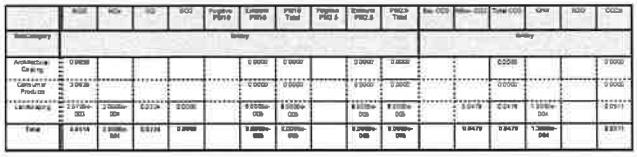
Unmitigated



EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated



7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

25. APPENDIX D

WETLAND DELINEATION REPORTS AND RECON'S TREE INVENTORY SPREADSHEET

Via Real Hotel Project
Preliminary Jurisdictional Waters/Wetlands Delineation Report

Stantec

Prepared for:
Ram Hotels
P.O. Box 52098
Amarillo, Texas 79159

Prepared by:
Stantec Consulting Services Inc.
290 Conejo Ridge Avenue
Thousand Oaks, California 91361

September 19, 2017

Sign-off Sheet

This document entitled Via Real Hotel Project Preliminary Jurisdictional Waters/Wetlands Delineation Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Ram Hotels (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment considering the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not consider any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____
(signature)

Mayra Navarro, Staff Environmental Scientist

Reviewed by _____
(signature)

Rocky Brown, Associate Biologist

Approved by _____
(signature)

Jared Varonin, Principal Biologist

Stantec

Table of Contents

EXECUTIVE SUMMARY I

1.0 INTRODUCTION 1.2
1.1 PURPOSE OF THE REPORT 1.2
1.2 PROJECT LOCATION 1.2
1.3 PROJECT DESCRIPTION 1.2
1.4 LEAD AGENCY NAME AND ADDRESS 1.2
1.5 CONTACT PERSON AND PHONE NUMBER 1.2

2.0 EXISTING CONDITIONS 2.4
2.1 TOPOGRAPHY AND SURROUNDING LAND USES 2.4
2.2 VEGETATION 2.4
2.3 CLIMATE 2.5
2.4 HYDROLOGY AND GEOMORPHOLOGY 2.6
2.5 GEOLOGY 2.6
2.6 SOILS 2.7

3.0 REGULATORY BACKGROUND 3.8

4.0 WATERS/WETLANDS DELINEATION 4.9
4.1 DELINEATION METHODOLOGY 4.9
4.1.1 Wetland Vegetation 4.9
4.1.2 Wetland Hydrology 4.10
4.1.3 Wetland Soils 4.10
4.2 RESULTS 4.10

5.0 SUMMARY AND CONCLUSIONS 5.13

6.0 REFERENCES 6.15

LIST OF TABLES
Table 1 Soil Units Occurring in the Proposed Project Area
Table 2 Acreage of Potential Jurisdictional Waters and Wetlands in the Proposed Project Area
Table 3 Wetland Indicator Status of Plant Species Observed within the Proposed Project Area

LIST OF FIGURES
Figure 1 Project Location Map
Figure 2 Vegetation and Land Cover Types
Figure 3 Historic Soil Types
Figure 4 Jurisdictional Waters/Wetlands

LIST OF APPENDICES

APPENDIX A FIGURES A.1
APPENDIX B PHOTOGRAPHIC LOG B.2
APPENDIX C SOIL RESOURCES REPORT C.3
APPENDIX D WETLAND DETERMINATION FIELD FORMS D.4
APPENDIX E ARID WEST INDICATOR TABLES E.5
APPENDIX F REGULATORY BACKGROUND INFORMATION F.6

Stantec

Stantec

Executive Summary

This Jurisdictional Delineation (JD) Report serves as guidance in establishing baseline conditions for resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), and the California Coastal Commission (CCC) for the Via Real Hotel Project (Project). Specifically, the purpose of the JD was to determine the location and extent of waters and/or wetlands subject to potential jurisdictional authority on the approximately 2.6-acre Project site located at 4110 Via Real in Carpinteria, California.

The Project consists of the construction of a 2-story hotel with associated parking lots, a vegetated stormwater treatment swale, three vegetated bioretention basins, and general landscaping.

Potentially jurisdictional features observed on the Project site during the survey included two shallow, vegetated swales running parallel along the western and northwestern boundaries of the property, Swale A and Swale B, respectively. Four sampling points were assessed along these swales, none of which met the hydrophytic vegetation, hydric soil, and wetlands hydrology criteria to be considered wetland waters of the U.S. However, one sampling point from Swale A exhibited a primary hydrology indicator (oxidized root channels), which is sufficient to be considered a potential CCC wetland. These swales are also potential non-wetland waters of the U.S. and waters of the state.

Based on the field observations and data collected, approximately 0.06 acres of potential non-wetland waters of the U.S., 0.13 acres of CDFW jurisdictional waters, and 0.02 acres of CCC wetland waters, subject to the jurisdiction of the USACE, CDFW, and CCC and City of Carpinteria, respectively, occur on the Project site. If these areas are directly or indirectly impacted during construction of the proposed Project, the Project proponent would be required to procure a USACE Section 404 Permit, RWQCB Section 401 Water Quality Certification, and CDFW Section 1602 Streambed Alteration Agreement. This report contains recommendations for impacts avoidance. The jurisdictional boundaries provided here are subject to verification by the above-mentioned regulatory agencies.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report presents the findings of an investigation of jurisdictional features conducted by Stantec Consulting Services, Inc. (Stantec) for the Via Real Hotel Project (Project). The assessment of jurisdictional wetlands, other "waters of the U.S.," waters of the State, and riparian habitat was conducted on September 5, 2017, by Stantec Principal Biologist Jared Varonin, Associate Biologist Rocky Brown, and Staff Environmental Scientist Mayra Navarro. This assessment was conducted to determine the extent of resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), the Los Angeles Regional Water Quality Control Board (RWQCB), the California Department of Fish and Wildlife (CDFW), and California Coastal Commission (CCC) that occur within the proposed Project area.

1.2 PROJECT LOCATION

The Project site is an approximately 2.6-acre parcel located at 4110 Via Real in the City of Carpinteria, in Santa Barbara County, California (refer to Appendix A, Figure 1). Access to the site is currently provided by Via Real. The site currently contains a vacant church building, some small outbuildings, parking lot, outdoor playground, unpaved access road, and vacant field.

1.3 PROJECT DESCRIPTION

The proposed Project consists of constructing a 2-story hotel with associated parking lot and ornamental landscaping. A vegetated stormwater treatment swale and three vegetated bioretention basins are also proposed for the proposed Project site. Stormwater and irrigation runoff from the adjacent agriculture field and other offsite sources will be channeled to a subsurface storm drain and drain to the existing culvert adjacent to Via Real with drop inlets.

1.4 LEAD AGENCY NAME AND ADDRESS

City of Carpinteria

Community Development Department

5775 Carpinteria Avenue

Carpinteria, CA 93013

1.5 CONTACT PERSON AND PHONE NUMBER

Steve Goggia

Community Development Director

(805) 755-4414

steveg@ci.carpinteria.ca.us

2.0 EXISTING CONDITIONS

2.1 TOPOGRAPHY AND SURROUNDING LAND USES

The Project site is situated within the USGS Carpinteria 7.5-minute topographic quadrangle and is relatively flat, ranging in elevation from approximately 15 feet above mean sea level (MSL) in the north to 7 feet above MSL in the south. Two shallow, man-made, vegetated swales occur on the Project site. "Drainage Swale A" traverses north-south approximately 315 feet along the unpaved road that borders the western property boundary, emanating from a culvert at the northwest corner of the property and flowing to a culvert near the southwestern corner of the site. "Drainage Swale B" is approximately 256 feet long, entering the site from the northwestern corner of the northern portion of the property. It parallels the western boundary of the northern portion of the property before turning west to intersect with Swale A at the northwest corner of the site (refer to Appendix A, Figure 4).

The Project is located within a commercial planned development district in the City of Carpinteria (City of Carpinteria Zoning Districts, 2016). The property is bordered to the north by agriculture land and residential development, to the south by Via Real and U.S. Highway 101, to the west by an apartment complex, and to the east by residential development and commercial structures.

2.2 VEGETATION

The *Manual of California Vegetation, 2nd Edition* (Sawyer et al., 2009), was utilized to classify vegetation/land cover types present on the subject property. Habitat within the proposed Project site consists primarily of planted ornamental species, disturbed/developed areas, and non-native plant species. Four vegetation/land cover types were identified on the Project site as described below and depicted in Figure 2 (Appendix A).

Vegetation Types

Myoporum Groves

Within the Project area, myoporum groves occur along the western boundary of the northern portion of the property and is the dominant vegetation community in the upstream half of Drainage Swale B. It is dominated by non-native myoporum trees (*Myoporum laetum*) interspersed with coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and a single red willow (*Salix laevigata*). Understory vegetation is dominated by kikuyu grass (*Pennisetum clandestinum*) with English ivy (*Hedera helix*) also present. Additional species observed within this community include non-native Canary Island date palm (*Phoenix canariensis*), castor bean (*Ricinus communis*), and pampas grass (*Cortaderia selloana*).

Non-native Grassland

Non-native grasslands occur on the southern and western portions of the property, adjacent to the church building and playground area, and is dominated by kikuyu grass (*Pennisetum clandestinum*). Additional herbaceous species that occur within this community included non-natives such as prickly sow-thistle (*Sonchus asper*) and cheeseweed (*Malva parviflora*). Within Drainage Swale A, non-native species such as pampas grass, wild radish (*Raphanus sativus*), morning glory (*Calystegia* sp.), and an unidentified sedge (*Cyperus* sp.) were observed. Red willow, the only native species present in this community, was observed at scattered locations within Drainage Swale A. Throughout the property, areas mapped as non-native grassland appear to be regularly maintained via mowing and/or weed whipping, limiting mid strata growth. This community does not match any of the vegetation types described by Sawyer et al. (2009).

Ruderal Herbaceous Scrub

Ruderal vegetation occupies the northern outcrop portion of the property. It is dominated by non-native, herbaceous plant species including greenstem filaree (*Erodium moschatum*), cheeseweed, cut-leaved geranium (*Geranium dissectum*), prickly sow thistle, English plantain (*Plantago lanceolata*), scarlet pimpernel (*Lysimachia arvensis*), kikuyu grass, and annual grasses such as bromes (*Bromus* spp.) and wild oat (*Avena fatua*). Based on a review of historic aerial photos, this area appears to have been used as a vegetable garden from 2011 through 2014.

Other Cover Types

Disturbed/Developed

This land use type describes existing structures, dirt roads, and other disturbed areas; ornamental vegetation is also included under this classification.

2.3 CLIMATE

The City of Carpinteria is characterized by a Mediterranean climate, consisting of dry summers and moist winters. Onshore winds produced by the westerly transoceanic air currents predominate the Carpinteria valley and are common in the afternoons of the winter, spring, and summer months. Offshore air flow produced by continental cooling, generally occurs at night during the fall and winter months. The City of Carpinteria is also characterized by fog, an important feature of the southern California coastline. Cool moist air is trapped at low elevations which produce fog and low-lying clouds. Fog is common during the early morning and night and often occurs during late spring and early summer (Carpinteria Salt Marsh Reserve, 2016).

Precipitation data from the City of Santa Barbara, located northwest of the City of Carpinteria was used to characterize the precipitation levels for Carpinteria. These coastal cities are approximately 11 miles apart and experience significantly similar climatic events. The warmest month in the City of Santa Barbara is August and the coolest month is December. Ninety percent of the annual rainfall occurs from November to April. The mean annual precipitation is approximately 17.8 inches, based on data from 1967 to 1979 (Carpinteria Salt Marsh Reserve, 2016).

2.4 HYDROLOGY AND GEOMORPHOLOGY

The drainage swales located within the proposed Project area are ephemeral in nature, only containing water during and shortly after significant rain events. Irrigation runoff from adjacent agriculture fields also contributes periodic flows to the swales. Drainage Swale B connects to Drainage Swale A, which exits the subject property through a culvert near the southwest corner of the site. Flows are conveyed under Via Real and Highway 101 and enter the Carpinteria Salt Marsh, which empties into the Pacific Ocean.

The Carpinteria Salt Marsh is located south of the proposed Project area, to the south of U.S. Highway 101. It is one of the largest and most critical estuaries in California, supporting a number of sensitive plant and animal species. The estuary is characterized by natural and artificial channels and estuarine wetlands that emerge from the drainages of Franklin and Santa Monica creeks. A smaller, unnamed drainage, just to the west of the Santa Monica Creek, also drains into the marsh. These drainages generally collect runoff from the southern slopes of the Santa Ynez Mountains, located to the north of the marsh and proposed Project area (Carpinteria Salt Marsh Reserve, 2016).

2.5 GEOLOGY

The Project site is located in the Carpinteria Valley of 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 range from approximately 600 to 2,000 feet above MSL. Elevations of the valley floor range from sea level to approximately 130 feet above MSL. In general, topography of the Carpinteria Valley area slopes towards the south to southwest.

Several small drainages cross the Carpinteria Valley draining the adjacent highlands to the north. These drainages (listed from west to east) include the Toro Canyon Creek, Arroyo Paredon, Santa Monica Creek, Franklin Creek, and Carpinteria Creek.

The Project site is located within a seismically active region of Santa Barbara County, which is within the Transverse Ranges Geomorphologic Province of California. East-west trending faults, folds, and mountain ranges characterize the Transverse Ranges Province. The Transverse Ranges Province extends from southwestern San Bernardino County westward through northern Los Angeles County and Ventura County, terminating at the Pacific Ocean near Point Arguello in western Santa Barbara County. The Transverse Ranges Province is extensively faulted with known active faults. Some of the larger faults in or near the province that could affect the project site include the San Andreas, San Cayetano, Oak Ridge, Ventura-Pitas Point, Arroyo-Parida, Red Mountain, and Santa Ynez faults. There are also many smaller localized faults throughout the province. Some of the smaller faults in the Project vicinity include the Rincon Creek, Carpinteria, Holloway and Shepard Mesa faults. All of the faults in the City's Planning Area are considered potentially active.

The Carpinteria Valley is within an area formed the Santa Barbara Fold Belt, which 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. This deformation is thought to have caused localized topographic highs within the Carpinteria Valley, such as the Shepard Mesa and Summerland Hills (Gurrola et al., 1998).

2.6 SOILS

Soils within the proposed Project area were dominated by silt loam and silty clay soils. Historic soils data from the Natural Resources Conservation Service (NRCS) was also used to determine potential soil types, including where hydric soils have historically occurred (refer to Appendix A, Figure 3). Characteristics of soils present on the site are summarized in Appendix C. Table 1 below identifies the soil occurrence within the proposed Project area.

Table 1. Soil Units Occuring in the Proposed Project area

Map Unit Symbol	Map Unit Name	Description	Acres Within proposed Project area	% Total Within proposed Project area
Cb	Camarillo, variant, fine sandy loam	A poorly-drained soil that occurs on flood plains at elevations between 10-50 feet; parent material consists of alluvium derived from calcareous sedimentary rock; prone to flooding; fine sandy loam (0-7"), stratified loamy sand to clay loam (7-35"), clay (35-72").	2.6	100.0%
		TOTAL	2.6	100.0%

3.0 REGULATORY BACKGROUND

The USACE Regulatory Program regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA); the CDFW regulates activities under California Fish and Game Code Sections 1600-1607; the RWQCB regulates activities under Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act; and the CCC regulates activities under the California Coastal Act. Refer to Appendix F for additional details on regulatory authorities and background.

4.0 WATERS/WETLANDS DELINEATION

4.1 DELINEATION METHODOLOGY

This section describes the methods employed by Stantec during the survey conducted on September 5, 2017, to determine the extent of potentially jurisdictional wetlands and/or waters that occur within the proposed Project area. Prior to conducting the field assessment, Stantec reviewed current and historic aerial photographs, detailed topographic maps, soil maps of the proposed Project area (NRCS, 2017), and local and state hydric soil lists to evaluate the potential active channels and wetland features that occur in the proposed Project area (NRCS 2014a, 2014b). During the field assessment, vegetation, hydrology, and locations of soil test pits were mapped using a Trimble Geo 7X global positioning system (GPS) unit and identified on aerial photographs (refer to Appendix A, Figures 2 and 4). Field maps were digitized using Global Information Technology (GIS) and total jurisdictional area for each jurisdiction was calculated.

Federal Wetlands/Waters

Jurisdictional non-wetland "waters of the U.S." were delineated based on the limits of the ordinary high water mark (OHWM) as determined by changes in physical and biological features, such as bank erosion, deposited vegetation or debris, and vegetative characteristics. Jurisdictional wetlands were delineated using a routine determination in accordance with the methods outlined in the USACE Wetland Delineation Manual (1987) and the Arid West Supplement (2011) and based on three wetland parameters: dominant hydrophytic vegetation, wetland hydrology, and hydric soils. See Tables 1 and 2 in Appendix E (Potential Geomorphic and Vegetative Indicators of Ordinary High Water Marks for the Arid West) for a list of key physical features used to determine the OHWM identified by the arid west manual.

CDFW Jurisdictional Waters

CDFW jurisdiction was delineated to the top of the banks of the channel and/or to the edge of the riparian canopy/riparian habitat. For portions of the proposed Project area, the CDFW jurisdictional boundary mirrors the OHWM. In some areas, the top of the banks extend beyond the OHWM. Therefore, the total acreage of CDFW jurisdictional waters is greater than the combined acreage of federal jurisdictional waters/wetlands.

4.1.1 Wetland Vegetation

Vegetation percent cover was visually estimated for plant species in each of the four strata (tree, sapling/shrub, herb, and woody vine), and species in each stratum were ranked based on canopy dominance (USACE 2008). Species with a total percent cover of at least 50 percent and species with 20 percent coverage within each strata were recorded on the Field Data Sheets (50/20 Rule). Wetland indicator status was assigned to each dominant species using the Region 0 List of Plant Species that Occur in Wetlands (Reed 1988), the California subregion of the National List of Vascular Plant Species that Occur in Wetlands: 1996 National Summary (USFWS 1997), Wetland Plants of

Specialized Habitats in the Arid West (USACE 2007), and the Arid West Region of The National Wetland Plant List (USACE 2012). If greater than 50 percent of the dominant species from all strata were Obligate, Facultative-Wetland, or Facultative species, the criteria for wetland vegetation was considered to be met (Appendix E, Table 3).

4.1.2 Wetland Hydrology

The presence of wetland hydrology was assessed by evaluating the presence of primary and secondary hydrology indicators (Appendix E, Tables 4 and 5). No surface water was present during the September 5, 2017, delineation. However, anecdotal evidence and research of available information indicates that Drainage Swale A is inundated for a period of time following storm events and/or periodically as a result of agricultural runoff.

In conditions where surface water/saturated soils are not present, the USACE Arid West Supplement advises evaluating the area using two additional sets of indicators: Group B (evidence of recent inundation) and Group C (evidence of recent soil saturation) (USACE 2008). These indicators are tiered into two categories (primary and secondary indicators). The presence of one primary indicator from either group is indicative of sufficient wetland hydrology, while two or more secondary indicators must be present to conclude wetland hydrology. Indicators are intended to be one-time observations of site conditions representing evidence of wetland hydrology when hydrophytic vegetation and hydric soils are present (USACE 2008).

4.1.3 Wetland Soils

Four soil pits were excavated within the two swales on the Project site: three in Drainage Swale A and one in Drainage Swale B (refer to Appendix A, Figure 5). Soils pits were dug to a depth of approximately 16 to 20 inches. At each soil pit, the soil texture and color were evaluated and compared to standard plates from a Munsell soil color chart (Munsell 2000) and indicators of hydric soils were recorded, including gleyed or low-chroma soils, reduced soil conditions, redoximorphic features, buried organic matter, and organic streaking (refer to Appendix E, Tables 6 and 7, for a complete list of hydric soils indicators). In addition, soils data from the NRCS was referenced to determine if hydric soils have been previously documented on or near the Project site.

4.2 RESULTS

Three types of jurisdictional features were recorded within the proposed Project area. These include USACE non-wetland waters, CDFW jurisdictional waters, and California Coastal Commission wetlands, as summarized in Table 2 and Figure 4 (Appendix A). According to the NRCS Hydric Soils List, no hydric soils have been mapped on the Project site. Vegetation present within and adjacent to the drainage swales present on the Project site did not satisfy the 50/20 Rule required to meet hydrophytic vegetation threshold. Plant species observed and their wetland indicator status are summarized in Table 3.

Representative photographs are provided in Appendix B and Appendix D contains the Wetland Determination Data Forms that were completed during the site assessment.

Table 2. Acreage of Potential Jurisdictional Waters and Wetlands within the Proposed Project area

Drainage Feature	USACE/RWQCB Non-Wetland Waters (acres)	CDFW Jurisdictional Waters (acres)	CCC Wetlands (acres)
Drainage Swale A	0.02	0.09	0.02
Drainage Swale B	0.04	0.04	--
TOTAL	0.06	0.13	0.02

Table 3. Wetland Indicator Status of Plant Species Observed Within the Proposed Project area

Latin Name	Common Name	Wetland Indicator Status** Region 0/California Subregion/Arid West
Avena fatua	wild oat	--
Bromus catharticus var. catharticus	rescue grass	--
Bromus diandrus	ripgut brome	UPL
Calystegia sp.	morning glory	--
Chamerops humilis	European fan palm	--
Cortaderia selloana	pampas grass	FACU
Cyperus sp.	sedge	--
Erodium moschatum	greenstem filaree	--
Geranium dissectum	cut-leaved geranium	--
Hedera helix	English ivy	FACU
Hordeum murinum ssp. leporinum	hare barley	--
Juniperus chinensis	Chinese juniper	--
Lysimachia arvensis	scarlet pimpernel	FAC
Malva parviflora	cheeseweed	--
Myoporum laetum	myoporum	FACU
Pennisetum clandestinum	kikuyu grass	--
Phoenix canariensis	Canary Island date palm	--
Pinus pinea	Italian stone pine	--
Plantago lanceolata	English plantain	FAC
Quercus agrifolia	coast live oak	UPL
Raphanus sativus	wild radish	UPL

Latin Name	Common Name	Wetland Indicator Status** Region 0/California Subregion/Arid West
Ricinus communis	castor bean	FACU
Rumex crispus	curly dock	FAC
Salix laevigata	red willow	FACW+
Salix lasiolepis	arroyo willow	FACW
Sonchus asper ssp. asper	prickly sow-thistle	FAC
Syagrus romanzoffiana	queen palm	--

Federal Non-Wetland Waters

Based on Stantec's professional opinion following an assessment of hydrology, soil characteristics, and the limits of the OHWM, there are approximately 0.06 acres (2,589 sq. ft.) of non-wetland waters of the United States present on the Project site: Drainage Swale A – 0.02 acres (969 sq. ft.); Drainage Swale B – 0.04 acres (1,620 sq. ft.). The lone hydrologic indicator observed during the delineation was Oxidized Rhizospheres along Living Roots (C3), a primary indicator of wetland hydrology, at Sampling Point 03 within Drainage Swale A.

CDFW Jurisdictional Waters

Based on Stantec's professional opinion following an assessment of hydrology and the presence of bed and bank, there are approximately 0.13 acres of CDFW jurisdictional waters present on the Project site: Drainage Swale A – 0.09 acres (3,876 sq. ft.); Drainage Swale B – 0.04 acres (1,620 sq. ft.).

California Coastal Commission Waters

Based on Stantec's professional opinion following an assessment of hydrology and OHWM, there are approximately 0.02 acres of CCC wetlands present on the Project site, limited to within Drainage Swale A. As noted above, a primary wetland indicator was observed within a soil pit dug in this swale, which is sufficient to qualify the drainage as a CCC wetland.

5.0 SUMMARY AND CONCLUSIONS

The Project area supports USACE non-wetland waters, CDFW jurisdictional waters, and CCC jurisdictional wetlands. While no surface water was present during the delineation, the two drainage swales present on the Project site exhibit defined beds and banks and are known to convey surface flows based on research of site conditions and anecdotal evidence. In addition, the presence of a primary wetland hydrology indicator was observed within a soil pit dug in Drainage Swale A and this area is known to support ponded water for short periods after significant rain events. Both of the swales on the Project site provide little in terms of wildlife habitat value; due in large part to the routine mowing/maintenance of these areas to preclude substantial vegetative growth.

Project-related impacts to jurisdictional areas would require the Project proponent to procure regulatory permits from the USACE, CDFW, and RWQCB. These include Clean Water Act Section 401/404 and CDFW Lake and Streambed Alteration Agreement permits. The City of Carpinteria, through their administration of the Coastal Act, typically mandates a minimum 100-foot set back from wetlands within which development is precluded; however, a project may acquire a variance to this limitation at the discretion of the CCC and City if mitigating circumstances are present.

The conclusions presented above represent Stantec's professional opinion based on our knowledge and experience with the applicable regulatory agencies, including their technical guidance documents and manuals. However, the USACE, CDFW, and CCC have final authority in determining the status and presence of jurisdictional wetlands/waters and the extent of their boundaries.

6.0 REFERENCES

City of Carpinteria. Padre Associates, Inc. 2016. Draft Environemntal Impact Report for the Carpinteria Avenue Bridge (51C-172) Replacement Project. March 2016. Accessed on September 8, 2017. Available at: http://www.carpinteria.ca.us/PDFs/Draft%20EIR_%20Carp%20Ave%20Bridge.pdf

City of Carpinteria. 2016. City of Carpinteria Zoning Districts. 20 October 2016. Accessed on September 8, 2017Available at: http://www.carpinteria.ca.us/PDFs/cd_zoning%20map.pdf

Cowardin, L. M., V. Garter, F. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Office of Biological Services, U.S. Fish & Wildlife Service. FWS/OBS-79/31.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1). Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Environmental Laboratory. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Vicksburg, MS: U.S. Army Engineer Research and Development Center. <http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf>.

Gurrola L. D., Keller, E. A., Dibblee Jr., T. W., Dolan, J., Campbell, S., and Hoover, M. 1998. Active Folding of Emergent Marine Terraces: Summerland to Carpinteria, Santa Barbara Fold Belt, California. The Geological Society of America, Abstracts with Programs, Cordilleran Section, 30(5):8107.

Munsell Color. 1994. Munsell Soil Color Charts. New Windsor, NY: Kollmorgen Instruments Corp.

Reed, P.B., Jr. 1988. *National List of Plant Species that Occur in Wetlands: National Summary* (Biological Report 88 (24)). Washington, D.C.: USFWS.

Sawyer et al. 2009. *Manual of California Vegetation*, 2nd edition: Online Manual. Accessed on September 2017. Available at: http://vegetation.cnps.org/

University of California Natural Reserve System. Carpinteria Salt Marsh Reserve. Part I: Carpinteria Salt Marsh: Background and Natural History. Accessed on September 12, 2017. Available at: http://carpinteria.ucnrs.org/introduction.html

U.S. Army Corps of Engineers (USACE). 2012. The National Wetland Plant List. ed. R. W. Lichvar. ERDC/CRREL TR-12-11. Hanover, NH: Cold Regions Research and Engineering Laboratory.

U.S. Army Corps of Engineers (USACE). 2008a. (June 26). Regulatory Guidance Letter: Jurisdictional Determinations. Washington, D.C.: USACE.

U.S. Army Corps of Engineers (USACE). 2008b (January 28). *Memorandum for Commander, Major Subordinate Commands and District Commands: Process for Coordinating Jurisdictional Delineations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the Rapanos and SWANCC Supreme Court Decisions*. Washington, D.C: USACE.

U.S. Army Corps of Engineers (USACE). 2007a (January 31). *Memorandum: Interim Guidance for Amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) Implementing Regulations*. Washington, D.C.: USACE.

U.S. Army Corps of Engineers (USACE). 2007b. Wetland Plants of Specialized Habitats in the Arid West. Robert Lichvar and Lindsey Dixon. ERDC/CRREL TR-07-8. Hanover, NH: Cold Regions Research and Engineering Laboratory.

U.S. Department of Agriculture (USDA). 2016. Web Soil Survey. Natural Resources Conservation Service. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

U.S. Fish and Wildlife Service (USFWS). 2016. Wetland Mapper. National Wetlands Inventory. Washington, D.C.: USFWS. < https://www.fws.gov/wetlands/>.

APPENDICES

Appendix A FIGURES







Appendix B PHOTOGRAPHIC LOG





Photo 1 - View looking southwest along Drainage Swale A from the northwestern corner of the Project site.



Photo 2 - View looking southwest along Drainage Swale B from the approximate location of Soil Pit No. 1.



Photo 3 - View of Soil Pit No. 1. No wetland indicators were observed at this location.



Photo 4 - View looking east at the downstream end of Drainage Swale B.



Photo 5 - View of Soil Pit No. 3. Oxidized root channels, an indicator of hydric soils, were observed within this pit.



Photo 6 - View looking north along Drainage Swale A from the southwestern corner of the Project site.

Appendix C SOIL RESOURCES REPORT

Santa Barbara County, California, South Coastal Part

Cb—Camarillo, variant, fine sandy loam

Map Unit Setting
National map unit symbol: hc4f
Elevation: 10 to 50 feet
Mean annual precipitation: 15 to 20 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 310 to 330 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Camarillo variant and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Camarillo Variant

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from calcareous sedimentary rock

Typical profile
H1 - 0 to 7 inches: fine sandy loam
H2 - 7 to 35 inches: stratified loamy sand to clay loam
H3 - 35 to 72 inches: clay

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.0 inches)

Interpretive groups
Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Minor Components

Unnamed, (is surface layer)
Percent of map unit: 8 percent
Hydric soil rating: No

Unnamed, (soil >40" deep over clay)
Percent of map unit: 7 percent
Hydric soil rating: No

Appendix D WETLAND DETERMINATION FIELD FORMS

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Ram Hotels/4110 Via Real | City/County: Carpinteria/Santa Barbara | Sampling Date: 9/5/17
Applicant/Owner: Ram Hotels | State: CA | Sampling Point: 01
Investigator(s): R. Brown; M. Navarro | Section, Township, Range: S 19, T 4 N, R 25 W
Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): C - Mediterranean California | Lat: 34°24'21.82"N | Long: 119°32'4.26"W | Datum: WGS 1984
Soil Map Unit Name: Camarillo, variant, fine sandy loam | NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)
Are Vegetation [X], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )
Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ( ) No (●)
Hydric Soil Present? Yes ( ) No (●)
Wetland Hydrology Present? Yes ( ) No (●)
Is the Sampled Area within a Wetland? Yes ( ) No (●)
Remarks: Dry Channel.

VEGETATION

Tree Stratum (Use scientific names)	Absolute % Cover	Dominant Species?	Indicator Status
1. Myoporum sp.	90	Yes	
2. Quercus agrifolia	15	No	
3. Salix lasiolepis	10	No	
4.			
Total Cover:	115%		
Sapling/Shrub Stratum			
1. Phoenix dactylifera	1	No	
2. Quercus agrifolia	2	No	
3.			
4.			
5.			
Total Cover:	3 %		
Herb Stratum			
1. Pennisetum clandestinum	95	Yes	
2. Hedera helix	1	No	
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	96 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum: 0 % | % Cover of Biotic Crust: 0 %

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	0
FACW species	x 2 =	0
FAC species	x 3 =	0
FACU species	x 4 =	0
UPL species	x 5 =	0
Column Totals:	(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- (●) Dominance Test is >50%
- (●) Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: Overlapping canopies in tree stratum
20% leaf litter in herb stratum

US Army Corps of Engineers

SOIL

Sampling Point: 01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture[3]	Remarks
≥12	10YR 3/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:
- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[1]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type:
Depth (inches):
Hydric Soil Present? Yes ( ) No (●)
Remarks:

HYDROLOGY

Wetland Hydrology Indicators:
Primary Indicators (any one indicator is sufficient)
- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift Deposits (B3) (Nonriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)
- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) (Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Thin Muck Surface (C7)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ( ) No (●) Depth (inches):
Water Table Present? Yes ( ) No (●) Depth (inches):
Saturation Present? (includes capillary fringe) Yes ( ) No (●) Depth (inches):
Wetland Hydrology Present? Yes ( ) No (●)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Ram Hotels / 4110 Via Real | City/County: Carpinteria/ Santa Barbara | Sampling Date: 9/5/17
Applicant/Owner: Ram Hotels | State: CA | Sampling Point: 02
Investigator(s): R Brown; M Navarro | Section, Township, Range: S 19, T 4 N, R 25 W
Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): C - Mediterranean California | Lat: 34°24'21.52"N | Long: 119°32'6.33"W | Datum: WGS 1984
Soil Map Unit Name: Camarillo, variant, fine sandy loam | NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)
Are Vegetation [X], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )
Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ( ) No (●)
Hydric Soil Present? Yes ( ) No (●)
Wetland Hydrology Present? Yes ( ) No (●)
Is the Sampled Area within a Wetland? Yes ( ) No (●)
Remarks: Dry Channel.

VEGETATION

Tree Stratum (Use scientific names)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1. Salix lasiolepis	15		
2. Corsadena jubata	60		
3.			
4.			
5.			
Total Cover:	75 %		
Herb Stratum			
1. Pennisetum clandestinum	5		
2. Sonchus asper ssp. asper	7		
3. Wild radish	3		
4. Calystegia collina	2		
5.			
6.			
7.			
8.			
Total Cover:	17 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum: 20 % | % Cover of Biotic Crust: 0 %

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	0
FACW species	x 2 =	0
FAC species	x 3 =	0
FACU species	x 4 =	0
UPL species	x 5 =	0
Column Totals:	(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- (●) Dominance Test is >50%
- (●) Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: Recently and historically maintained via weed whacking/mowing, limiting mid strata growth

US Army Corps of Engineers

SOIL

Sampling Point: 02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture[3]	Remarks
≥12	10YR 3/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils:
- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[1]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type:
Depth (inches):
Hydric Soil Present? Yes ( ) No (●)
Remarks:

HYDROLOGY

Wetland Hydrology Indicators:
Primary Indicators (any one indicator is sufficient)
- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift Deposits (B3) (Nonriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)
- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) (Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Thin Muck Surface (C7)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ( ) No (●) Depth (inches):
Water Table Present? Yes ( ) No (●) Depth (inches):
Saturation Present? (includes capillary fringe) Yes ( ) No (●) Depth (inches):
Wetland Hydrology Present? Yes ( ) No (●)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Ram Hotels/4110 Via Real | City/County: Carpinteria/Santa Barbara | Sampling Date: 9/5/17
Applicant/Owner: Ram Hotels | State: CA | Sampling Point: 03
Investigator(s): R. Brown; M. Navarro | Section, Township, Range: S 30, T 4 N, R 25 W
Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | Slope (%):
Subregion (LRR): C - Mediterranean California | Lat: 34°24'20.34"N | Long: 119°32'7.04"W | Datum: WGS 1984
Soil Map Unit Name: Camarillo, variant, fine sandy loam | NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)
Are Vegetation [X] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )
Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ( ) No (●)
Hydric Soil Present? Yes ( ) No (●)
Wetland Hydrology Present? Yes (●) No ( )
Is the Sampled Area within a Wetland? Yes ( ) No (●)
Remarks: Dry Channel;

VEGETATION

Tree Stratum (Use scientific names)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1. Cercidium jubata	15		
2.			
3.			
4.			
5.			
Total Cover:	15 %		
Herb Stratum			
1. Pennisetum clandestinum	75		
2. Nut sedge	5		
3. Sonchus asper ssp. asper	5		
4. Melic grass	5		
5.			
6.			
7.			
8.			
Total Cover:	90 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		
% Bare Ground in Herb Stratum: %	% Cover of Biotic Crust: %		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	0
FACW species	x 2 =	0
FAC species	x 3 =	0
FACU species	x 4 =	0
UPL species	x 5 =	0
Column Totals	(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- Dominance Test is >50%
- Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: Melic? grass

US Army Corps of Engineers

Arid West - Version 11-1-2006

SOIL

Sampling Point: 03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture[3]	Remarks
≥12	10YR 3/2	99	7.5YR 5/6	1	RM	RC	Silty clay	oxidized root channels

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils[4]:
- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type:
Depth (inches):
Hydric Soil Present? Yes ( ) No (●)
Remarks:

HYDROLOGY

Wetland Hydrology Indicators:
Primary Indicators (any one indicator is sufficient)
- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift Deposits (B3) (Nonriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [x] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)
- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) (Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Thin Muck Surface (C7)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ( ) No (●) Depth (inches):
Water Table Present? Yes ( ) No (●) Depth (inches):
Saturation Present? (includes capillary fringe) Yes ( ) No (●) Depth (inches):
Wetland Hydrology Present? Yes (●) No ( )
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

US Army Corps of Engineers

Arid West - Version 11-1-2006

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Ram Hotels/4110 Via Real | City/County: Carpinteria/Santa Barbara | Sampling Date: 9/5/17
Applicant/Owner: Ram Hotels | State: CA | Sampling Point: 04
Investigator(s): R. Brown; M. Navarro | Section, Township, Range: S 30, T 4 N, R 25 W
Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): C - Mediterranean California | Lat: 34°24'19.34"N | Long: 119°32'6.94"W | Datum: WGS 1984
Soil Map Unit Name: Camarillo, variant, fine sandy loam | NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)
Are Vegetation [X] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )
Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ( ) No (●)
Hydric Soil Present? Yes ( ) No (●)
Wetland Hydrology Present? Yes ( ) No (●)
Is the Sampled Area within a Wetland? Yes ( ) No (●)
Remarks: Dry Channel;

VEGETATION

Tree Stratum (Use scientific names)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1. Cortaderia jubata	2		
2.			
3.			
4.			
5.			
Total Cover:	2 %		
Herb Stratum			
1. Pennisetum clandestinum	80		
2. Calystegia collina	1		
3. Malva parviflora	1		
4.			
5.			
6.			
7.			
8.			
Total Cover:	82 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		
% Bare Ground in Herb Stratum: 18 %	% Cover of Biotic Crust: 0 %		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	0
FACW species	x 2 =	0
FAC species	x 3 =	0
FACU species	x 4 =	0
UPL species	x 5 =	0
Column Totals	(A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- Dominance Test is >50%
- Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks: 18% bare ground/leaf litter

US Army Corps of Engineers

Arid West - Version 11-1-2006

SOIL

Sampling Point: 04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture[3]	Remarks
≥12	10YR 3/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.
[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5) (LRR C)
- [ ] 1 cm Muck (A9) (LRR D)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Vernal Pools (F9)

Indicators for Problematic Hydric Soils[4]:
- [ ] 1 cm Muck (A9) (LRR C)
- [ ] 2 cm Muck (A10) (LRR B)
- [ ] Reduced Vertic (F18)
- [ ] Red Parent Material (TF2)
- [ ] Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type:
Depth (inches):
Hydric Soil Present? Yes ( ) No (●)
Remarks:

HYDROLOGY

Wetland Hydrology Indicators:
Primary Indicators (any one indicator is sufficient)
- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1) (Nonriverine)
- [ ] Sediment Deposits (B2) (Nonriverine)
- [ ] Drift Deposits (B3) (Nonriverine)
- [ ] Surface Soil Cracks (B6)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Salt Crust (B11)
- [ ] Biotic Crust (B12)
- [ ] Aquatic Invertebrates (B13)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Plowed Soils (C6)
- [ ] Other (Explain in Remarks)

Secondary Indicators (2 or more required)
- [ ] Water Marks (B1) (Riverine)
- [ ] Sediment Deposits (B2) (Riverine)
- [ ] Drift Deposits (B3) (Riverine)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Thin Muck Surface (C7)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes ( ) No (●) Depth (inches):
Water Table Present? Yes ( ) No (●) Depth (inches):
Saturation Present? (includes capillary fringe) Yes ( ) No (●) Depth (inches):
Wetland Hydrology Present? Yes ( ) No (●)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

US Army Corps of Engineers

Arid West - Version 11-1-2006

Appendix E ARID WEST INDICATOR TABLES

Table 1. Potential Geomorphic Indicators of Ordinary High Water Marks for the Arid West

(A) Below OHW	(B) At OHW	(C) Above OHW
1. In-stream dunes 2. Crested ripples 3. Flaser bedding 4. Harrow marks 5. Gravel sheets to rippled sands 6. Meander bars 7. Sand tongues 8. Muddy point bars 9. Long gravel bars 10. Cobble bars behind obstructions 11. Scour holes downstream of obstructions 12. Obstacle marks 13. Stepped-bed morphology in gravel 14. Narrow berms and levees 15. Streaming lineations 16. Desiccation/mud cracks 17. Armored mud balls 18. Knick Points	1. Valley flat 2. Active floodplain 3. Benches: low, mid, most prominent 4. Highest surface of channel bars 5. Top of point bars 6. Break in bank slope 7. Upper limit of sand-sized particles 8. Change in particle size distribution 9. Staining of rocks 10. Exposed root hairs below intact soil layer 11. Silt deposits 12. Litter (organic debris, small twigs and leaves) 13. Drift (organic debris, larger than twigs)	1. Desert pavement 2. Rock varnish 3. Clast weathering 4. Salt splitting 5. Carbonate etching 6. Depositional topography 7. Caliche rubble 8. Soil development 9. Surface color/tone 10. Drainage development 11. Surface relief 12. Surface rounding

Table 2. Potential Vegetation Indicators of Ordinary High Water Marks for the Arid West

	(D) Below OHW	(E) At OHW	(F) Above OHW
Hydroriparian indicators	1. Herbaceous marsh species 2. Pioneer tree seedlings 3. Sparse, low vegetation 4. Annual herbs, hydromesic ruderals 5. Perennial herbs, hydromesic clonals	1. Annual herbs, hydromesic ruderals 2. Perennial herbs, hydromesic clonals 3. Pioneer tree seedlings 4. Pioneer tree saplings	1. Annual herbs, xeric ruderals 2. Perennial herbs, non-clonal 3. Perennial herbs, clonal and non-clonal co-dominant 4. Mature pioneer trees, no young trees 5. Mature pioneer trees w/upland species 6. Late-successional species
Mesoriparian indicators	6. Pioneer tree seedlings 7. Sparse, low vegetation 8. Pioneer tree saplings 9. Xeroriparian species	5. Sparse, low vegetation annual herbs, hydromesic 6 ruderals 7. Perennial herbs, hydromesic clonals 8. Pioneer tree seedlings 9. Pioneer tree saplings 10. Xeroriparian species 11. Annual herbs, xeric ruderals	7. Xeroriparian species 8. Annual herbs, xeric ruderals 9. Perennial herbs, non-clonal 10. Perennial herbs, clonal and non-clonal codominant 11. Mature pioneer trees, no young trees 12. Mature pioneer trees, xeric understory 13. Mature pioneer trees w/upland species 14. Late-successional species 15. Upland species
Xeroriparian indicators	10. Sparse, low vegetation 11. Xeroriparian species 12. Annual herbs, xeric ruderals	12. Sparse, low vegetation 13. Xeroriparian species 14. Annual herbs, xeric ruderals	16. Annual herbs, xeric ruderals 17. Mature pioneer trees w/upland species 18. Upland species

Stantec

Table 3. Summary of Wetland Indicator Status

Category		Probability
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability >99%)
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability of 67–99%)
Facultative	FAC	Equally likely to occur in wetlands/non-wetlands (estimated probability of 34–66%)
Facultative Upland	FACU	Usually occur in non-wetlands (estimated probability 67–99%)
Obligate Upland	UPL	Almost always occur in non-wetlands (estimated probability >99%)
Non-Indicator	NI	No indicator status has been assigned

Source: Reed, 1988; USFWS, 1997; USACE, 2012.

Table 4. Wetland Hydrology Indicators*

Primary Indicators	Secondary Indicators
Watermarks	Oxidized Rhizospheres Associated with Living Roots
Water-Borne Sediment Deposits	FAC-Neutral Test
Drift Lines	Water-Stained Leaves
Drainage Patterns Within Wetlands	Local Soil Survey Data

*Table adapted from 1987 USACE Manual and Related Guidance Documents.

Table 5. Wetland Hydrology Indicators for the Arid West*

	Primary Indicator (any one indicator is sufficient to make a determination that wetland hydrology is present)	Secondary Indicator (two or more indicators are required to make a determination that wetland hydrology is present)
Group A – Observation of Surface Water or Saturated Soils		
A1 – Surface Water	X	
A2 – High Water Table	X	
A3 – Saturation	X	
Group B – Evidence of Recent Inundation		
B1 – Water Marks	X (Non-riverine)	X (Riverine)
B2 – Sediment Deposits	X (Non-riverine)	X (Riverine)
B3 – Drift Deposits	X (Non-riverine)	X (Riverine)
B6 – Surface Soil Cracks	X	
B7 – Inundation Visible on Aerial Imagery	X	
B9 – Water-Stained Leaves	X	
B10 – Drainage	X	X
B11 – Salt Crust	X	
B12 – Biotic Crust	X	
B13 – Aquatic Invertebrates	X	

Table 5. Wetland Hydrology Indicators for the Arid West*

	Primary Indicator (any one indicator is sufficient to make a determination that wetland hydrology is present)	Secondary Indicator (two or more indicators are required to make a determination that wetland hydrology is present)
Group C – Evidence of Current or Recent Soil Saturation		
C1 – Hydrogen Sulfide Odor	X	
C2 – Dry-Season Water Table		X
C3 – Oxidized Rhizospheres along Living Roots	X	

*Table adapted from Regional Supplement to the USACE of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0.

Table 6. Field Indicators of Hydric Soil Conditions*

1. Indicators of Historical Hydric Soil Conditions	2. Indicators of Current Hydric Soil Conditions
a. Histosols b. Histic epipedons; c. Soil colors (e.g., gleyed or low-chroma colors, soils with bright mottles (Redoximorphic features) and/or depleted soil matrix d. High organic content in surface of sandy soils e. Organic streaking in sandy soils f. Iron and manganese concretions g. Soil listed on county hydric soils list	a. Aquic or peraquic moisture regime (inundation and/or soil saturation for *7 continuous days) b. Reducing soil conditions (inundation and/or soil saturation for *7 continuous days) c. Sulfidic material (rotten egg smell)

*Table adapted from 1987 USACE Manual and Related Guidance Documents.

Table 7. Hydric Soil Indicators for the Arid West*

Hydric Soil Indicators	Hydric Soil Indicators	Hydric Soil Indicators	Hydric Soil Indicators
A1 – Histosol	S1 – Sandy Mucky Mineral	F1 – Loamy Mucky Mineral	A9 – 1 cm Muck
A2 – Histic Epipedon	S4 – Sandy Gleyed Matrix	F2 – Loamy Gleyed Matrix	A10 – 2 cm Muck
A3 – Black Histic	S5 – Sandy Redox	F3 – Depleted Matrix	F18 – Reduced Verti
A4 – Hydrogen Sulfide	S6 – Stripped Matrix	F6 – Redox Dark Surface	TF2 – Red Parent Material
A5 – Stratified Layers	—	F7 – Depleted Dark Surface	Other (See Section 5 of Regional Supplement, Version 2.0)
A9 – 1 cm Muck	—	F8 – Redox Depressions	—
A11 – Depleted Below Dark Surface	—	F9 – Vernal Pool's	—
A12 – Thick Dark Surface	—	—	—

*Table adapted from Regional Supplement to the USACE of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0. **Indicators of hydrophytic vegetation and wetland hydrology must be present.

Appendix F REGULATORY BACKGROUND INFORMATION

Regulatory Background Information

Section 404 of the Clean Water Act (CWA)

Section 404 of the CWA regulates the discharge of dredged material, placement of fill material, or certain types of excavation within "waters of the U.S." (resulting in more than incidental fallback of material) and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Permits can be issued for individual projects (individual permits) or for general categories of projects (general permits). "Waters of the U.S." are defined by the CWA as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined by the CWA as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." The USACE has adopted several revisions to their regulations in order to more clearly define "waters of the U.S." Until the beginning of 2001, "waters of the U.S." included, among other things, isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable "waters of the U.S."

The jurisdictional extent of USACE regulation changed with the 2001 SWANCC (Solid Waste Agency of Northern Cook County) ruling. The U.S. Supreme Court held that the USACE could not apply Section 404 of the CWA to extend their jurisdiction over an isolated quarry pit. The Court ruled that the CWA does not extend Federal regulatory jurisdiction over non-navigable, isolated, intra-state waters. However, the Court made it clear that non-navigable wetlands adjacent to navigable waters are still subject to USACE jurisdiction.

Section 401 of the CWA

Section 401 of the CWA requires that any applicant for a Federal permit for activities that involve a discharge to 'waters of the State,' shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act. Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the RWQCB. Applications to the RWQCB must include a complete CEQA document (e.g., Initial Study/Mitigated Negative Declaration).

Section 1602 of the California Fish and Game Code

Section 1602 of the California Fish and Game Code requires any person, State or local governmental agency, or public utility which proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or use materials from a streambed, or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, to first notify the CDFW of the proposed project. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. Based on the notification materials

submitted, the CDFW will determine if the proposed project may impact fish or wildlife resources. If the CDFW determines that a proposed project may substantially adversely affect existing fish or wildlife resources, a Lake or Streambed Alteration Agreement (SAA) will be required. A completed CEQA document must be submitted to CDFW before a SAA will be issued.

California Coastal Commission/Coastal Act of 1976

The CCC has planning, regulatory, and permitting responsibilities, in partnership with local governments, over all "development" taking place within the coastal zone, a 1.5 million-acre area stretching 1,100 miles along the State's coastline from Oregon to Mexico (and around nine offshore islands). The coastal zone extends seaward three miles, while its landward boundary varies from several miles inland in places such as the Eel River and the Elkhorn Slough, to as close as a few hundred feet from the shore in other areas. The Commission's enabling legislation, the Coastal Act of 1976, created a comprehensive coastal protection program grounded in partnerships between the Commission and local government jurisdictions (15 counties and 60 cities) within the coastal zone. Among the coastal resources specifically protected within the Coastal Act are: public access to the coastline, wetlands and other environmentally sensitive habitat areas (ESHA), agriculture, low-cost visitor-serving recreational uses, visual resources, commercial and recreational fishing, and community character. Coastal streams and wetlands are also protected under the Coastal Act.

The Coastal Act Section 30231 defines a wetland as:

> "...lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens."

The CCC's regulations (California Code of Regulations Title 14) establishes a "one parameter definition," which requires evidence of a single parameter to establish wetland conditions:

> "Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats. (14 CCR Section 13577)."

The "one parameter" definition adopted by the Coastal Commission is based on the general definition used by the U.S. Fish and Wildlife (USFWS) and CDFW from the USFWS wetlands classification system first published in 1979 (Cowardin et al. 1979):

> "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification 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."

The Coastal Act definition of a wetland does not distinguish between wetlands based on their quality. Therefore, under the Coastal Act, poorly functioning or degraded areas that meet the definition of wetlands are subject to wetland protection policies.

City of Carpinteria General Plan/Local Coastal Land Use Plan

The policies of the General Plan/LCP/LUP for the City's coastal zone are intended to meet the requirements of and implement the provisions of the Coastal Act at a local level (City 2003). To ensure consistency with the Coastal Act, the City has adopted many of the Coastal Commission's regulations and policies regarding protection of coastal wetlands and streams and other types of ESHA. The City LCP/LUP land use objectives, stream, wetland, and ESHA policies applicable to the Project are listed below.

Objective LU-1a: The policies of the Coastal Act (Public Resources Code Section 30210 through 30263) are hereby incorporated by reference (and shall be effective as if included in full herein) as the guiding policies of the land use plan.

Objective LU-1c: Where policies in the Land Use Element overlap, the policy that is most protective of resources (e.g., land, water, air, etc.) shall take precedence.

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

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

Objective 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.

Objective 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.

Objective 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.

Coastal Wetland Policies

Objective OSC-3a: Wetland delineations shall be based on the definitions contained in Section 13577 (b) of Title 14 of the California Code of Regulations.

Objective OSC-3b: The upland limit of a wetland is defined as:

a) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;
b) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or
c) 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.

Implementation Policy No. 12: 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.

Coastal Stream Policies

Objective OSC-6a: Support the preservation of creeks and their corridors as open space, and maintain and restore riparian habitat to protect the community's water quality, wildlife diversity, aesthetic values, and recreation opportunities.

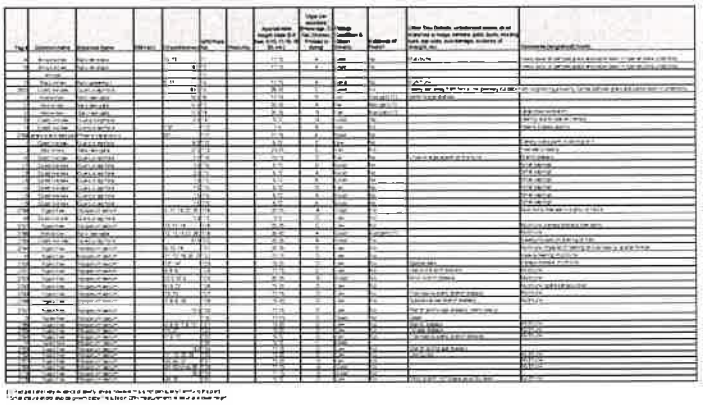
Objective OSC-6b: Protect and restore degraded creeks on City-owned land where protection and restoration does not interfere with good flood control practices.

Objective OSC-6c: When alterations to creeks are permitted by the Coastal Act and policies herein, the creek shall be protected by only allowing creek bank and creek bed alterations where no practical alternative solution is available, where the best mitigation measures feasible have been incorporated, and where any necessary State and federal permits have been issued. Creek alterations should utilize natural creek alteration methods where possible (e.g. earthen channels, biotechnical stabilization). Nothing in this policy shall be construed to require the City to approve creek alterations not otherwise allowed herein and by the Coastal Act.

Objective 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.

Objective 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.

Objective 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.



25. APPENDIX E

GEOTECHNICAL REPORT

Pacific Materials Laboratory
of Santa Barbara, Inc.

35-A South La Patera Lane
P.O. Box 96, Goleta, CA 93116
Phone: (805) 964-8901
FAX No.: (805) 964-6239
E-mail: pml@pml.sbcoxmail.com

PRELIMINARY GEOTECHNICAL INVESTIGATION

Proposed Hotel Development

4110 Via Real

City of Carpinteria

California

CLIENT
RAM Hotels
c/o Kush Nathu and Mina Patel
21 Prestwick Lane
Amarillo, TX 79124

Revised: April 12, 2016
October 23, 2014
Lab No: 106224-2 **Revised**
File No: 14-14026-2

"We Test The Earth"

TABLE OF CONTENTS

INTRODUCTION 1
SCOPE OF WORK 1
LIMITATIONS 1
FIELD INVESTIGATION 2
SOIL CONDITIONS 3
LIQUEFACTION ANALYSIS 3
SOFT CLAY LAYERS 5
PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS 5
GRADING 5
FOUNDATIONS 7
RESISTANCE TO LATERAL LOADS 8
RETAINING WALLS 8
PAVEMENT 10
ADJACENT LOADS 11
TEMPORARY DEWATERING 11
SETTLEMENT FROM STATIC LOADS 12
PLAN REVIEW 12
CLOSURE 12

PLATE 1 - Site Plan
APPENDIX A - Field Investigation
APPENDIX B - Laboratory Tests
APPENDIX C - Cone Penetrometer Tests
APPENDIX D - Seismic and Liquefaction Analyses

INTRODUCTION

This report presents the results of a preliminary geotechnical investigation performed at 4110 Via Real, in the City of Carpinteria, California. Existing at the site is a church building and paved parking lot. It is proposed to remove the existing building and redevelop the site with a hotel structure. The site is approximately level and the surface vegetation consists of a manicured lawn. The north end of the property has been cultivated with a vegetable garden.

SCOPE OF WORK

It is the purpose of this investigation to classify the soil disclosed by the exploratory borings and excavations by observation and tests on selected samples. In addition, this study includes laboratory tests to evaluate soil strength, the effect of moisture variation on the soil-bearing capacity, compressibility, liquefaction, and expansiveness. Based upon this information, we will provide preliminary grading and foundation recommendations for the proposed hotel development.

The scope of this investigation does not include the analysis of the corrosive potential of the soil, previous site construction, or analysis of geologic structures and their associated features, such as faults, fractures, bedding planes, strike and dip angles, ancient landslides, potential for earth movement in undisturbed or natural soil formations sloped or level, or other sources of potential instability which relate to the geologic conditions, as these items should be addressed by a qualified Engineering Geologist.

This exploration was conducted in accordance with presently accepted geotechnical engineering procedures currently applied in the local community in order to provide the appropriate geotechnical design characteristics of the foundations soils and of the proposed fill soils in order to properly evaluate the proposed structure with respect to differential settlement based upon the anticipated soil characteristics at the time of construction.

LIMITATIONS

This Laboratory's basic assumption is that the soil borings presented herein are representative of the entire footprint of the proposed development, however, no warranty is implied. If, during the course of construction, soil conditions are encountered which vary from those presented herein, please contact this Laboratory immediately so appropriate field modifications may be expeditiously proposed.

It is your responsibility to contact our office, providing at least 48 hours of notice for grading or footing excavation observations and testing. The observation of excavations during the construction phase represents an opportunity by our firm to either confirm soil conditions estimated by the exploratory borings or to discover soil conditions which have not been addressed. When such undisclosed conditions are encountered, opinions and recommendations addressing these conditions will be rendered at that time.

This report is considered preliminary and no person should consider the recommendations or soil conditions described herein as conclusive. The recommendations and conclusions of this report are considered preliminary until all excavations have been observed during the construction phase, after which a final report will be issued stating that the grading and foundation works accomplished and installed are appropriate for the soil conditions encountered.

FIELD INVESTIGATION

The subsurface soil conditions were explored by three truck-mounted auger borings, which were drilled to depths of up to 50 feet. Three (3) Cone Penetrometer Test Soundings (CPT) were advanced to depths of up to 86.29 feet. The CPT soundings were performed in conformance with ASTM D-3441. The locations of the borings were selected as appropriate and representative. Representative relatively "undisturbed" tube soil samples were obtained during the drilling operation by the Modified California Sampler Method. Laboratory tests and analysis of representative soil samples, obtained during the drilling operation, were performed to estimate the engineering properties and determine the soil classification. The locations of the borings are shown on Plate 1; these locations are approximate and have not been located by surveyed measurements. The boring log data is presented in Appendix A, "Field Investigation", while the results of the laboratory tests are provided in Appendix B, "Laboratory Tests".

The CPT soundings were accomplished by placing a cylindrical cone tipped probe into the soil deposit while simultaneously recording the resulting penetration resistance. The probe is attached to the end of a string of steel pipe segments, each 1 meter long, and pushed into the ground by means of heavy hydraulic rams, mounted inside the rear compartment of a three-axle truck. The weight of the truck provides the reaction force. Each downward stroke of the hydraulic ram pushes the string down one pipe length at a time, during which a constant penetration rate of 2 centimeters per second is maintained. A pause of a few seconds is necessary after each stroke to add a new section of pipe and raise the rams for the next downward push. An electric cable, which is strung through all of the steel segments in advance, connects the CPT probe to a computer controlled data acquisition system located inside the CPT rig.

The recorded soundings are presented graphically in Appendix C. The results of these soundings have been correlated to estimate engineering properties of the soils, including soil behavior type, Standard Penetration Test (SPT), equivalent relative density, undrained shear strength and internal angle of friction. These values accompany each graphic depiction of the soundings and are contained in Appendix C.

SOIL CONDITIONS

1. The free groundwater table varied from 8 to 10 feet. It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.
2. Compressible clay layers were encountered in the subsurface exploration at depths ranging from 3 to 13 feet below the existing ground surface.
3. The supporting soils were found to have a low potential for expansion.
4. On the average, the soil profile at this site is judged to be stiff soil corresponding to a Site Class D as defined by Table 1613.5.2 of the California Building Code (CBC). This estimate is based on CPT soundings, which measured equivalent Standard Penetration Resistance in blow counts averaging above 15.
5. The potential for liquefaction is considered high.

LIQUEFACTION ANALYSIS

Liquefaction is a phenomenon that occurs in a specific soil condition when disturbed by ground motions. 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. Ground motions are typically the result of a seismic event. Soils, which have the potential to liquefy, were encountered at this site between the depths of 6 to 45 feet below the present grade.

A liquefaction analysis was performed based on the evaluation method presented in Reference No. 3 (NCEER, 1997 Method). The "Liquefaction Analyses and Summary" is presented in Appendix C. The data for these analyses was a correlation between the CPT results and the probable ground motions for the site. The computation was performed utilizing the computer program "Liquefy2". The last column in the Liquefaction Analyses Summary indicates the Factor of Safety for liquefaction to occur. It should be noted the potential for liquefaction to occur is considered low to non-existent for Factors of Safety of 1.2 to 1.5. The results of the analyses for the on-site soils indicate the Liquefaction Factor of Safety to be from 0.47 and 0.80 in selected layers between the depths of 6 to 45 feet.

Due to the topography of the building site, the potential mode of seismically induced settlement is anticipated to be the result of volumetric compression. An estimate of the potential settlement due to volumetric compression has been tabulated in Table A below and is based on procedures proposed by Tokimatsu & Seed, Reference No. 2. The calculation is also based on the soil profile as discovered in the CPT soundings. The CPT soundings were converted to N_1 Values in accordance with the methods referenced above.

TABLE A
Possible Settlement Due to Liquefaction

LOCATION	SOIL LAYERS DEPTH (FT) FROM	TO	STRATA THICKNESS (inches)	CORRECTED SPT (N_1)$_{60}$ VALUE	CSR_{eq}	ESTIMATED VOLUMETRIC STRAIN (percent)*	ANTICIPATED STRATA SETTLEMENT (inches)
CPT-1	5.0	5.5	6.0	29.8	0.71	0.9	0.1
	8.0	8.5	6.0	24.0	0.71	1.1	0.1
	15.0	15.5	6.0	24.4	0.71	1.1	0.1
	16.0	16.5	6.0	27.9	0.70	1.0	0.1
	26.0	26.5	6.0	27.0	0.69	1.0	0.1
	26.5	29.0	6.0	22.1	0.68	1.2	0.1
	29.0	29.5	6.0	26.2	0.68	1.0	0.1
	29.5	30.5	12.0	23.6	0.68	1.1	0.1
	30.5	31.0	6.0	28.5	0.67	1.0	0.1
	32.0	32.5	6.0	17.7	0.66	1.4	0.1
	33.0	33.5	6.0	17.5	0.66	1.4	0.1
	41.5	42.0	6.0	14.0	0.61	1.7	0.1
	44.5	45.0	6.0	27.4	0.59	1.0	0.1
						Total CPT-1	1.3
CPT-2	5.5	6.0	6.0	17.5	0.73	1.4	0.1
	6.0	7.0	12.0	14.7	0.74	1.6	0.2
	8.0	8.5	6.0	18.4	0.75	1.4	0.1
	9.0	9.5	6.0	28.4	0.74	1.0	0.1
	13.0	13.5	6.0	14.3	0.73	1.6	0.1
	19.5	20.0	6.0	25.2	0.72	1.1	0.1
	24.0	24.5	6.0	27.3	0.70	1.0	0.1
	32.0	32.5	6.0	23.4	0.67	1.1	0.1
	33.0	33.5	6.0	27.4	0.67	1.0	0.1
	47.0	47.5	6.0	23.2	0.58	1.1	0.1
						Total CPT-2	1.1
CPT-3	7.5	8.0	6.0	15.2	0.72	1.6	0.1
	16.5	17.0	6.0	26.1	0.71	1.0	0.1
	17.0	17.5	6.0	27.4	0.71	1.0	0.1
	28.5	29.0	6.0	29.8	0.68	0.9	0.1
	29.5	30.0	6.0	21.4	0.68	1.2	0.1
	30.5	31.0	6.0	23.7	0.68	1.1	0.1
	37.5	38.0	6.0	29.8	0.64	0.9	0.1
	38.0	38.5	6.0	28.0	0.63	1.0	0.1
	38.5	39.5	12.0	27.9	0.63	1.0	0.1
	41.5	42.0	6.0	26.7	0.61	1.0	0.1
	46.5	47.0	6.0	25.2	0.58	1.1	0.1
	47.5	48.0	6.0	27.5	0.57	1.0	0.1
	48.0	48.5	6.0	27.7	0.57	1.0	0.1
	49.0	49.5	6.0	19.8	0.57	1.3	0.1
	49.5	50.0	6.0	23.5	0.56	1.1	0.1
						Total CPT-3	1.5

* Based upon Figure 9 in Tokimatsu & Seed (August 1987 Geotechnical Journal)

The total maximum anticipated settlement of 1.5 inches due to volumetric compression as shown in Table A is estimated to potentially contribute a differential settlement of 0.75 inches to the proposed structure in a seismic event. Cosmetic damage to the building due to the settlement will require repair and the floor system may require re-leveling, however, risk to the human occupancy is considered extremely low to unlikely provided the recommendations contained in this report are implemented into the design and construction.

SOFT CLAY LAYERS

Soft clay layers were encountered in the soil profile between the depths of 3 to 13 feet. Soil samples obtained from the clay layers were tested for consolidation, the results of which are provided in Appendix B. Based upon the consolidation characteristics of the clay and based on settlement calculations using the data in Appendix C, differential settlements from static loads could exceed 1 inch, unless the structure is supported by a mat foundation designed with the soil values provided below:

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

It is the opinion of this Laboratory the proposed construction is feasible from a soil-engineering perspective provided the recommendations contained in this soil engineering report are incorporated into the design and implemented during construction.

In order to prevent the structure from experiencing excessive differential settlements from both static load and ground motions, a mat foundation shall be designed for the support of the structure.

It is the understanding of this Laboratory the proposed hotel buildings will be two-story structure with no subterranean features. Based upon this understanding, we present the following preliminary recommendations:

GRADING

1. The area to be graded shall be cleared of surface vegetation, including roots and root structures.
2. All manmade features above and below grade shall be removed. Cavities resulting from the demolition shall be observed by the Project Geotechnical Engineer prior to the placement of backfill.
3. If, during the grading operations, previously placed undocumented fill material is encountered, this fill material shall be removed under the direction of this Laboratory prior to commencement of the filling operations.
4. The footings of the proposed structures shall be supported completely by a **uniform** thickness of compacted soil. **The structures shall not be supported**

over a cut/fill transition unless the foundation is engineered to account for the transition. The over-excavation is to occur beneath the proposed structure and for a minimum distance of 5 feet beyond the exterior perimeters.

5. Beneath the proposed structure, the old fill, loose topsoil, and compressible original surface soils shall be removed and observed by a representative of our firm. Upon approval of excavation, the exposed ground surface shall be scarified an additional 6 to 8 inches, moistened or dried to near the optimum moisture content, and compacted to 90% of the relative compaction. We anticipate the depth of the surface soil removal to be at least 6 to 7 feet deep and at least 36 inches below the bottom of the proposed footings.
6. If unstable soil conditions are encountered, stabilization of the excavation bottom will be required prior to placing fill. This can be accomplished by placing gabion rock over a woven geo-fabric, such as Mirafi™ 600X or equivalent. Gabion rock from Bee Rock Quarry is an acceptable rock source meeting this requirement. The woven geo-fabric shall be placed in conformance with the manufacturer's specifications over the excavation bottom. The rock layer is increased until stabilization is achieved. Typically, a 12-inch-thick layer is sufficient; however, a trial-and-error process may be required to determine the actual thickness of rock required. The rock is then covered with a nonwoven filter fabric, such as Mirafi™ 140N or equivalent. The compaction equipment shall not travel directly on top of the fabrics. A layer of soil shall be spread in front of the equipment to ensure no wheel or track to fabric contact.
7. The removed surface soils and/or imported approved fill may then be placed in loose lifts of approximately 6 inches, thoroughly mixed, moistened or dried to near 2% above the optimum moisture content, and compacted to a minimum of 95% relative compaction.
8. Rocks greater than 6 inches in size shall be removed from the soil being spread for compaction.
9. Import soils, if required for compacted fill, shall be granular, non-expansive soils which are equal to, or superior in quality to, the on-site soils as determined by this Laboratory prior to importation of the fill material to the site. This is not referring to retaining wall backfill. See the RETAINING WALLS section of this report for retaining wall backfill requirements.
10. The compaction standard shall be the latest adoption of the ASTM D-1557 method of compaction.
11. Positive surface drainage shall direct water away from all slopes and away from the foundation system of the proposed structure.

FOUNDATIONS

1. Based on the settlement characteristics of the underlying natural alluvial deposits, an allowable net static bearing pressure of 1,500 pounds per square foot (psf) may be used for design of a mat foundation. There shall be no concentrate loads supported by isolated pad or continuous footings. The loads must be distributed over the entire footprint of the building. This bearing value is for dead-plus-live loads, and may be increased one-third for short-term, transient, wind and seismic loading. The maximum edge pressures induced by eccentric loading or overturning moments should not be allowed to exceed 1,500 psf for static loads nor 1,995 (1,500 increased by one-third) when considering seismic loads.
2. Based on our experience, a mat slab approximately 18 to 24 inches thick could be anticipated for this type of structure. Differential movements of approximately 2 inches in 100 feet should be expected (approximately 1 inch each from static and from seismic loads). The minimum mat slab thickness and the reinforcing of the mat slab should be as specified by the Project Structural Engineer.
3. A perimeter grade beam on the exterior edge of the mat slab foundation shall extend a minimum of 30 inches deep below the lowest final adjacent exterior grade.
4. Foundation excavations shall be observed and approved by a representative of this firm prior to the placement of reinforcing steel and/or concrete. Concrete should be placed only in excavations that have been kept moist and are free of loose, soft soil or debris.
5. A modulus of subgrade reactions (k_s) of 100 pci may be used in the mat slab foundation design.
6. The traditional or conventional subgrade preparation below a concrete slab-on-grade floor or mat slab is some variation of the following: A minimum 4-inch coarse washed concrete sand layer is placed over the soil subgrade. A 15-mil or heavier impervious Stego-type vapor barrier membrane may be placed over the sand layer. These concrete slab-on-grade and sand layer recommendations shall be modified and/or eliminated as needed by the designers for surcharge loads, wheel loads, concentrated loads, or for moisture control. The floor covering supplier or manufacturer should be contacted for their specifications for design features which will result in a successful bond between the concrete slab and floor covering. Floor flatness and shrinkage crack control must be addressed by a competent contractor experienced in the skill of concrete placement. The owners or their agents shall inform those designing, building, and installing the concrete slab on grade and flooring of the performance and aesthetics expected. It is the sole purpose of the recommendations contained in this report to analyze the mechanical properties of the soil with respect to achieving a stable soil subgrade. By stable, we refer to the settlement or heave properties of the subgrade soil.

7. Placing concrete directly on a Stego-type vapor barrier in accordance with manufacturer's specifications will require the use of a very low water-to-cement ratio and potentially high range of clean free-draining material, such as a 1/2-inch coarse aggregate mix, to serve as a cushion and a capillary break. Where moisture-susceptible storage or floor coverings are anticipated, a 15-mil Stego Wrap membrane (or equivalent installed per manufacturer's specifications) should be placed between the free-draining water reducing admixture. The contractor should be familiar with current techniques to finish slabs poured directly on this membrane.

8. This Laboratory shall be requested to inspect the footing excavation prior to placement of reinforcing steel and timber form boards.

9. Floor elevations located lower than the surrounding exterior grades are recommended to be protected from moisture intrusion. Please consult the building designer for details, such as waterproofing and French drains if such conditions are presented.

RESISTANCE TO LATERAL LOADS

Resistance to lateral loading can be provided by sliding friction acting on the base of concrete mat slab and the perimeter grade beams combined with passive pressure acting on the sides of the perimeter grade beams. A coefficient of 0.35 for resistance to lateral forces may be assumed. For resistance to lateral load, we recommend using a value of 250 pcf, equivalent fluid weight, for passive resistance acting on the sides of foundations, with concrete placed neat against compacted materials or cut original ground. A one-third increase in passive value can be used when considering short-term wind or seismic loads.

RETAINING WALLS

Cantilevered - For cantilevered retaining walls, such as site walls and garden walls, which do not form part of the structure, we recommend the following:

1. The cantilevered retaining wall shall be designed assuming an active soil pressure equivalent to a fluid (E.F.P.) whose weight is 35 pcf for level backfill conditions and 52 pcf for backfill slopes, which are constructed at an angle of up to 27 degrees. These values are based on Coulomb's Equation and the following assumed backfill soil values: internal angle of friction equal to 34 degrees, cohesion equal to 0, and a total unit weight of soil equal to 125 pcf. The E.F.P. value does not include surcharge loads and is based on a free-draining condition. The free-draining condition must be created by placing the backfill specified in this section of the report.

2. Retaining walls may be designed using pseudostatic analyses based on a modified[1] Seed Whitman (1970) approach. The need to apply the lateral seismic

[1] Marshal Lew and Nicolas Sitar, et al, "Seismic Earth Pressures on Deep Building Basements", SEAOC 2010 Convention Proceedings

load is to be determined by the Project Structural Engineer or by the building code. We have estimated the seismic earth pressures using the modified Seed Whitman (1970) method, assuming a horizontal peak ground acceleration of 1.093g, and assuming drained backfill conditions. The peak horizontal ground acceleration (PGA) was determined in accordance with Section 1803.5.12 of the 2013 CBC, Paragraph 2.2. The seismic earth pressure (ΔP_{AE}), resulting from seismic loads acting on retaining walls, may be estimated as ΔP_{AE} 33H[2], in pounds per lineal foot of wall, for a triangular pressure distribution (analogous to that used to represent static earth pressures) with the resultant force acting 0.33H above the base of the wall[2].

3. The bottom of the retaining wall footing shall be supported by the compacted soil that has been graded in conformance with the GRADING recommendations of this document. The depth of the footing shall be at least 18 inches below the lowest adjacent grade and may assume an allowable soil bearing value of 1,500 psf.

4. A passive soil pressure equivalent to a fluid whose weight is 350 pcf and a coefficient of friction against sliding of 0.35 may be assumed for the footing excavation described in the recommendation above.

5. The use of equipment to compact soil within the wedge of backfill defined by a 1:1 line projected up from behind the retaining wall to the surface shall be limited to handheld rammer plate compactors, such as a Wacker BS 45Y. A string line shall be placed along the top of the wall to monitor possible rotation of the wall due to the compaction surcharge. If the wall begins to bow or lean away from the backfilling operations, the compaction process shall stop and the Geotechnical Engineer shall be notified immediately such that modified compaction recommendations can be given at that time.

6. The finish covering on the face of the wall, such as stucco or paint, may be adversely affected by moisture intrusion from the backfill through the back of the wall. To prevent this, you should consider waterproofing the back of the wall and footing. All waterproofing and application of waterproofing shall be in accordance with the specifications of the product supplier.

7 Retaining wall backfill shall be a clean coarse sand or gravel wrapped in a filter fabric. The gravel shall be separated from adjacent native soil by a filter fabric, such as Mirafi 140N™. The retaining wall shall be serviced by appropriately placed weep holes or a perforated drain. This drainage feature must include at least 2 cubic feet of gravel wrapped in filter fabric. Lower quality native backfill material may be utilized outside the triangular wedge which extends upwards from the inside edge of the retaining wall and is a minimum width of 60% of the wall height at ground surface. The sand between the wall and native soil shall have a Sand Equivalent of 20 or greater and an Expansion Index equal to 0. To

[2] Linda Al Atik, M. ASCE and Nicholas Sitar, M. ASCE, "Seismic Earth Pressures on Cantilever Retaining Structures", Journal of Geotechnical and Geoenvironmental Engineering, October 2010

avoid excessive amounts of sand and gravel backfill, do not allow the excavation contractor to cut a vertical excavation 2 to 4 feet beyond the back of the retaining wall footing or stem. Cut only to the point needed to install the drainpipe and slope the excavation back as specified.

8. It is assumed that the rough grade excavation behind the retaining wall is to be cut at a temporary slope angle of 1 horizontal to 1 vertical in order to comply with Cal-OSHA safety requirements.

9. All soil backfill shall be compacted to a minimum of 90% relative compaction. It should be noted retaining walls designed assuming active soil conditions are anticipated to deflect seasonally. In addition, surface features which obtain their support from retaining wall backfill materials are anticipated to express differential movement with respect to the retaining wall as the wall may be resting upon a thinner depth of fill or undisturbed original ground and the surface features may be resting upon a considerable thickness of compacted fill which has settlement characteristics differing from that of original ground. The differential movement between the wall and slab patio may be undesirable. In order to hide or prevent such differential movement, an alternate design may be required, such as but not limited to placing a planter between the wall and slab or connecting the slab to the wall, creating a retaining wall which is pinned at the top, not cantilevered.

PAVEMENT

1. In the areas to be paved, we recommend the top loose surface soils be removed from below the proposed final soil subgrade elevation, moistened or dried to at or near the optimum moisture content and compacted to 90% relative compaction, the top 9 inches being compacted to 95% relative compaction where pavement will be subject to vehicle travel or parking. The subgrade area shall be check rolled in order to detect isolated soft spots. Any areas found to be yielding under the wheel loads of the equipment shall be stabilized by removal and compaction.

2. The Class 2 aggregate base shall be recompacted to a minimum of 95% relative compaction in accordance with the ASTM D-1557 test method. Asphalt concrete shall be placed only after the Class 2 aggregate base has been demonstrated to be firm and unyielding.

3. If pumping soils or otherwise unstable soils are encountered, stabilization will be required. Stabilization can be accomplished by placing gabion rock over a woven geo-fabric, such as Mirafi™ 600X or an equivalent. The woven geo-fabric shall be placed in conformance with the manufacturer's specifications over the unstable area. The gabion rock is placed until stabilization is achieved. The gabion rock layer shall be a minimum thickness of 12 inches. The gabion rock is then covered with a non-woven filter fabric, such as Mirafi™ 140N or an equivalent. The compaction equipment shall not travel directly on top of the fabrics. A pile of gabion rock or soil shall be pushed and spread in front of the equipment to ensure no wheel or track to fabric contact.

4. If asphalt pavement is selected for the finished pavement surface, we recommend an R-Value of the subgrade soil be performed by this Laboratory in order to provide appropriate thickness of Class 2 aggregate base and asphalt concrete.

5. Maintenance to assist in reducing the potential for rapid deterioration of the asphalt paved areas shall include surface treatment approximately six months to one year after construction and approximately three years from the first treatment. Pavement conditions should be reviewed at least once a year for cracks, puddling of surface water, and overall appearance. If possible, this review should be done in the fall such that cracks may be repaired which may otherwise allow moisture to pass through the pavement and weaken the subgrade.

6. For concrete pavement, it is recommended the concrete slab be 6 inches thick and be reinforced with No. 3 rebar spaced at 24 inches on center each way. The concrete slab shall be supported by a minimum 4-inch-thick layer of Class 2 aggregate base compacted to 95% relative compaction.

ADJACENT LOADS

Where footings are placed at varying elevations, the effect of adjacent loads may be calculated using the widely published Formulas for Stresses in Semi-infinite Elastic Foundations or the Boussinesq figures and equations for both vertical and horizontal surcharge loads.

TEMPORARY DEWATERING

There may be a potential for the excavations during the grading to encounter groundwater. Site dewatering may be necessary to reduce the effects of groundwater upon the excavation and construction operation. The contractor should provide an effective dewatering system. The dewatering system should be designed to effectively reduce and maintain the groundwater level at least 2 feet below the bottom of the excavation or to the depth necessary to support equipment, whichever is deeper. Dewatering might be performed by using the following techniques alone or in combination:

1. Well points placed within the area of construction.

2. Cut-off walls or medium that reduces water infiltration into construction area.

3. Sumps or pits in which a pump can be installed.

Several problems related to working or grading near or below groundwater level should be considered by the grading contractor. Such difficulties may include the following:

1. Saturated excavation bottoms may pump and may not support conventional construction and/or grading equipment.

2. Excavation materials may be wet and may require drying to slightly above the optimum moisture content before placement of fill.

The effectiveness of the dewatering system may not be consistent throughout the site. A grading technique may be needed to stabilize wet excavations. Stabilizing the bottom of the excavation may be accomplished by placing 1 to 2 feet of gabion rock (3- to 6-inch size) between filter fabric. The Mirafi™ 600X fabric should be placed below the rock and the Mirafi™ 140N should be placed above the rock. Construction dewatering may require permits and monitoring of dewatering discharge to ensure compliance with Regional Water Quality Control Board requirements. Dewatering systems should be designed, installed, and maintained by experienced contractors.

SETTLEMENT FROM STATIC LOADS

It is the intent of the recommendations contained in this report to achieve angular distortions[3] of approximately 1/480. A total settlement from static loads of approximately 1 inch or less is anticipated in the undisturbed native soil and approximately 1% of the fill height is the anticipated total settlement at areas where compacted fill soil is placed in accordance with the GRADING recommendations provided in this soil engineering report. Movement from seismic motion was previously discussed in this document under the heading of LIQUEFACTION ANALYSIS on Page 3. The soil bearing values and estimated settlements contained in this report are preliminary and may need to be modified after the foundation and grading plans are substantially complete.

PLAN REVIEW

We request the grading and foundation plans be submitted to our office for a general review to verify substantial compliance to the recommendations contained in this report.

CLOSURE

The recommendations contained herein are for the sole use of our client and are based upon this Laboratory's understanding of the project which has been described herein. If the project scope, location, or conceptual design is subsequently altered, this Laboratory shall be requested to modify, as necessary, the recommendations contained herein as is appropriate for the new development concept. If the recommendations of this report are not implemented within one year, we recommend an update and review of the contents of this report be performed by this Laboratory.

The recommendations contained herein are based upon the assumption that Pacific Materials Laboratory shall be requested to perform the testing and observation services which will be required during the grading and foundation operations in order to verify that the actual

[3] Angular distortion is the ratio of the vertical differential settlement divided by the horizontal distance over which the vertical differential is measured.

soil conditions encountered and the construction procedures are consistent with the recommendations contained herein. If this service is performed by others, only the technical correctness of the actual analytical soil tests described here is attested to by this Laboratory.

Thank you for the opportunity of providing this service. If you have any questions regarding this matter, please do not hesitate to call.

Respectfully submitted,

PACIFIC MATERIALS LABORATORY, INC.

Ronald J. Pike
Geotechnical Engineer, G. E. 2291

RJP:vlh

cc: Addressee (3)
nKLOSURES, Inc., Attn: Nikhil Kamat, Email: nkihil@nklosures.com

REFERENCES

1. Seed, H.B., Tokimatsu, K., Harder, L.F. and Chung, R., 1985, "Influence of SPT Procedures in Soil Liquefaction Resistance Evaluation," JGED, ASCE, Vol. 111, No. 12.

2. Tokimatsu, K. and Seed, H.B., 1987, "Evaluation of Settlements in Sands due to Earthquake Shaking," ASCE, Journal of Geotechnical Engineering, Vol. 113, No. 8, p. 861-878.

3. Youd, T.L. and Idriss, I.M., 1997, *NCEER Workshop on Evaluation of Liquefaction Resistance of Soils*, Technical Report NCEER-97-0022.

4. Seed, H.B. and Idress, I.M., 1982, Ground Motion and Soil Liquefaction During Earthquakes: Berkeley, CA Earthquake Engineering Research Institute, p. 134.

5. Tokimatsu, K., Kojima, H., Kuwayama, S., Abe, A. and Midorikawa, S., 1994, "Liquefaction-Induced Damage to Buildings in 1990 Luzon Earthquake," ASCE, Journal of Geotechnical Engineering, Vol. 120, No. 2, p. 290-307, Feb.

6. NAVFAC, 1982, DM - 7.1, p. 7.1-220 to 222, May

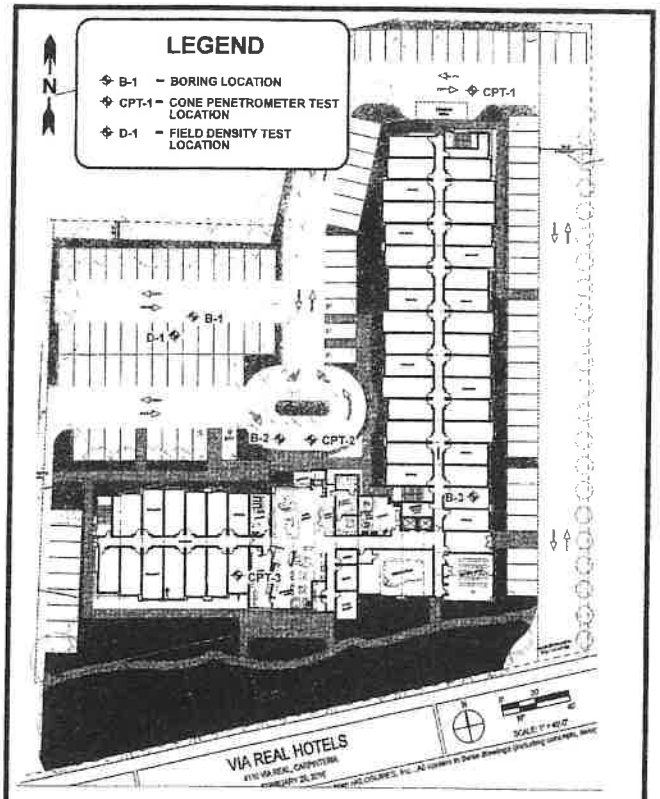
7. Lambe, Whitman, 1969, "Soil Mechanics", Empirical Methods for Predicting Settlement, p. 221.

8. Duncan, J.M., and Buchignani, A.L., 1976, An Engineering Manual for Settlement Studies, University of California, Berkeley.

9. Rollins, K. M., Rogers, G. W., 1994, "Mitigation Measures for Small Structures on Collapsible Alluvial Soils," ASCE, Journal of Geotechnical Engineering, Vol. 120, No. 9, p. 1533-1553.

10. American Society of Civil Engineers Press, 1994, "Settlement Analysis", Technical Engineering and Design Guides, Adapted From the US Army Corps of Engineers, No. 9.

11. Bartlett, S.F. and Youd, T.L. (1995), " Empirical Prediction of Liquefaction-Induced Lateral Spread", Journal of Geotechnical Engineering, Vol. 121, No. 43, April.



SITE PLAN

4110 Via Real
Carpinteria, California

Scale: none	Plate 1 Lab No: 106224-2 Revised File No: 16-14026-2 April 13, 2016

Pacific Materials Laboratory, Inc.

25. APPENDIX F

DRAINAGE AND HYDROLOGY REPORT

Via Real Hotel 4110 Via Real, Carpinteria, Preliminary Drainage Report

Evaluation of BMPs and Drainage Improvements at 4110 Via Real in Carpinteria

Stantec

Prepared for:
nKLOSURES, Inc.

Prepared by:
Craig A. Steward, P.E., CFM

October 25, 2016
(Revised March 10, 2017)

Sign-off Sheet

This document entitled Via Real Hotels 4110 Via Real, Carpinteria, Preliminary Drainage Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of nKLOSURES, Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____
(signature)
Craig A. Steward, P.E., CFM

Reviewed by _____
(signature)
Stephen C. Wang, P.E., LEED AP, QSD/P

REGISTERED PROFESSIONAL ENGINEER
CRAIG A. STEWARD
No. 77253
CIVIL
STATE OF CALIFORNIA

Table of Contents

I. Project Data 1
II. Setting 2
II.A. Project Location and Description 2
II.B. Existing Site Features and Conditions 2
II.C. Opportunities and Constraints for Stormwater Control 2
III. Low Impact Development Design Strategies 3
III.A. Optimization of Site Layout 3
III.A.1. Limitation of development envelope 3
III.A.2. Preservation of natural drainage features 3
III.A.3. Setbacks from creeks, wetlands, and riparian habitats 3
III.A.4. Minimization of imperviousness 3
III.A.5. Use of drainage as a design element 3
III.B. Use of Permeable Pavements 3
III.C. Dispersal of Runoff to Pervious Areas 3
III.D. Stormwater Control Measures 4
IV. Documentation of Drainage Design 4
IV.A. Descriptions of each Drainage Management Area 4
IV.A.1. Table of Drainage Management Areas 4
IV.A.2. Drainage Management Area Descriptions 5
IV.B. Tabulation and Sizing Calculations 7
IV.B.1. Information Summary for LID Facility Design 7
IV.B.2. Self-Treating Areas 7
IV.B.3. Self-Retaining Areas 7
IV.B.4. Areas Draining to Self-Retaining Areas 8
IV.B.5. Areas Draining to Bioretention Facilities (Tier 2 Projects) 10
V. Source Control Measures 12
V.A. Site activities and potential sources of pollutants 12
V.B. Source Control Table 12
V.C. Features, Materials, and Methods of Construction of Source Control BMPs 13
VI. Stormwater Facility Maintenance 13
VI.A. Ownership and Responsibility for Maintenance in Perpetuity 13
VI.B. Summary of Maintenance Requirements for Each Stormwater Facility 13
VII. Construction Checklist 14
VIII. Certifications 14

Tables

Table 1. Project Data 1
Table 2. Drainage Management Areas 3
Table 3. Summary of LID Facility Design 4
Table 4. Self-Treating Areas 5
Table 5. Self-Retaining Areas 5
Table 6. Areas Draining to Self-Retaining Areas 5
Table 7. Areas Draining to Bioretention Facilities 6
Table 8. Project Source Controls 8
Table 9. Construction Checklist 8

Figures

Figure A - Vicinity Map 2

Attachments

Stormwater Control Plan Exhibit

Stormwater Control Measures Sizing Calculator (submit Excel file)

Appendices

This Stormwater Control Plan was prepared using the template dated 18 February 2014.

I. Project Data

Table 1. Project Data

Project Name/Number	Via Real Hotel
Application Submittal Date	September 6, 2016
Project Location	4110 Via Real, Carpinteria, CA 93013
Project Phase No.	NA
Project Type and Description	2-story hotel building surrounded by paved parking
Total Project Site Area (acres)	2.61 acres
Total New Impervious Surface Area	0.92 acres
Total Replaced Impervious Surface Area	0.75 acres
Total Pre-Project Impervious Surface Area	0.75 acres
Total Post-Project Impervious Surface Area	1.68 acres
Net Impervious Area	NA (Tier 3)
Watershed Management Zone(s)	1
Design Storm Frequency and Depth	25-year rainfall event
Urban Sustainability Area	No Applicable

II. Setting

II.A. Project Location and Description

The project is located at 4110 Via Real (APN 004-017-022) in the City of Carpinteria. It is situated north of Via Real approximately 1,500 feet east of Craven Lane. See Figure A.

II.B. Existing Site Features and Conditions

The existing condition of the site is a large church building with parking. It slopes gently to the southwest and southeast at a 0.5 percent slope. The existing site has Hydrologic Soils Group Type C soils per Natural Resources Conservation Service (NRCS) Web Soil Survey and Geotechnical Report, Pacific Material Laboratory, Inc., dated October 23, 2014.



Figure A - Location Map

The proposed project is a 2-story hotel building surrounded by paved parking and landscaping. The lot is situated north of Via Real. The groundwater depth below natural ground at the site is 8 to 10 feet. Agricultural fields to the north and the project site drain to an existing headwall and a 36" diameter storm drain that cross under Via Real and US 101 to the south. See the Grading and Drainage Plan (Sheets C3 and C4).

The project site is located within flood Zone A as shown on the Flood Insurance Rate Map for the area[1].

The 100-year flood elevation (BFE) for the site was determined based on the Casas De Las Flores project (4096 Via Real), that was recently constructed, to be elevation 13.04 feet (NAVD1988). In accordance with standard practice, the finish floor of the structures should be elevated to two (2) feet above the BFE. Therefore, the building finish floor should be elevated to a minimum elevation of 15.04 feet (NAVD1988). We have set the finish floor at 17.0 feet based on the flood elevation and earthwork to provide a balanced site.

II.C. Opportunities and Constraints for Stormwater Control

The existing site has a couple of constraints that were considered within the project design for stormwater control. The existing site receives runoff from the northerly adjacent property via an existing vegetated swale along the northerly and western sides of the property. The entire site is sloped from the north to the south, so all the proposed runoff from the site will collect along the southern edge of the property (north of Via Real) prior to outletting through an existing culvert under Via Real and US101.

[1] FIRM Panel 06083C1420G, December 4, 2012.

With the site sloping from north to south, the drainage runoff collects along the southern edge of the property and makes an ideal location to place a stormwater treatment swale similar to the recently constructed Casas De Las Flores project to the west. The collection of the existing northerly run-on drainage will be handled by an inlet structure at the northwest and transport the runoff along the western property line to the existing drainage pipe under Via Real and US 101.

III. Low Impact Development Design Strategies

III.A. Optimization of Site Layout

III.A.1. Limitation of development envelope

The development is being limited by the necessity of providing areas to treat and retain the stormwater runoff by means of a treatment swale along the southerly boundary, high groundwater, and preservation of historic drainage patterns.

III.A.2. Preservation of natural drainage features

The drainage runoff from the northerly adjacent properties is currently draining along the western side of the property in a drainage swale. The drainage swale along the western side of the property is being collected at the northwest corner of the site and transported via pipe to the existing southern drop inlet at Via Real to preserve the historic runoff from the adjacent properties through the proposed project site and to prevent comingling of off-site, untreated stormwater.

III.A.3. Setbacks from creeks, wetlands, and riparian habitats

There are no setbacks from creeks, wetlands, or riparian habitats that affect the layout of this project.

III.A.4. Minimization of imperviousness

The project utilizes porous pavement within the northwesterly parking lot to reduce the amount of impervious material.

III.A.5. Use of drainage as a design element

Drainage runoff from the site is transported via surface runoff and storm drain piping to a stormwater treatment swale along the southern property line. The vegetated stormwater treatment will act as an aesthetic feature at the entry to the property.

III.B. Use of Permeable Pavements

The project utilizes porous asphalt concrete pavement at various location on the site to allow infiltration of the parking areas, treat stormwater, and minimize runoff.

III.C. Dispersal of Runoff to Pervious Areas

Much of the roof water is discharged to bioretention devices. The remaining drainage runoff from the site is collected through a storm drain system that runs along the eastern and western sides of the project site and daylights into a proposed stormwater

treatment swale. The vegetated treatment swale will allow minor infiltration and stormwater treatment during a rainfall event.

III.D. Storm water Control Measures

- Bioretention of roof water
- Porous Asphalt
- Direct infiltration through underground chambers
- Treatment swale

IV. Documentation of Drainage Design

IV.A. Descriptions of each Drainage Management Area

IV.A.1. Table of Drainage Management Areas

DMA Name	Surface Type	Area sf
A-1	Pervious Pavement	9,182
B-1	Pervious Pavement	811
C-1	Pervious Pavement	938
D-1	Roof	6,887
	Bioretention	1,711
E-1	Pervious Pavement	3,129
	Walkway	1,159
	Landscaping	418
F-1	Pervious Pavement	641
G-1	Walkway	199
	Pervious Pavement	479
H-1	Walkway	283
	Pervious Pavement	1,777
	Landscaping	438
I-1	Walkway	144
	Landscaping	470
	Pervious Pavement	620
J-1	Walkway	218
	Landscaping	336
	Pervious Pavement	635
K-1	Roof	8,759
	Bioretention	1,713
L-1	Roof	10,177
	Bioretention	1,117
	Walkway	1,843
M-1	Walkways/paving	3,081

DMA Name	Surface Type	Area sf
	Landscaping	13,696
N-1	Landscaping	810
	Pervious Pavement	2,515
O-1	Landscaping	4,390
	Paving	15,158
P-1	Paving	10,918
	Landscaping	1,121
Q-1	Paving	8,304
	Landscaping	202
Z-1	Paving	1,085
	Landscaping	104
Total		113,846

Table 2. Drainage Management Areas

IV.A.2. Drainage Management Area Descriptions

DMA A-1, totaling 9,182 square feet accepts the stormwater that falls on it to SCM A-1 which consists of porous paving.

DMA B-1, totaling 811 square feet accepts the stormwater that falls on it to SCM B-1 which consists of porous paving.

DMA C-1, totaling 938 square feet accepts the stormwater that falls on it to SCM C-1 which consists of porous paving.

DMA D-1, totaling 8,598 square feet accepts the stormwater that falls on a portion of the roof and the below grade bioretention planter (SCM D-1) which consists of planter/filter mix underlain by gravel. An overflow pipe will discharge to the parking lot. A deepened building footing or other measure should be evaluated by the structural engineer.

DMA E-1, totaling 4,735 square feet accepts the stormwater that falls on it and from 418 square feet of walkway. Stormwater discharges to SCM E-1 which consists of porous paving.

DMA F-1, totaling 641 square feet accepts the stormwater that falls on it to SCM F-1 which consists of porous paving.

DMA G-1, totaling 678 square feet accepts the stormwater that falls on it and from 199 square feet of walkway. Stormwater discharges to SCM G-1 which consists of porous paving.

DMA H-1, totaling 1,843 square feet accepts the stormwater that falls on it and from 283 square feet of walkway. Stormwater discharges to SCM H-1 which consists of porous paving.

DMA I-1, totaling 1,234 square feet accepts the stormwater that falls on it, from 144 square feet of walkway, and 470 square feet of landscaping. Stormwater discharges to SCM I-1 which consists of porous paving.

DMA J-1, totaling 1,189 square feet accepts the stormwater that falls on it, from 218 square feet of walkway, and 336 square feet of landscaping. Stormwater discharges to SCM J-1 which consists of porous paving.

DMA K-1, totaling 9,476 square feet accepts the stormwater that falls on a portion of the roof and the below grade bioretention planter (SCM K-1) which consists of planter/filter mix underlain by gravel. An overflow pipe will discharge to the parking lot. A deepened building footing or other measure should be evaluated by the structural engineer.

DMA L-1, totaling 13,137 square feet accepts the stormwater that falls on a portion of the roof and the below grade bioretention planter (SCM L-1) which consists of planter/filter mix underlain by gravel. An overflow pipe will discharge to the adjacent treatment swale. A deepened building footing or other measure should be evaluated by the structural engineer.

DMA M-1 totaling 16,777 square feet, drains the southerly portion of the site which is mainly landscaping with a few pathways. It also receives overflow drainage from the remainder of the site and passes it through a vegetated filter swale prior to discharging from the project site.

DMA N-1, totaling 3,325 square feet accepts the stormwater that falls on it to SCM N-1 which consists of porous paving.

DMA O-1 totaling 19,548 square feet, drains predominantly paved driving areas with some landscaping. DMA O-1 drains to SCM O-1 which consists of underground infiltration chambers which will be located below DMA A-1.

DMA P-1 totaling 12,039 square feet, drains predominantly paved driving areas with some landscaping. DMA P-1 drains to SCM P-1 which consists of underground infiltration chambers which will be located below the driveway aisle on the easterly side of the project.

DMA Q-1 totaling 8,506 square feet, drains predominantly paved driving areas with some landscaping. DMA P-1 drains to SCM Q-1 which consists of underground infiltration chambers which will be located below the driveway aisle on the westerly side of the project.

DMA Z-1 totaling 1,189 square feet, drains a small area at the southeast corner of the project that cannot be drained and treated. DMA Z-1 drains to Via Real without treatment.

IV.B. Tabulation and Sizing Calculations

IV.B.1. Information Summary for LID Facility Design

Table 3. Summary of LID Facility Design

Total Project Area (Square Feet)	113,846 square feet
Design Storm Depth	2"
Applicable Requirements	Tier 3

IV.B.2. Self-Treating Areas

Most areas that are self-treating do so by retaining and infiltrating stormwater into an appropriate SCM and are described in Table 5. Area M-1 is self-treating via a treatment swale. Design calculations verifying the design parameters is attached.

Table 4. Self-Treating Areas

DMA Name	Area (square feet)
M-1	16,757

IV.B.3. Self-Retaining Areas

This project provides the following self-retaining treatment approaches:

- Bioretention
- Porous asphalt pavement
- Direct infiltration through chambered infiltration galleries.

All self-retaining BMPs are sized to retain the 95th percentile runoff volume.

Table 5. Self-Retaining Areas

DMA Name	Area (square feet)
A-1	9,182
B-1	811
C-1	938
D-1	1,716 (bioretention)
E-1	3,158
F-1	641
G-1	479
H-1	1,122
I-1	620
J-1	635
K-1	1,213 (bioretention)
L-1	1,117 (bioretention)
N-1	2,515
O-1	NA (chambers)
P-1	NA (chambers)
Q-1	NA (chambers)

IV.B.4. Areas Draining to Self-Retaining Areas

Table 6. Areas Draining to Self-Retaining Areas

DMA Name	Area (square feet)	Post-project surface type[1]	Runoff factor	Product (Area x runoff factor)[A]	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet) [B]	Ratio [A]/[B]
A-1	9182	PAC	0	0	A-1	9182	0
B-1	811	PAC	0	0	A-1	811	0
C-1	938	PAC	0	0	C-1	938	0
E-1	3158	PAC	0	0	E-1	3158	0.13
	418	Walkway	1	418		0	
F-1	641	PAC	0	0	F-1	641	0
G-1	479	PAC	0	0	G-1	479	0.4
	199	Walkway	1	199		0	
I-1	144	Walkway	1	172	I-1	620	0.4
	470	L	0.1	44			
	620	PAC	0	0			
J-1	218	Walkway	1	214	J-1	635	0.4
	336	L	0.1	36			
	635	PAC	0	0			
N-1	810	L	0.1	81	N-1	2515	0.03
	2515	PAC	0	0			
O-1[2]	NA						
P-1[2]	NA						

Q-1	NA						

Notes:

1. PAC = Porous Asphaltic Concrete, BR – Bioretention, L = Landscaping, NA = Not applicable
2. See description of stormwater chamber requirements below.

Storm water galleries will consist of subsurface excavations into which have been constructed man-made chambers specifically designed for infiltration of stormwater. The system will provide pre-treatment for stormwater which may consist of the initial row of treatment chambers being constructed lower than the rest to trap sediment and other pollutants. The treatment chamber shall include inspection and maintenance ports to allow for cleaning and removal of pollutants. The stormwater chamber SCMs shall be designed to accept and infiltrate the 95th percentile storm volume. The specific brand, model, and style of chamber will be determined at time of final design.

IV.B.5. Areas Draining to Bioretention Facilities (Tier 2 Projects)

Table 7. Areas Draining to Bioretention Facilities

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area x runoff factor	SCM Name		
					D-1		
D-1	6882	Roof	1.0	6882			
D-1	1716	L	0.1	172	SCM Sizing factor	Minimum SCM Size	Proposed SCM Size
Total>				7054	0.04	282	1716
DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area x runoff factor	SCM Name		
					K-1		
K-1	8263	Roof	1.0	8263			
K-1	1213	L	0.1	121	SCM Sizing factor	Minimum SCM Size	Proposed SCM Size

Total>				8384	0.04	335	1213
DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area x runoff factor	SCM Name		
					L-1		
I-1	10177	Roof	1.0	10177			
L-1	1117	L	0.1	112	SCM Sizing factor	Minimum SCM Size	Proposed SCM Size
Total>				10289	0.04	412	1117

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

V.B. Source Control Table

Table 8. Project Source Controls

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
On-site storm drain inlets (unauthorized spills and leaks)	Mark all inlets: "No Dumping! Flows to Ocean."	Inspect inlets annually at in November. Maintain and replace inlet markings as needed. Remove silt and trash from inlets. Check inspection ports on infiltration devices. Service as necessary.
Elevator shaft sump pump	Connect elevator drain to sanitary sewer system	Inspect inlets annually at in November. Remove silt and trash from inlets.
Landscape/ Outdoor Pesticide Use/Building and Grounds Maintenance	Final landscape plans will indicate the following: Chemicals, fertilizers, pesticides and herbicides should be stored in a safe manner away from contact with stormwater and in a manner that contains spills. Appropriate plants should be maintained in the bioretention basins. Mulch should be removed and replaced on alternate years in the bioretention basins. Plants in the treatment swale area should be tolerant of saturated soil conditions.	Maintain landscaping using minimum or no pesticides.

Trash Enclosure	Architectural plans will shown trash enclosure to be covered to prevent contact with stormwater Signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	Operator will be provided with instructions to: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site.

V.C. Features, Materials, and Methods of Construction of Source Control BMPs

The Source Control BMPs on this project site can be constructed with grading operations and excavation. The porous asphalt pavement will be graded with a special structural section that allows infiltration through the material and into the ground. The stormwater treatment basin will be excavated and the outlet control structure will be constructed at the entrance to the existing drainage outlet.

VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

The Property Owner shall execute a Storm Water Maintenance Plan (SWMP) with the City of Carpinteria to maintain the proposed Best Management Practices designed for the project site. The Owner shall accept all responsibility for the operation and maintenance of the facilities until such time the property and/or responsibility is formally transferred.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

Bioretention SCMs will be inspected at least semi-annually to verify that plantings are growing and healthy. They shall be maintained frequently, removing litter. Inspection ports shall be inspected 24 hours after significant rainfall to verify that infiltration is occurring. Remediation will be scheduled if standing water is noted in the inspection port 72 hours after significant rainfall.

Porous Paving SCMs shall be swept and vacuumed at least quarterly. Normal pavement maintenance/replacement shall ensure that the pavement remains porous. Inspection ports shall be inspected 24 hours after significant rainfall to verify that infiltration is occurring. Remediation will be scheduled if standing water is noted in the inspection port 72 hours after significant rainfall.

Infiltration gallery inspection ports shall be inspected 24 hours after significant rainfall to verify that infiltration is occurring. Remediation will be scheduled if standing water is noted in the inspection port 72 hours after significant rainfall.

Stormwater Treatment Swale (SCM M-1) – The stormwater treatment swale shall be maintained by on-site grounds crews and landscapers. The basin shall be reviewed on a continuous schedule to prevent overgrowth of the landscaping and allow the drainage runoff to be treated and flow through the basin. Excessive sediment shall be removed as required to allow flow through the swale.

VII. Construction Checklist

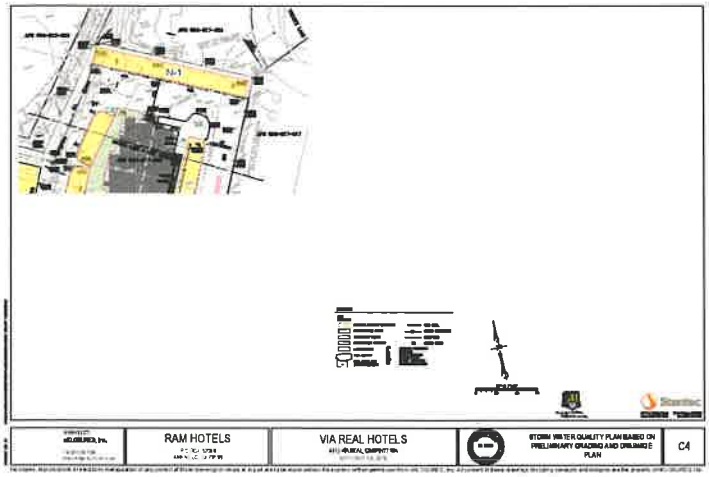
Table 9. Construction Checklist

Stormwater Control Plan Page #	BMP Description	See Plan Sheet #s
4-8, 10, 12, 13	Bioretention	C3
3-7, 9, 10, 13, 14	Porous Asphalt Pavement	C3, C4
4, 6-8, 10	Infiltration Gallery	C3
	Stormwater Treatment Swale	C3

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the Santa Barbara County Project Clean Water's Stormwater Technical Guide.





Central Coast Region Stormwater Control Measure Sizing Calculator

Version: 2/26/2014

1. Project Information

Project name:	Via Real Hotel
Project location:	4110 Via Real, Carpinteria, CA
Tier 2/Tier 3:	Tier 3 - Retention
Design rainfall depth (in):	2.0
Total project area (ft2):	113846
Total new impervious area (ft2):	40380
Total replaced impervious in a USA (ft2):	
Total replaced impervious not in a USA (ft2):	32470
Total pervious/landscape area (ft2):	40796

2. DMA Characterization

Name	DMA Type	Area (ft2)	Surface Type	New, Replaced?	Connection
A-1	Drains to SCM	9182	Porous asphalt	New	A-1
B-1	Drains to SCM	811	Porous asphalt	New	B-1
C-1	Drains to SCM	938	Porous asphalt	New	C-1
D-1	Drains to SCM	6882	Roof	New	D-1
D-1	Drains to SCM	1716	Landscape	New	D-1
E-1	Drains to SCM	3158	Porous asphalt	Replaced	E-1
E-1	Drains to SCM	418	Concrete or asphalt	New	E-1
F-1	Drains to SCM	641	Porous asphalt	New	F-1
G-1	Drains to SCM	199	Concrete or asphalt	Replaced	G-1
G-1	Drains to SCM	479	Porous asphalt	Replaced	G-1
H-1	Drains to SCM	283	Roof	New	H-1
H-1	Drains to SCM	1122	Porous asphalt	Replaced	H-1
I-1	Drains to SCM	144	Concrete or asphalt	New	I-1
I-1	Drains to SCM	470	Landscape	New	I-1
I-1	Drains to SCM	620	Porous asphalt	New	I-1
J-1	Drains to SCM	218	Concrete or asphalt	New	J-1
J-1	Drains to SCM	336	Landscape	New	J-1
J-1	Drains to SCM	635	Pervious concrete	New	J-1
K-1	Drains to SCM	8263	Roof	Replaced	K-1
K-1	Drains to SCM	1213	Landscape	Replaced	K-1
L-1	Drains to SCM	10177	Roof	Replaced	L-1
L-1	Drains to SCM	1117	Landscape	Replaced	L-1
N-1	Drains to SCM	810	Landscape	New	N-1
N-1	Drains to SCM	2515	Porous asphalt	Replaced	N-1
M-1	Self-Treating	27388			
A-1	Drains to SCM	2	Roof	New	A-1
B-1	Drains to SCM	2	Roof	New	B-1
C-1	Drains to SCM	2	Roof	New	C-1
F-1	Drains to SCM	2	roof	New	F-1
E-1	Drains to SCM	1159	Landscape	New	E-1
H-1	Drains to SCM	438	Landscape	New	H-1
L-1	Drains to SCM	1843	Concrete or asphalt	New	L-1

DMA Summary Area

Total project impervious area (ft2):	28435
New impervious area (ft2):	9796
Replaced impervious within a USA (ft2):	0
Replaced impervious not in a USA (ft2):	18639

Total pervious/landscape area (ft2):	27260

3. SCM Characterization

Name	SCM Type	Safety Factor	SCM Soil Type	Infiltr. Rate (in/hr)	Area (ft2)
D-1	Bioretention	1	HSG C/D	0.25	1716
E-1	Direct infiltration	2	HSG C/D	0.25	3158
G-1	Direct infiltration	2	HSG C/D	0.25	479
H-1	Direct infiltration	2	HSG C/D	0.25	1122
I-1	Direct infiltration	2	HSG C/D	0.25	620
J-1	Direct infiltration	2	HSG C/D	0.25	635
K-1	Bioretention	1	HSG C/D	0.25	1213
L-1	Bioretention	1	HSG C/D	0.25	1117
N-1	Direct infiltration	2	HSG C/D	0.25	2515
A-1	Direct infiltration	2	HSG C/D	0.25	9182
B-1	Direct infiltration	2	HSG C/D	0.25	811
C-1	Direct infiltration	2	HSG C/D	0.25	938
F-1	Direct infiltration	2	HSG C/D	0.25	641

4. Run SBUH Model

5. SCM Minimum Sizing Requirements

SCM Name	Min. Required Storage Vol. (ft3)	Depth Below Underdrain (ft)	Drain Time (hours)
D-1	628	0.91	16.6
E-1	202	0.16	0.0
G-1	34	0.17	0.0
H-1	84	0.19	0.0
I-1	45	0.18	0.0
J-1	53	0.21	0.0
K-1	360	0.74	12.6
L-1	728	1.63	31.3
N-1	131	0.13	0.0
A-1	475	0.13	0.0
B-1	42	0.13	0.0
C-1	49	0.13	0.0
F-1	33	0.13	0.0

6. Self-Retaining Area Sizing Checks

Self-Retaining DMA Name	Self-Retaining DMA Area (ft2)	Tributary DMA Name	Tributary DMA Area (ft2)	Tributary / SRA Area Ratio

HYDROLOGY

DMA Name	Surface Type	Area sf
A-1	Pervious Pavement	9,182
B-1	Pervious Pavement	811
C-1	Pervious Pavement	938
D-1	Roof	6,882
	Bioretention	1,716
E-1	Pervious Pavement	3,158
	Landscaping	1,159
	Walkway	418
F-1	Pervious Pavement	641
G-1	Walkway	199
	Pervious Pavement	479
H-1	Walkway	283
	Pervious Pavement	1,122
	Landscaping	438
I-1	Walkway	144
	Landscaping	470
	Pervious Pavement	620
J-1	Walkway	218
	Landscaping	336
	Pervious Pavement	635
K-1	Roof	8,263
	Bioretention	1,213
L-1	Roof	10,177
	Bioretention	1,117
	Walkway	1,843
M-1	Walkways/paving	3,081
	Landscaping	13,696
N-1	Landscaping	810
	Pervious Pavement	2,515
O-1	Landscaping	4,390
	Paving	15,158
P-1	Paving	10,918
	Landscaping	1,121
Q-1	Paving	8,304
	Landscaping	202
Z-1	Paving	1,085
	Landscaping	104
Total		113,846

WATER QUALITY REQUIREMENTS

Retain on Site the 95% volume 2.0 inch

Treat the 85% runoff 1.35 inch

Post-Project Peak Runoff shall be less than Pre-Project Peak runoff for 2, 5, 10, 25, 50, and 100 year events.

Site Area: 113,846 sf

Approach:

Drainage Management Areas have been delineated for the various cover types within the SCMs

Minimim SCM sizes have been assigned per the County work template.

A more rigorous analysis is then provided using HydroCAD for both retaining the 95 percentile volume and treating the 85 percentile runoff.

Due to high groundwater at Water
using a bioswale. The treatment design will be in accordance with the City of Santa Barbara criteria assuming a flow rate of 2 x the 85 percentile flow rate as indicated in the regulations.

Determine 95th Percentile Volume

From Hydrocad = 10,043 cf

Retention Capacity Provided in SCMs

SCM	Type	Calc'd Depth below Outlet	Min. Calc'd Volume	Design Volume Provided	Area Provided	Depth Provided
		ft	cf	cf	sf	ft
A-1	Porous AC	0.13	475	3,673	9,182	1
B-1	Porous AC	0.13	42	334	811	1
C-1	Porous AC	0.13	58	375	938	1
D-1	Bioretention	1.28	773	2,059	1,716	3
E-1	Porous AC	0.19	270	1,763	3,158	1
F-1	Porous AC	0.13	33	256	641	1
G-1	Porous AC	0.18	34	192	479	1
H-1	Porous AC	0.19	109	449	1,122	1
I-1	Porous AC	0.19	48	248	620	1
J-1	Porous AC	0.71	32	254	635	1
K-1	Bioretention	0.8	361	1,456	1,213	3
L-1	Bioretention	3.78	915	5,787	1,117	4
M-1	Bioswale	NA	NA	NA	NA	
N-1	Porous AC	0.13	131	1,006	2,515	1
O-1	Dir.Infiltration	NA	NA	1,354	NA	NA
P-1	Dir.Infiltration	NA	NA	652	NA	NA
Q-1	Dir.Infiltration	NA	NA		NA	NA
Total (Not accounting for infiltration)			3,753	19,748		

Comparison of Inflow Volumes

SCM	95% Inflow
	cf
A-1	686
B-1	61
C-1	83
D-1	1,147
E-1	411
F-1	50
G-1	65
H-1	166
I-1	101
J-1	130
K-1	1,257
L-1	1,892
M-1	1,307
N-1	378
O-1	378
P-1	245
Q-1	1,237
Z-1	164
Total	10,043
Outflow	1,466
Retained on site	8,577

Comparison of Peak Flow Rates

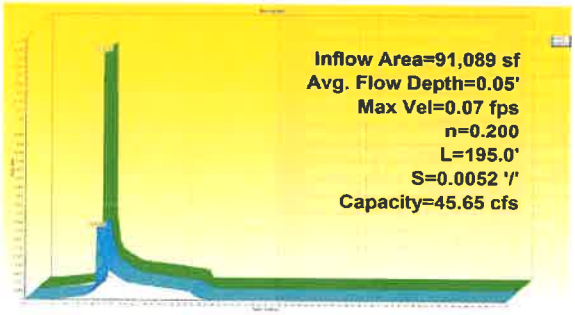
Return Period	$Q_{pre-project}$	$Q_{post-project}$	Difference
	cfs	cfs	cfs
2	5.33	0.37	-4.96
5	8.39	0.90	-7.49
10	10.43	1.97	-8.46
25	12.93	3.81	-9.12
50	14.75	4.91	-9.84
100	16.51	6.01	-10.50

Treatment

The entire site except for Areas M and Z provide treatment through infiltration.

Area Z cannot be feasibly treated. It comprises 1,171 square feet of the project total of 113,846 square feet (1 percent of site)

Area M cannot be treated through infiltration due to high groundwater. Therefore it is being treated using a biofiltration swale



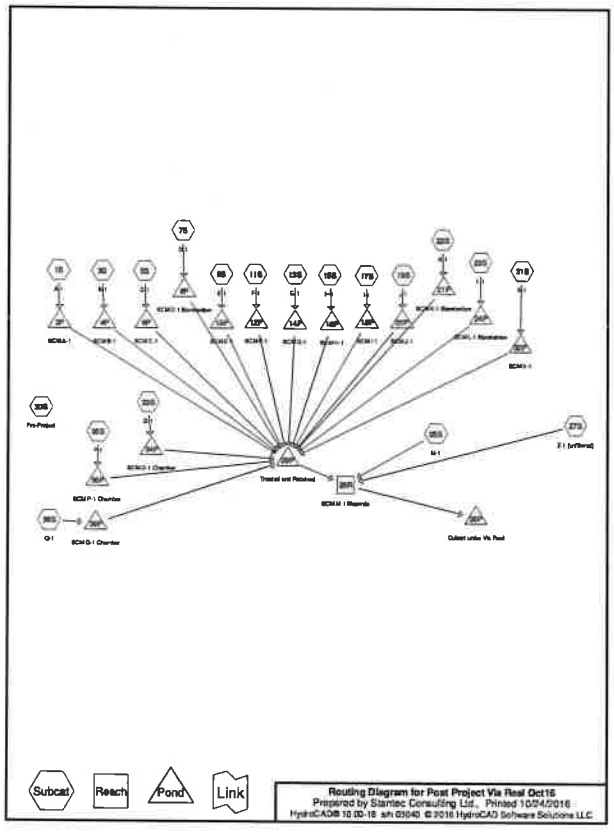
Design Criteria

W_{bottom} = 10 ft
SI_{side} = 4:1
SI_{max} = vertical (wall)
So = 0.005 ft/ft
n = 0.2

Water Quality Performance Criteria
(reference: City of Santa Barbara Stormwater Guidance Manual)

$Length_{max}$ = 100 ft
V_{max} = 1 fps
$Depth_{max}$ = 0.333 ft
$T_{residence}$ = 10 minutes or greater

Q_{design} = 0.14 cfs
L = 196 ft OK
V = 0.07 fps OK
Depth = 0.05 ft OK
$T_{residence}$ = 46.7 minutes OK



Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
25,330	85	1/2 acre lots, 25% imp, HSG D (1S, 3S, 5S, 9S, 11S, 13S, 15S, 17S, 19S, 31S, 33S)
82,363	89	<50% Grass cover, Poor, HSG D (30S, 35S, 38S)
3,949	80	>75% Grass cover, Good, HSG D (7S, 22S, 23S, 31S)
13,800	84	Pasture/grassland/range, Fair, HSG D (25S, 27S)
36,101	98	Paved parking, HSG D (9S, 13S, 15S, 17S, 19S, 27S, 30S)
15,699	98	Paved roads w/curbs & sewers, HSG D (25S, 35S, 36S)
28,056	98	Roofs, HSG D (7S, 22S, 23S)
860	86	Woods/grass comb., Poor, HSG D (17S, 19S)
206,178	91	TOTAL AREA

Summary for Subcatchment 1S: A-1

Runoff = 0.04 cfs @ 9.97 hrs, Volume= 355 cf, Depth= 0.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 3S: B-1

Runoff = 0.00 cfs @ 9.97 hrs, Volume= 31 cf, Depth= 0.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 5S: C-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 43 cf, Depth= 0.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 7S: D-1

Runoff = 0.11 cfs @ 9.96 hrs, Volume= 715 cf, Depth= 0.98"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 9S: E-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 231 cf, Depth= 0.61"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 11S: F-1

Runoff = 0.00 cfs @ 9.97 hrs, Volume= 26 cf, Depth= 0.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 13S: G-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 37 cf, Depth= 0.66"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 15S: H-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 93 cf, Depth= 0.61"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 17S: I-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 53 cf, Depth= 0.52"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 72 cf, Depth= 0.60"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.12 cfs @ 9.96 hrs, Volume= 789 cf, Depth= 1.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 0.19 cfs @ 9.96 hrs, Volume= 1,200 cf, Depth= 1.09"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 0.14 cfs @ 9.89 hrs, Volume= 662 cf, Depth= 0.47"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.02 cfs @ 9.87 hrs, Volume= 104 cf, Depth= 1.06"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 1.53 cfs @ 9.88 hrs, Volume= 6,615 cf, Depth= 0.70"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.01 cfs @ 9.98 hrs, Volume= 108 cf, Depth= 0.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.03 cfs @ 9.89 hrs, Volume= 170 cf, Depth= 0.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.11 cfs @ 9.87 hrs, Volume= 463 cf, Depth= 1.01"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 0.19 cfs @ 9.87 hrs, Volume= 787 cf, Depth= 1.12"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 85% Rainfall=1.35"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.10" for 85% event
Inflow = 0.16 cfs @ 9.89 hrs, Volume= 765 cf
Outflow = 0.05 cfs @ 10.69 hrs, Volume= 765 cf, Atten= 67%, Lag= 47.8 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.08 fps, Min. Travel Time= 41.1 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 61.8 min

Peak Storage= 131 cf @ 10.00 hrs
Average Depth at Peak Storage= 0.06'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 '/' Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 0.46" for 85% event
Inflow = 0.04 cfs @ 9.97 hrs, Volume= 355 cf
Outflow = 0.03 cfs @ 10.18 hrs, Volume= 355 cf, Atten= 37%, Lag= 12.5 min
Discarded = 0.03 cfs @ 10.18 hrs, Volume= 355 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.01' @ 10.18 hrs Surf.Area= 9,182 sf Storage= 26 cf

Plug-Flow detention time= 17.3 min calculated for 355 cf (100% of inflow)
Center-of-Mass det. time= 17.3 min (828.1 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (83% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 10.18 hrs HW=13.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 611 sf, 25.00% Impervious, Inflow Depth = 0.46" for 85% event
Inflow = 0.00 cfs @ 9.97 hrs, Volume= 31 cf
Outflow = 0.00 cfs @ 10.06 hrs, Volume= 31 cf, Atten= 17%, Lag= 5.1 min
Discarded = 0.00 cfs @ 10.06 hrs, Volume= 31 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.00' @ 10.06 hrs Surf.Area= 611 sf Storage= 1 cf

Plug-Flow detention time= 6.3 min calculated for 31 cf (100% of inflow)
Center-of-Mass det. time= 6.3 min (817.1 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	611	0	0
14.55	611	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 10.06 hrs HW=14.00' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 0.46" for 85% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 43 cf
Outflow = 0.00 cfs @ 10.06 hrs, Volume= 43 cf, Atten= 17%, Lag= 5.1 min
Discarded = 0.00 cfs @ 10.06 hrs, Volume= 43 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.00' @ 10.06 hrs Surf.Area= 1,117 sf Storage= 2 cf

Plug-Flow detention time= 6.3 min calculated for 43 cf (100% of inflow)
Center-of-Mass det. time= 6.3 min (817.1 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.06 hrs HW=14.00' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 6,718 sf, 83.85% Impervious, Inflow Depth = 0.98" for 85% event
Inflow = 0.11 cfs @ 9.96 hrs, Volume= 715 cf
Outflow = 0.01 cfs @ 8.82 hrs, Volume= 715 cf, Atten= 93%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.82 hrs, Volume= 715 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.21' @ 14.05 hrs Surf.Area= 1,408 sf Storage= 289 cf

Plug-Flow detention time= 370.7 min calculated for 715 cf (100% of inflow)
Center-of-Mass det. time= 370.7 min (1,115.7 - 745.0)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.82 hrs HW=12.74' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.70' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 0.61" for 85% event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 231 cf
Outflow = 0.00 cfs @ 9.62 hrs, Volume= 231 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.62 hrs, Volume= 231 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.17' @ 11.86 hrs Surf.Area= 811 sf Storage= 55 cf

Plug-Flow detention time= 98.4 min calculated for 231 cf (100% of inflow)
Center-of-Mass det. time= 98.4 min (878.8 - 780.4)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.62 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 0.46" for 85% event
Inflow = 0.00 cfs @ 9.97 hrs, Volume= 26 cf
Outflow = 0.00 cfs @ 10.19 hrs, Volume= 26 cf, Atten= 37%, Lag= 12.9 min
Discarded = 0.00 cfs @ 10.19 hrs, Volume= 26 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.26' @ 10.19 hrs Surf.Area= 673 sf Storage= 2 cf

Plug-Flow detention time= 17.9 min calculated for 26 cf (100% of inflow)
Center-of-Mass det. time= 17.9 min (828.6 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 10.19 hrs HW=13.26' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 0.68" for 85% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 37 cf
Outflow = 0.00 cfs @ 10.00 hrs, Volume= 37 cf, Atten= 46%, Lag= 1.9 min
Discarded = 0.00 cfs @ 10.00 hrs, Volume= 37 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.12' @ 10.24 hrs Surf.Area= 479 sf Storage= 4 cf

Plug-Flow detention time= 18.3 min calculated for 37 cf (100% of inflow)
Center-of-Mass det. time= 18.3 min (792.4 - 774.1)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 10.00 hrs HW=13.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 0.61" for 85% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 93 cf
Outflow = 0.01 cfs @ 10.17 hrs, Volume= 93 cf, Atten= 38%, Lag= 12.1 min
Discarded = 0.01 cfs @ 10.17 hrs, Volume= 93 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.12' @ 10.17 hrs Surf.Area= 1,424 sf Storage= 9 cf

Plug-Flow detention time= 18.4 min calculated for 93 cf (100% of inflow)
Center-of-Mass det. time= 18.4 min (799.4 - 781.0)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.17 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 0.52" for 85% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 53 cf
Outflow = 0.00 cfs @ 10.02 hrs, Volume= 53 cf, Atten= 48%, Lag= 2.8 min
Discarded = 0.00 cfs @ 10.02 hrs, Volume= 53 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.42' @ 10.28 hrs Surf.Area= 620 sf Storage= 5 cf

Plug-Flow detention time= 18.9 min calculated for 53 cf (100% of inflow)
Center-of-Mass det. time= 18.9 min (826.6 - 807.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 10.02 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 0.60" for 85% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 72 cf
Outflow = 0.00 cfs @ 9.93 hrs, Volume= 72 cf, Atten= 62%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.93 hrs, Volume= 72 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.04' @ 10.44 hrs Surf.Area= 635 sf Storage= 9 cf

Plug-Flow detention time= 22.5 min calculated for 72 cf (100% of inflow)
Center-of-Mass det. time= 22.5 min (812.7 - 790.2)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.93 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 1.02" for 85% event
Inflow = 0.12 cfs @ 9.96 hrs, Volume= 789 cf
Outflow = 0.01 cfs @ 8.12 hrs, Volume= 789 cf, Atten= 95%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.12 hrs, Volume= 789 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.46' @ 18.30 hrs Surf.Area= 1,126 sf Storage= 386 cf

Plug-Flow detention time= 603.5 min calculated for 789 cf (100% of inflow)
Center-of-Mass det. time= 603.5 min (1,346.6 - 743.1)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.12 hrs HW=11.64' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=11.60' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 1.09" for 85% event
Inflow = 0.19 cfs @ 9.96 hrs, Volume= 1,200 cf
Outflow = 0.01 cfs @ 23.99 hrs, Volume= 1,104 cf, Atten= 97%, Lag= 841.9 min
Discarded = 0.01 cfs @ 23.99 hrs, Volume= 1,104 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 11.56' @ 23.99 hrs Surf.Area= 605 sf Storage= 862 cf

Plug-Flow detention time= 1,528.7 min calculated for 1,104 cf (92% of inflow)
Center-of-Mass det. time= 1,477.8 min (2,217.6 - 739.8)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 23.99 hrs HW=11.56' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=8.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.10" for 85% event
Inflow = 0.05 cfs @ 10.69 hrs, Volume= 765 cf
Primary = 0.05 cfs @ 10.69 hrs, Volume= 765 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 0.00" for 85% event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 0.39" for 85% event
Inflow = 0.01 cfs @ 9.98 hrs, Volume= 108 cf
Outflow = 0.01 cfs @ 10.20 hrs, Volume= 108 cf, Atten= 37%, Lag= 13.5 min
Discarded = 0.01 cfs @ 10.20 hrs, Volume= 108 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.11' @ 10.20 hrs Surf.Area= 2,515 sf Storage= 8 cf

Plug-Flow detention time= 17.8 min calculated for 108 cf (100% of inflow)
Center-of-Mass det. time= 17.8 min (845.0 - 827.1)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.20 hrs HW=14.11' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 0.46" for 85% event
Inflow = 0.03 cfs @ 9.89 hrs, Volume= 170 cf
Outflow = 0.00 cfs @ 10.90 hrs, Volume= 170 cf, Atten= 87%, Lag= 60.5 min
Discarded = 0.00 cfs @ 10.90 hrs, Volume= 170 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 10.12' @ 10.90 hrs Surf.Area= 730 sf Storage= 34 cf

Plug-Flow detention time= 73.6 min calculated for 170 cf (100% of inflow)
Center-of-Mass det. time= 73.5 min (872.3 - 798.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.00 cfs @ 10.90 hrs HW=10.12' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=10.00' (Free Discharge)
└**1=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 1.01" for 85% event
Inflow = 0.11 cfs @ 9.87 hrs, Volume= 463 cf
Outflow = 0.00 cfs @ 23.16 hrs, Volume= 463 cf, Atten= 98%, Lag= 797.1 min
Discarded = 0.00 cfs @ 23.16 hrs, Volume= 463 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 8.82' @ 23.16 hrs Surf.Area= 275 sf Storage= 314 cf

Plug-Flow detention time= 1,365.5 min calculated for 463 cf (100% of inflow)
Center-of-Mass det. time= 1,365.3 min (2,102.7 - 737.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 23.16 hrs HW=8.82' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=7.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 1.12" for 85% event
Inflow = 0.19 cfs @ 9.87 hrs, Volume= 787 cf
Outflow = 0.00 cfs @ 20.81 hrs, Volume= 787 cf, Atten= 97%, Lag= 656.4 min
Discarded = 0.00 cfs @ 20.81 hrs, Volume= 787 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 9.56' @ 20.81 hrs Surf.Area= 730 sf Storage= 464 cf

Plug-Flow detention time= 933.5 min calculated for 787 cf (100% of inflow)
Center-of-Mass det. time= 933.6 min (1,660.8 - 727.2)

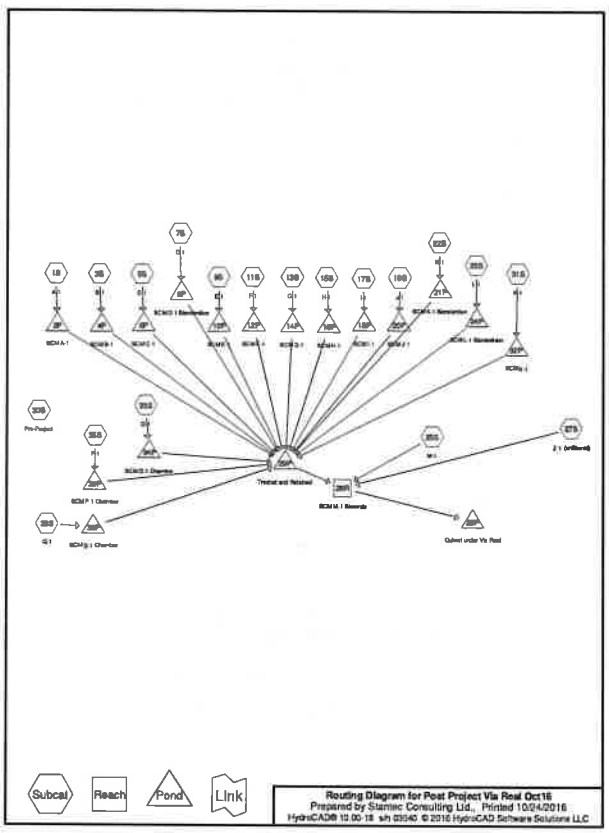
Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 20.81 hrs HW=8.56' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=8.50' (Free Discharge)
├2=**Orifice/Grate** (Controls 0.00 cfs)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
25,330	85	1/2 acre lots, 25% imp, HSG D (1S, 3S, 5S, 9S, 11S, 13S, 15S, 17S, 19S, 31S, 33S)
82,363	89	<50% Grass cover, Poor, HSG D (30S, 35S, 36S)
3,949	80	>75% Grass cover, Good, HSG D (7S, 22S, 23S, 31S)
13,800	84	Pasture/grassland/range, Fair, HSG D (25S, 27S)
36,101	98	Paved parking, HSG D (9S, 13S, 15S, 17S, 19S, 27S, 30S)
15,699	98	Paved roads w/curbs & sewers, HSG D (25S, 35S, 38S)
28,056	98	Roofs, HSG D (7S, 22S, 23S)
880	86	Woods/grass comb., Poor, HSG D (17S, 19S)
206,178	91	TOTAL AREA

Summary for Subcatchment 1S: A-1

Runoff = 0.09 cfs @ 9.97 hrs, Volume= 686 cf, Depth= 0.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 3S: B-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 61 cf, Depth= 0.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 5S: C-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 83 cf, Depth= 0.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 7S: D-1

Runoff = 0.17 cfs @ 9.96 hrs, Volume= 1,147 cf, Depth= 1.56"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 9S: E-1

Runoff = 0.06 cfs @ 9.97 hrs, Volume= 411 cf, Depth= 1.10"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 11S: F-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 50 cf, Depth= 0.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 13S: G-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 65 cf, Depth= 1.15"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 15S: H-1

Runoff = 0.02 cfs @ 9.97 hrs, Volume= 166 cf, Depth= 1.09"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 17S: I-1

Runoff = 0.01 cfs @ 9.97 hrs, Volume= 101 cf, Depth= 0.98"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.02 cfs @ 9.97 hrs, Volume= 130 cf, Depth= 1.09"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.19 cfs @ 9.96 hrs, Volume= 1,257 cf, Depth= 1.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 0.29 cfs @ 9.96 hrs, Volume= 1,891 cf, Depth= 1.72"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 0.29 cfs @ 9.89 hrs, Volume= 1,302 cf, Depth= 0.93"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.04 cfs @ 9.87 hrs, Volume= 164 cf, Depth= 1.68"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 2.81 cfs @ 9.88 hrs, Volume= 11,804 cf, Depth= 1.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 219 cf, Depth= 0.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.07 cfs @ 9.89 hrs, Volume= 328 cf, Depth= 0.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.18 cfs @ 9.87 hrs, Volume= 745 cf, Depth= 1.62"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 0.29 cfs @ 9.87 hrs, Volume= 1,237 cf, Depth= 1.76"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr 95% Rainfall=2.00"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.19" for 95% event
Inflow = 0.33 cfs @ 9.88 hrs, Volume= 1,496 cf
Outflow = 0.15 cfs @ 10.44 hrs, Volume= 1,496 cf, Atten= 54%, Lag= 33.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.12 fps, Min. Travel Time= 27.2 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 59.2 min

Peak Storage= 252 cf @ 9.99 hrs
Average Depth at Peak Storage= 0.11'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 '/' Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 0.90" for 95% event
Inflow = 0.09 cfs @ 9.97 hrs, Volume= 686 cf
Outflow = 0.05 cfs @ 10.04 hrs, Volume= 686 cf, Atten= 43%, Lag= 4.1 min
Discarded = 0.05 cfs @ 10.04 hrs, Volume= 686 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.02' @ 10.22 hrs Surf.Area= 9,182 sf Storage= 64 cf

Plug-Flow detention time= 17.5 min calculated for 686 cf (100% of inflow)
Center-of-Mass det. time= 17.5 min (816.2 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (83% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 10.04 hrs HW=13.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 811 sf, 25.00% Impervious, Inflow Depth = 0.90" for 95% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 61 cf
Outflow = 0.00 cfs @ 9.92 hrs, Volume= 61 cf, Atten= 43%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.92 hrs, Volume= 61 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.01' @ 10.22 hrs Surf.Area= 811 sf Storage= 4 cf

Plug-Flow detention time= 7.4 min calculated for 61 cf (100% of inflow)
Center-of-Mass det. time= 7.4 min (806.1 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
14.55	811	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.92 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 0.90" for 95% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 83 cf
Outflow = 0.01 cfs @ 9.92 hrs, Volume= 83 cf, Atten= 43%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.92 hrs, Volume= 83 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.01' @ 10.22 hrs Surf.Area= 1,117 sf Storage= 6 cf

Plug-Flow detention time= 7.4 min calculated for 83 cf (100% of inflow)
Center-of-Mass det. time= 7.4 min (806.1 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.92 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 8,718 sf, 83.85% Impervious, Inflow Depth = 1.58" for 95% event
Inflow = 0.17 cfs @ 9.96 hrs, Volume= 1,147 cf
Outflow = 0.01 cfs @ 7.31 hrs, Volume= 1,147 cf, Atten= 95%, Lag= 0.0 min
Discarded = 0.01 cfs @ 7.31 hrs, Volume= 1,147 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.77' @ 19.77 hrs Surf.Area= 1,408 sf Storage= 602 cf

Plug-Flow detention time= 722.1 min calculated for 1,147 cf (100% of inflow)
Center-of-Mass det. time= 722.2 min (1,454.9 - 732.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 7.31 hrs HW=12.74' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.70' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 1.10" for 95% event
Inflow = 0.06 cfs @ 9.97 hrs, Volume= 411 cf
Outflow = 0.00 cfs @ 8.99 hrs, Volume= 411 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.99 hrs, Volume= 411 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.47' @ 15.33 hrs Surf.Area= 811 sf Storage= 152 cf

Plug-Flow detention time= 343.7 min calculated for 411 cf (100% of inflow)
Center-of-Mass det. time= 343.7 min (1,114.9 - 771.2)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.99 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 0.90" for 95% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 50 cf
Outflow = 0.00 cfs @ 10.05 hrs, Volume= 50 cf, Atten= 43%, Lag= 4.7 min
Discarded = 0.00 cfs @ 10.05 hrs, Volume= 50 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.27' @ 10.22 hrs Surf.Area= 673 sf Storage= 5 cf

Plug-Flow detention time= 18.0 min calculated for 50 cf (100% of inflow)
Center-of-Mass det. time= 18.0 min (816.7 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 10.05 hrs HW=13.27' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 1.15" for 95% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 65 cf
Outflow = 0.00 cfs @ 9.86 hrs, Volume= 65 cf, Atten= 71%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.86 hrs, Volume= 65 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.15' @ 10.55 hrs Surf.Area= 479 sf Storage= 10 cf

Plug-Flow detention time= 28.3 min calculated for 65 cf (100% of inflow)
Center-of-Mass det. time= 28.3 min (793.2 - 764.9)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.86 hrs HW=13.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 1.09" for 95% event
Inflow = 0.02 cfs @ 9.97 hrs, Volume= 166 cf
Outflow = 0.01 cfs @ 9.90 hrs, Volume= 166 cf, Atten= 65%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.90 hrs, Volume= 166 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.14' @ 10.47 hrs Surf.Area= 1,424 sf Storage= 24 cf

Plug-Flow detention time= 24.2 min calculated for 166 cf (100% of inflow)
Center-of-Mass det. time= 24.2 min (796.0 - 771.8)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.90 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 0.98" for 95% event
Inflow = 0.01 cfs @ 9.97 hrs, Volume= 101 cf
Outflow = 0.00 cfs @ 9.85 hrs, Volume= 101 cf, Atten= 75%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.85 hrs, Volume= 101 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.47' @ 10.72 hrs Surf.Area= 620 sf Storage= 18 cf

Plug-Flow detention time= 36.4 min calculated for 101 cf (100% of inflow)
Center-of-Mass det. time= 36.4 min (829.9 - 793.5)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.85 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 1.09" for 95% event
Inflow = 0.02 cfs @ 9.97 hrs, Volume= 130 cf
Outflow = 0.00 cfs @ 9.77 hrs, Volume= 130 cf, Atten= 80%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.77 hrs, Volume= 130 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.11' @ 10.97 hrs Surf.Area= 635 sf Storage= 27 cf

Plug-Flow detention time= 54.8 min calculated for 130 cf (100% of inflow)
Center-of-Mass det. time= 54.8 min (833.2 - 778.4)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	408 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.77 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 1.63" for 95% event
Inflow = 0.19 cfs @ 9.96 hrs, Volume= 1,257 cf
Outflow = 0.01 cfs @ 6.22 hrs, Volume= 1,257 cf, Atten= 97%, Lag= 0.0 min
Discarded = 0.01 cfs @ 6.22 hrs, Volume= 1,257 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.34' @ 22.66 hrs Surf.Area= 1,126 sf Storage= 785 cf

Plug-Flow detention time= 1,111.4 min calculated for 1,257 cf (100% of inflow)
Center-of-Mass det. time= 1,111.3 min (1,841.6 - 730.3)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 6.22 hrs HW=11.64' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=11.60' (Free Discharge)
├**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 1.72" for 95% event
Inflow = 0.29 cfs @ 9.96 hrs, Volume= 1,891 cf
Outflow = 0.01 cfs @ 24.04 hrs, Volume= 1,371 cf, Atten= 98%, Lag= 844.6 min
Discarded = 0.01 cfs @ 24.04 hrs, Volume= 1,371 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.41' @ 24.04 hrs Surf.Area= 605 sf Storage= 1,473 cf

Plug-Flow detention time= 1,629.3 min calculated for 1,371 cf (72% of inflow)
Center-of-Mass det. time= 1,489.9 min (2,216.1 - 726.1)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 24.04 hrs HW=14.41' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=8.00' (Free Discharge)
├**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.19" for 95% event
Inflow = 0.15 cfs @ 10.44 hrs, Volume= 1,496 cf
Primary = 0.15 cfs @ 10.44 hrs, Volume= 1,496 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 0.00" for 95% event
Inflow = 0.00 cfs @ 18.84 hrs, Volume= 30 cf
Primary = 0.00 cfs @ 18.84 hrs, Volume= 30 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 0.79" for 95% event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 219 cf
Outflow = 0.01 cfs @ 10.30 hrs, Volume= 219 cf, Atten= 49%, Lag= 19.4 min
Discarded = 0.01 cfs @ 10.30 hrs, Volume= 219 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.12' @ 10.30 hrs Surf.Area= 2,515 sf Storage= 21 cf

Plug-Flow detention time= 18.5 min calculated for 219 cf (100% of inflow)
Center-of-Mass det. time= 18.6 min (831.9 - 813.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.30 hrs HW=14.12' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└2=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 0.90" for 95% event
Inflow = 0.07 cfs @ 9.89 hrs, Volume= 328 cf
Outflow = 0.00 cfs @ 13.85 hrs, Volume= 328 cf, Atten= 94%, Lag= 237.9 min
Discarded = 0.00 cfs @ 13.85 hrs, Volume= 328 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 10.38' @ 13.85 hrs Surf.Area= 730 sf Storage= 111 cf

Plug-Flow detention time= 281.1 min calculated for 328 cf (100% of inflow)
Center-of-Mass det. time= 281.1 min (1,067.8 - 786.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.00 cfs @ 13.85 hrs HW=10.38' (Free Discharge)
└2=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=10.00' (Free Discharge)
└1=**Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 1.62" for 95% event
Inflow = 0.18 cfs @ 9.87 hrs, Volume= 745 cf
Outflow = 0.01 cfs @ 18.84 hrs, Volume= 624 cf, Atten= 97%, Lag= 538.3 min
Discarded = 0.00 cfs @ 18.84 hrs, Volume= 594 cf
Primary = 0.00 cfs @ 18.84 hrs, Volume= 30 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.31' @ 18.84 hrs Surf.Area= 275 sf Storage= 529 cf

Plug-Flow detention time= 1,510.0 min calculated for 624 cf (84% of inflow)
Center-of-Mass det. time= 1,416.2 min (2,139.8 - 723.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 18.84 hrs HW=10.31' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 18.84 hrs HW=10.31' (Free Discharge)
└2=**Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.38 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 1.76" for 95% event
Inflow = 0.29 cfs @ 9.87 hrs, Volume= 1,237 cf
Outflow = 0.01 cfs @ 23.37 hrs, Volume= 1,228 cf, Atten= 98%, Lag= 810.2 min
Discarded = 0.01 cfs @ 23.37 hrs, Volume= 1,228 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 10.29' @ 23.37 hrs Surf.Area= 730 sf Storage= 657 cf

Plug-Flow detention time= 1,500.2 min calculated for 1,228 cf (99% of inflow)
Center-of-Mass det. time= 1,495.0 min (2,208.1 - 713.1)

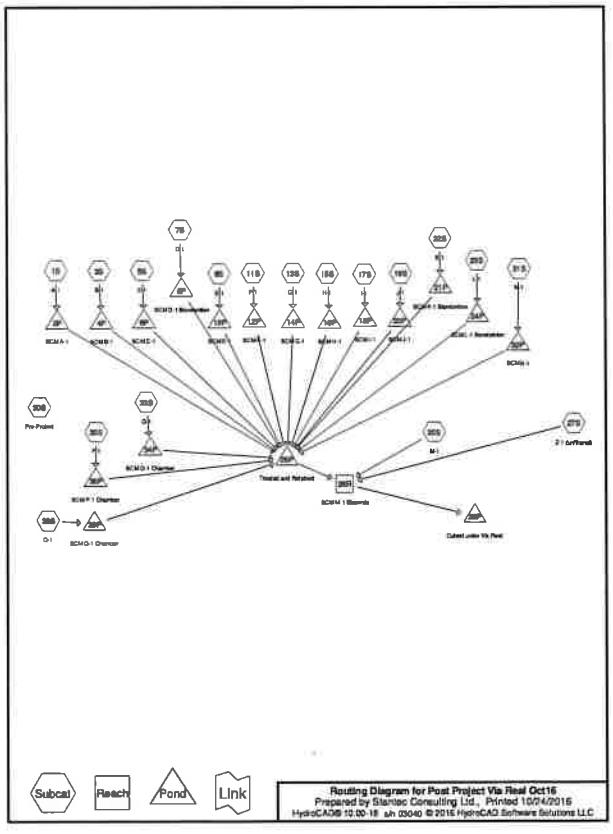
Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 23.37 hrs HW=10.29' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=8.50' (Free Discharge)
└2=**Orifice/Grate** (Controls 0.00 cfs)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
25,330	85	1/2 acre lots, 25% imp, HSG D (1S, 3S, 5S, 9S, 11S, 13S, 15S, 17S, 19S, 31S, 33S)
82,363	89	<50% Grass cover, Poor, HSG D (30S, 35S, 36S)
3,949	80	>75% Grass cover, Good, HSG D (7S, 22S, 23S, 31S)
13,800	84	Pasture/grassland/range, Fair, HSG D (25S, 27S)
36,101	98	Paved parking, HSG D (9S, 13S, 15S, 17S, 19S, 27S, 30S)
15,699	98	Paved roads w/curbs & sewers, HSG D (25S, 35S, 36S)
28,056	98	Roofs, HSG D (7S, 22S, 23S)
880	86	Woods/grass comb., Poor, HSG D (17S, 19S)
206,178	91	TOTAL AREA

Summary for Subcatchment 1S: A-1

Runoff = 0.21 cfs @ 9.97 hrs, Volume= 1,411 cf, Depth= 1.84"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 3S: B-1

Runoff = 0.02 cfs @ 9.97 hrs, Volume= 125 cf, Depth= 1.84"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 5S: C-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 172 cf, Depth= 1.84"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 7S: D-1

Runoff = 0.29 cfs @ 9.96 hrs, Volume= 1,972 cf, Depth= 2.71"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 9S: E-1

Runoff = 0.12 cfs @ 9.97 hrs, Volume= 787 cf, Depth= 2.10"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 11S: F-1

Runoff = 0.02 cfs @ 9.97 hrs, Volume= 103 cf, Depth= 1.84"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 13S: G-1

Runoff = 0.02 cfs @ 9.97 hrs, Volume= 123 cf, Depth= 2.17"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 15S: H-1

Runoff = 0.05 cfs @ 9.97 hrs, Volume= 316 cf, Depth= 2.09"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 17S: I-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 202 cf, Depth= 1.97"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.04 cfs @ 9.97 hrs, Volume= 252 cf, Depth= 2.10"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.32 cfs @ 9.96 hrs, Volume= 2,146 cf, Depth= 2.78"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 0.48 cfs @ 9.96 hrs, Volume= 3,186 cf, Depth= 2.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 0.64 cfs @ 9.88 hrs, Volume= 2,677 cf, Depth= 1.92"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.06 cfs @ 9.87 hrs, Volume= 278 cf, Depth= 2.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 5.35 cfs @ 9.88 hrs, Volume= 22,188 cf, Depth= 2.34"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.07 cfs @ 9.97 hrs, Volume= 470 cf, Depth= 1.70"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.16 cfs @ 9.88 hrs, Volume= 674 cf, Depth= 1.84"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.30 cfs @ 9.87 hrs, Volume= 1,280 cf, Depth= 2.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 0.48 cfs @ 9.87 hrs, Volume= 2,075 cf, Depth= 2.95"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-002yr Rainfall=3.20"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.67" for SC-002yr event
Inflow = 0.70 cfs @ 9.88 hrs, Volume= 5,130 cf
Outflow = 0.41 cfs @ 10.28 hrs, Volume= 5,130 cf, Atten= 41%, Lag= 24.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.17 fps, Min. Travel Time= 16.7 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 45.4 min

Peak Storage= 463 cf @ 9.97 hrs
Average Depth at Peak Storage= 0.19'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 '/' Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 1.84" for SC-002yr event
Inflow = 0.21 cfs @ 9.97 hrs, Volume= 1,411 cf
Outflow = 0.05 cfs @ 9.83 hrs, Volume= 1,411 cf, Atten= 74%, Lag= 0.0 min
Discarded = 0.05 cfs @ 9.83 hrs, Volume= 1,411 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.07' @ 10.67 hrs Surf.Area= 9,182 sf Storage= 252 cf

Plug-Flow detention time= 34.4 min calculated for 1,411 cf (100% of inflow)
Center-of-Mass det. time= 34.4 min (815.2 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (63% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 9.83 hrs HW=13.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 811 sf, 25.00% Impervious, Inflow Depth = 1.84" for SC-002yr event
Inflow = 0.02 cfs @ 9.97 hrs, Volume= 125 cf
Outflow = 0.00 cfs @ 9.76 hrs, Volume= 125 cf, Atten= 74%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.76 hrs, Volume= 125 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.06' @ 10.67 hrs Surf.Area= 811 sf Storage= 20 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 25.1 min (806.0 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
14.55	811	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.76 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 1.84" for SC-002yr event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 172 cf
Outflow = 0.01 cfs @ 9.76 hrs, Volume= 172 cf, Atten= 74%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.76 hrs, Volume= 172 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.06' @ 10.67 hrs Surf.Area= 1,117 sf Storage= 28 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 25.1 min (806.0 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.76 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 8,718 sf, 83.85% Impervious, Inflow Depth = 2.71" for SC-002yr event
Inflow = 0.29 cfs @ 9.96 hrs, Volume= 1,972 cf
Outflow = 0.01 cfs @ 4.46 hrs, Volume= 1,972 cf, Atten= 97%, Lag= 0.0 min
Discarded = 0.01 cfs @ 4.46 hrs, Volume= 1,972 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.48' @ 24.01 hrs Surf.Area= 1,408 sf Storage= 1,345 cf

Plug-Flow detention time= 1,465.5 min calculated for 1,972 cf (100% of inflow)
Center-of-Mass det. time= 1,465.3 min (2,185.8 - 720.6)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 4.46 hrs HW=12.74' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.70' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 2.10" for SC-002yr event
Inflow = 0.12 cfs @ 9.97 hrs, Volume= 787 cf
Outflow = 0.00 cfs @ 7.50 hrs, Volume= 787 cf, Atten= 96%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.50 hrs, Volume= 787 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.41' @ 22.63 hrs Surf.Area= 811 sf Storage= 457 cf

Plug-Flow detention time= 908.4 min calculated for 787 cf (100% of inflow)
Center-of-Mass det. time= 908.3 min (1,666.6 - 758.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 7.50 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 1.84" for SC-002yr event
Inflow = 0.02 cfs @ 9.97 hrs, Volume= 103 cf
Outflow = 0.00 cfs @ 9.84 hrs, Volume= 103 cf, Atten= 74%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.84 hrs, Volume= 103 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.32' @ 10.67 hrs Surf.Area= 673 sf Storage= 19 cf

Plug-Flow detention time= 34.8 min calculated for 103 cf (100% of inflow)
Center-of-Mass det. time= 34.8 min (815.7 - 780.9)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.84 hrs HW=13.27' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 2.17" for SC-002yr event
Inflow = 0.02 cfs @ 9.97 hrs, Volume= 123 cf
Outflow = 0.00 cfs @ 9.61 hrs, Volume= 123 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.61 hrs, Volume= 123 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.26' @ 11.33 hrs Surf.Area= 479 sf Storage= 30 cf

Plug-Flow detention time= 84.6 min calculated for 123 cf (100% of inflow)
Center-of-Mass det. time= 84.6 min (837.2 - 752.6)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.70 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 2.09" for SC-002yr event
Inflow = 0.05 cfs @ 9.97 hrs, Volume= 318 cf
Outflow = 0.01 cfs @ 9.70 hrs, Volume= 318 cf, Atten= 83%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.70 hrs, Volume= 318 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.23' @ 11.06 hrs Surf.Area= 1,424 sf Storage= 72 cf

Plug-Flow detention time= 65.7 min calculated for 318 cf (100% of inflow)
Center-of-Mass det. time= 65.7 min (824.5 - 758.8)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.70 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 1.97" for SC-002yr event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 202 cf
Outflow = 0.00 cfs @ 9.47 hrs, Volume= 202 cf, Atten= 88%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.47 hrs, Volume= 202 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.64' @ 12.56 hrs Surf.Area= 620 sf Storage= 59 cf

Plug-Flow detention time= 154.6 min calculated for 202 cf (100% of inflow)
Center-of-Mass det. time= 154.6 min (929.5 - 774.9)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.47 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 2.10" for SC-002yr event
Inflow = 0.04 cfs @ 9.97 hrs, Volume= 252 cf
Outflow = 0.00 cfs @ 9.17 hrs, Volume= 252 cf, Atten= 90%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.17 hrs, Volume= 252 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.33' @ 13.35 hrs Surf.Area= 635 sf Storage= 83 cf

Plug-Flow detention time= 226.8 min calculated for 252 cf (100% of inflow)
Center-of-Mass det. time= 226.8 min (989.6 - 762.8)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.17 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 2.78" for SC-002yr event
Inflow = 0.32 cfs @ 9.96 hrs, Volume= 2,146 cf
Outflow = 0.03 cfs @ 13.41 hrs, Volume= 2,005 cf, Atten= 92%, Lag= 206.8 min
Discarded = 0.01 cfs @ 3.54 hrs, Volume= 1,633 cf
Primary = 0.02 cfs @ 13.41 hrs, Volume= 371 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.21' @ 13.41 hrs Surf.Area= 1,126 sf Storage= 1,263 cf

Plug-Flow detention time= 1,335.4 min calculated for 2,005 cf (93% of inflow)
Center-of-Mass det. time= 1,291.9 min (2,009.8 - 717.9)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 3.54 hrs HW=11.64' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.01 cfs @ 13.41 hrs HW=15.21' (Free Discharge)
└2=**Orifice/Grate** (Weir Controls 0.01 cfs @ 0.28 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 2.90" for SC-002yr event
Inflow = 0.48 cfs @ 9.96 hrs, Volume= 3,186 cf
Outflow = 0.05 cfs @ 12.16 hrs, Volume= 2,371 cf, Atten= 89%, Lag= 132.1 min
Discarded = 0.01 cfs @ 12.16 hrs, Volume= 1,554 cf
Primary = 0.04 cfs @ 12.16 hrs, Volume= 818 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 15.11' @ 12.16 hrs Surf.Area= 605 sf Storage= 1,893 cf

Plug-Flow detention time= 1,207.8 min calculated for 2,371 cf (74% of inflow)
Center-of-Mass det. time= 1,074.1 min (1,787.1 - 713.0)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 In/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.16 hrs HW=15.11' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.02 cfs @ 12.16 hrs HW=15.11' (Free Discharge)
└2=**Orifice/Grate** (Weir Controls 0.02 cfs @ 0.32 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 0.67" for SC-002yr event
Inflow = 0.41 cfs @ 10.28 hrs, Volume= 5,130 cf
Primary = 0.41 cfs @ 10.28 hrs, Volume= 5,130 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 0.35" for SC-002yr event
Inflow = 0.09 cfs @ 13.38 hrs, Volume= 2,174 cf
Primary = 0.09 cfs @ 13.38 hrs, Volume= 2,174 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 1.70" for SC-002yr event
Inflow = 0.07 cfs @ 9.97 hrs, Volume= 470 cf
Outflow = 0.01 cfs @ 10.89 hrs, Volume= 470 cf, Atten= 79%, Lag= 55.0 min
Discarded = 0.01 cfs @ 10.89 hrs, Volume= 470 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.19' @ 10.89 hrs Surf.Area= 2,515 sf Storage= 93 cf

Plug-Flow detention time= 47.6 min calculated for 470 cf (100% of inflow)
Center-of-Mass det. time= 47.6 min (840.5 - 792.8)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 In/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.89 hrs HW=14.19' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└2=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 1.84" for SC-002yr event
Inflow = 0.16 cfs @ 9.88 hrs, Volume= 674 cf
Outflow = 0.00 cfs @ 21.50 hrs, Volume= 674 cf, Atten= 97%, Lag= 696.9 min
Discarded = 0.00 cfs @ 21.50 hrs, Volume= 674 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 10.90' @ 21.50 hrs Surf.Area= 730 sf Storage= 374 cf

Plug-Flow detention time= 782.4 min calculated for 674 cf (100% of inflow)
Center-of-Mass det. time= 782.5 min (1,551.4 - 768.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 In/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.00 cfs @ 21.50 hrs HW=10.90' (Free Discharge)
└2=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=10.00' (Free Discharge)
└1=**Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.56% Impervious, Inflow Depth = 2.79" for SC-002yr event
Inflow = 0.30 cfs @ 9.87 hrs, Volume= 1,280 cf
Outflow = 0.06 cfs @ 10.09 hrs, Volume= 1,159 cf, Atten= 79%, Lag= 13.2 min
Discarded = 0.00 cfs @ 10.09 hrs, Volume= 613 cf
Primary = 0.06 cfs @ 10.09 hrs, Volume= 546 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.40' @ 10.09 hrs Surf.Area= 275 sf Storage= 539 cf

Plug-Flow detention time= 878.6 min calculated for 1,159 cf (91% of inflow)
Center-of-Mass det. time= 818.7 min (1,528.2 - 709.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 In/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 10.09 hrs HW=10.40' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.06 cfs @ 10.09 hrs HW=10.40' (Free Discharge)
└2=**Orifice/Grate** (Orifice Controls 0.06 cfs @ 1.08 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 2.95" for SC-002yr event
Inflow = 0.48 cfs @ 9.87 hrs, Volume= 2,075 cf
Outflow = 0.03 cfs @ 12.88 hrs, Volume= 1,796 cf, Atten= 94%, Lag= 180.7 min
Discarded = 0.01 cfs @ 12.88 hrs, Volume= 1,357 cf
Primary = 0.02 cfs @ 12.88 hrs, Volume= 439 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.08' @ 12.88 hrs Surf.Area= 730 sf Storage= 1,227 cf

Plug-Flow detention time= 1,273.5 min calculated for 1,796 cf (87% of inflow)
Center-of-Mass det. time= 1,192.0 min (1,891.6 - 699.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap x 18 Inside #1** Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.88 hrs HW=11.08' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.02 cfs @ 12.88 hrs HW=11.08' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.02 cfs @ 0.94 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: A-1

Runoff = 0.36 cfs @ 9.97 hrs, Volume= 2,354 cf, Depth= 3.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 3S: B-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 208 cf, Depth= 3.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 5S: C-1

Runoff = 0.04 cfs @ 9.97 hrs, Volume= 286 cf, Depth= 3.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 7S: D-1

Runoff = 0.44 cfs @ 9.96 hrs, Volume= 2,964 cf, Depth= 4.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 9S: E-1

Runoff = 0.19 cfs @ 9.96 hrs, Volume= 1,264 cf, Depth= 3.37"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 11S: F-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 173 cf, Depth= 3.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 13S: G-1

Runoff = 0.03 cfs @ 9.96 hrs, Volume= 195 cf, Depth= 3.46"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 15S: H-1

Runoff = 0.08 cfs @ 9.96 hrs, Volume= 512 cf, Depth= 3.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 17S: I-1

Runoff = 0.05 cfs @ 9.97 hrs, Volume= 332 cf, Depth= 3.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.06 cfs @ 9.96 hrs, Volume= 406 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.48 cfs @ 9.96 hrs, Volume= 3,209 cf, Depth= 4.15"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 0.70 cfs @ 9.96 hrs, Volume= 4,721 cf, Depth= 4.29"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 1.07 cfs @ 9.88 hrs, Volume= 4,444 cf, Depth= 3.18"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.10 cfs @ 9.87 hrs, Volume= 414 cf, Depth= 4.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 8.39 cfs @ 9.87 hrs, Volume= 34,943 cf, Depth= 3.68"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.12 cfs @ 9.97 hrs, Volume= 803 cf, Depth= 2.90"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.27 cfs @ 9.88 hrs, Volume= 1,125 cf, Depth= 3.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	61	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.44 cfs @ 9.87 hrs, Volume= 1,918 cf, Depth= 4.18"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 0.70 cfs @ 9.87 hrs, Volume= 3,064 cf, Depth= 4.35"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-005yr Rainfall=4.61"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 1.61" for SC-005yr event
Inflow = 1.61 cfs @ 9.86 hrs, Volume= 12,350 cf
Outflow = 1.10 cfs @ 10.19 hrs, Volume= 12,350 cf, Atten= 32%, Lag= 19.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.25 fps, Min. Travel Time= 13.0 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 36.9 min

Peak Storage= 855 cf @ 9.96 hrs
Average Depth at Peak Storage= 0.35'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 ': Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 3.08" for SC-005yr event
Inflow = 0.36 cfs @ 9.97 hrs, Volume= 2,354 cf
Outflow = 0.05 cfs @ 9.62 hrs, Volume= 2,354 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.05 cfs @ 9.62 hrs, Volume= 2,354 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.16' @ 11.45 hrs Surf.Area= 9,182 sf Storage= 593 cf

Plug-Flow detention time= 90.4 min calculated for 2,353 cf (100% of inflow)
Center-of-Mass det. time= 90.4 min (856.7 - 766.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (83% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 9.62 hrs HW=13.02' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
2=Orifice/Grate (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 811 sf, 25.00% Impervious, Inflow Depth = 3.08" for SC-005yr event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 208 cf
Outflow = 0.00 cfs @ 9.50 hrs, Volume= 208 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.50 hrs, Volume= 208 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.15' @ 11.45 hrs Surf.Area= 811 sf Storage= 50 cf

Plug-Flow detention time= 80.7 min calculated for 208 cf (100% of inflow)
Center-of-Mass det. time= 80.7 min (847.0 - 766.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
14.55	811	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.50 hrs HW=14.01' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 3.08" for SC-005yr event
Inflow = 0.04 cfs @ 9.97 hrs, Volume= 286 cf
Outflow = 0.01 cfs @ 9.50 hrs, Volume= 286 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.50 hrs, Volume= 286 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.15' @ 11.45 hrs Surf.Area= 1,117 sf Storage= 69 cf

Plug-Flow detention time= 80.7 min calculated for 286 cf (100% of inflow)
Center-of-Mass det. time= 80.7 min (847.0 - 766.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.50 hrs HW=14.01' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 8,718 sf, 83.85% Impervious, Inflow Depth = 4.08" for SC-005yr event
Inflow = 0.44 cfs @ 9.96 hrs, Volume= 2,964 cf
Outflow = 0.05 cfs @ 11.83 hrs, Volume= 2,787 cf, Atten= 88%, Lag= 112.1 min
Discarded = 0.01 cfs @ 2.93 hrs, Volume= 2,057 cf
Primary = 0.05 cfs @ 11.83 hrs, Volume= 730 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 16.30' @ 11.83 hrs Surf.Area= 1,408 sf Storage= 1,578 cf

Plug-Flow detention time= 1,215.8 min calculated for 2,787 cf (94% of inflow)
Center-of-Mass det. time= 1,175.5 min (1,888.2 - 712.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 2.93 hrs HW=12.74' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.01 cfs @ 11.83 hrs HW=16.30' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 0.01 cfs @ 0.12 fps)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 3.37" for SC-005yr event
Inflow = 0.19 cfs @ 9.96 hrs, Volume= 1,264 cf
Outflow = 0.05 cfs @ 10.63 hrs, Volume= 1,264 cf, Atten= 75%, Lag= 39.9 min
Discarded = 0.00 cfs @ 5.79 hrs, Volume= 826 cf
Primary = 0.04 cfs @ 10.63 hrs, Volume= 438 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.44' @ 10.63 hrs Surf.Area= 811 sf Storage= 468 cf

Plug-Flow detention time= 630.3 min calculated for 1,264 cf (100% of inflow)
Center-of-Mass det. time= 630.3 min (1,377.8 - 747.5)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 5.79 hrs HW=14.02' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.02 cfs @ 10.63 hrs HW=15.44' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 0.02 cfs @ 0.15 fps)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 3.08" for SC-005yr event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 173 cf
Outflow = 0.00 cfs @ 9.62 hrs, Volume= 173 cf, Atten= 85%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.62 hrs, Volume= 173 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.41' @ 11.45 hrs Surf.Area= 673 sf Storage= 44 cf

Plug-Flow detention time= 90.9 min calculated for 172 cf (100% of inflow)
Center-of-Mass det. time= 90.9 min (857.2 - 766.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.62 hrs HW=13.27' (Free Discharge)
↳**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
↳**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 3.46" for SC-005yr event
Inflow = 0.03 cfs @ 9.96 hrs, Volume= 195 cf
Outflow = 0.00 cfs @ 8.98 hrs, Volume= 195 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.98 hrs, Volume= 195 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.44' @ 13.21 hrs Surf.Area= 479 sf Storage= 65 cf

Plug-Flow detention time= 226.5 min calculated for 195 cf (100% of inflow)
Center-of-Mass det. time= 226.5 min (968.9 - 742.5)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.98 hrs HW=13.12' (Free Discharge)
↳**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
↳**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 3.36" for SC-005yr event
Inflow = 0.08 cfs @ 9.96 hrs, Volume= 512 cf
Outflow = 0.01 cfs @ 9.19 hrs, Volume= 512 cf, Atten= 89%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.19 hrs, Volume= 512 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.38' @ 12.69 hrs Surf.Area= 1,424 sf Storage= 158 cf

Plug-Flow detention time= 177.9 min calculated for 512 cf (100% of inflow)
Center-of-Mass det. time= 177.9 min (925.8 - 747.9)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.19 hrs HW=12.12' (Free Discharge)
↳**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
↳**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 3.24" for SC-005yr event
Inflow = 0.05 cfs @ 9.97 hrs, Volume= 332 cf
Outflow = 0.00 cfs @ 8.73 hrs, Volume= 332 cf, Atten= 93%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.73 hrs, Volume= 332 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.94' @ 15.41 hrs Surf.Area= 620 sf Storage= 135 cf

Plug-Flow detention time= 395.7 min calculated for 332 cf (100% of inflow)
Center-of-Mass det. time= 395.7 min (1,156.0 - 760.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.73 hrs HW=13.42' (Free Discharge)
↳**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
↳**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 3.39" for SC-005yr event
Inflow = 0.06 cfs @ 9.96 hrs, Volume= 406 cf
Outflow = 0.00 cfs @ 8.41 hrs, Volume= 406 cf, Atten= 94%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.41 hrs, Volume= 406 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.72' @ 17.63 hrs Surf.Area= 635 sf Storage= 182 cf

Plug-Flow detention time= 505.6 min calculated for 406 cf (100% of inflow)
Center-of-Mass det. time= 505.6 min (1,255.9 - 750.4)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.41 hrs HW=14.02' (Free Discharge)
↳**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
↳**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 4.15" for SC-005yr event
Inflow = 0.48 cfs @ 9.96 hrs, Volume= 3,209 cf
Outflow = 0.23 cfs @ 10.26 hrs, Volume= 3,066 cf, Atten= 52%, Lag= 18.2 min
Discarded = 0.01 cfs @ 2.34 hrs, Volume= 1,651 cf
Primary = 0.22 cfs @ 10.26 hrs, Volume= 1,415 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.26' @ 10.26 hrs Surf.Area= 1,126 sf Storage= 1,275 cf

Plug-Flow detention time= 903.8 min calculated for 3,066 cf (96% of inflow)
Center-of-Mass det. time= 873.0 min (1,583.0 - 709.9)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 2.34 hrs HW=11.64' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.21 cfs @ 10.26 hrs HW=15.26' (Free Discharge)
├2=**Orifice/Grate** (Weir Controls 0.21 cfs @ 0.82 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 4.29" for SC-005yr event
Inflow = 0.70 cfs @ 9.96 hrs, Volume= 4,721 cf
Outflow = 0.41 cfs @ 10.18 hrs, Volume= 3,905 cf, Atten= 42%, Lag= 13.0 min
Discarded = 0.01 cfs @ 10.18 hrs, Volume= 1,574 cf
Primary = 0.40 cfs @ 10.18 hrs, Volume= 2,331 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 15.17' @ 10.18 hrs Surf.Area= 605 sf Storage= 1,930 cf

Plug-Flow detention time= 781.6 min calculated for 3,905 cf (83% of inflow)
Center-of-Mass det. time= 680.7 min (1,385.7 - 705.0)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.18 hrs HW=15.17' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.38 cfs @ 10.18 hrs HW=15.17' (Free Discharge)
├2=**Orifice/Grate** (Weir Controls 0.38 cfs @ 0.66 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 1.61" for SC-005yr event
Inflow = 1.10 cfs @ 10.19 hrs, Volume= 12,350 cf
Primary = 1.10 cfs @ 10.19 hrs, Volume= 12,350 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 1.21" for SC-005yr event
Inflow = 0.78 cfs @ 10.25 hrs, Volume= 7,493 cf
Primary = 0.78 cfs @ 10.25 hrs, Volume= 7,493 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 2.90" for SC-005yr event
Inflow = 0.12 cfs @ 9.97 hrs, Volume= 803 cf
Outflow = 0.01 cfs @ 12.39 hrs, Volume= 803 cf, Atten= 88%, Lag= 145.1 min
Discarded = 0.01 cfs @ 12.39 hrs, Volume= 803 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.33' @ 12.39 hrs Surf.Area= 2,515 sf Storage= 232 cf

Plug-Flow detention time= 146.5 min calculated for 803 cf (100% of inflow)
Center-of-Mass det. time= 146.5 min (922.9 - 776.4)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 12.39 hrs HW=14.33' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└2=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 3.08" for SC-005yr event
Inflow = 0.27 cfs @ 9.88 hrs, Volume= 1,125 cf
Outflow = 0.01 cfs @ 24.00 hrs, Volume= 1,125 cf, Atten= 98%, Lag= 847.3 min
Discarded = 0.01 cfs @ 24.00 hrs, Volume= 1,125 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.62' @ 24.00 hrs Surf.Area= 730 sf Storage= 771 cf

Plug-Flow detention time= 1,381.0 min calculated for 1,125 cf (100% of inflow)
Center-of-Mass det. time= 1,381.2 min (2,135.5 - 754.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.01 cfs @ 24.00 hrs HW=11.62' (Free Discharge)
└2=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=10.00' (Free Discharge)
└1=**Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 4.18" for SC-005yr event
Inflow = 0.44 cfs @ 9.87 hrs, Volume= 1,918 cf
Outflow = 0.44 cfs @ 9.88 hrs, Volume= 1,796 cf, Atten= 0%, Lag= 0.6 min
Discarded = 0.00 cfs @ 9.88 hrs, Volume= 621 cf
Primary = 0.44 cfs @ 9.88 hrs, Volume= 1,175 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.59' @ 9.88 hrs Surf.Area= 275 sf Storage= 560 cf

Plug-Flow detention time= 588.7 min calculated for 1,796 cf (94% of inflow)
Center-of-Mass det. time= 546.7 min (1,247.1 - 700.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 9.88 hrs HW=10.59' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.44 cfs @ 9.88 hrs HW=10.59' (Free Discharge)
├2=**Orifice/Grate** (Orifice Controls 0.44 cfs @ 1.83 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 4.35" for SC-005yr event
Inflow = 0.70 cfs @ 9.87 hrs, Volume= 3,064 cf
Outflow = 0.25 cfs @ 9.99 hrs, Volume= 2,781 cf, Atten= 64%, Lag= 7.4 min
Discarded = 0.01 cfs @ 9.99 hrs, Volume= 1,376 cf
Primary = 0.25 cfs @ 9.99 hrs, Volume= 1,405 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.28' @ 9.99 hrs Surf.Area= 730 sf Storage= 1,302 cf

Plug-Flow detention time= 859.3 min calculated for 2,781 cf (91% of inflow)
Center-of-Mass det. time= 799.8 min (1,491.1 - 691.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.99 hrs HW=11.28' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.24 cfs @ 9.99 hrs HW=11.28' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 1.79 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: A-1

Runoff = 0.46 cfs @ 9.97 hrs, Volume= 3,011 cf, Depth= 3.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 3S: B-1

Runoff = 0.04 cfs @ 9.97 hrs, Volume= 266 cf, Depth= 3.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 5S: C-1

Runoff = 0.06 cfs @ 9.97 hrs, Volume= 366 cf, Depth= 3.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 7S: D-1

Runoff = 0.54 cfs @ 9.96 hrs, Volume= 3,632 cf, Depth= 5.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 9S: E-1

Runoff = 0.24 cfs @ 9.96 hrs, Volume= 1,594 cf, Depth= 4.25"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 11S: F-1

Runoff = 0.03 cfs @ 9.97 hrs, Volume= 221 cf, Depth= 3.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 13S: G-1

Runoff = 0.04 cfs @ 9.96 hrs, Volume= 245 cf, Depth= 4.34"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 15S: H-1

Runoff = 0.10 cfs @ 9.96 hrs, Volume= 645 cf, Depth= 4.24"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 17S: I-1

Runoff = 0.06 cfs @ 9.96 hrs, Volume= 422 cf, Depth= 4.11"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.08 cfs @ 9.96 hrs, Volume= 512 cf, Depth= 4.27"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.58 cfs @ 9.96 hrs, Volume= 3,924 cf, Depth= 5.08"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 0.85 cfs @ 9.96 hrs, Volume= 5,748 cf, Depth= 5.22"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 1.37 cfs @ 9.88 hrs, Volume= 5,666 cf, Depth= 4.06"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.12 cfs @ 9.87 hrs, Volume= 505 cf, Depth= 5.18"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 10.43 cfs @ 9.87 hrs, Volume= 43,598 cf, Depth= 4.59"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.16 cfs @ 9.97 hrs, Volume= 1,037 cf, Depth= 3.74"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.34 cfs @ 9.88 hrs, Volume= 1,440 cf, Depth= 3.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.54 cfs @ 9.87 hrs, Volume= 2,345 cf, Depth= 5.11"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 0.85 cfs @ 9.87 hrs, Volume= 3,724 cf, Depth= 5.29"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-010yr Rainfall=5.55"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 2.27" for SC-010yr event
Inflow = 2.62 cfs @ 9.90 hrs, Volume= 17,434 cf
Outflow = 2.07 cfs @ 10.20 hrs, Volume= 17,434 cf, Atten= 21%, Lag= 18.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.32 fps, Min. Travel Time= 10.3 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 33.9 min

Peak Storage= 1,261 cf @ 10.03 hrs
Average Depth at Peak Storage= 0.50'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 '/' Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 3.94" for SC-010yr event
Inflow = 0.46 cfs @ 9.97 hrs, Volume= 3,011 cf
Outflow = 0.05 cfs @ 9.32 hrs, Volume= 3,011 cf, Atten= 88%, Lag= 0.0 min
Discarded = 0.05 cfs @ 9.32 hrs, Volume= 3,011 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.24' @ 12.37 hrs Surf.Area= 9,182 sf Storage= 892 cf

Plug-Flow detention time= 153.1 min calculated for 3,011 cf (100% of inflow)
Center-of-Mass det. time= 153.1 min (912.1 - 759.0)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (83% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 9.32 hrs HW=13.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 811 sf, 25.00% Impervious, Inflow Depth = 3.94" for SC-010yr event
Inflow = 0.04 cfs @ 9.97 hrs, Volume= 266 cf
Outflow = 0.00 cfs @ 9.17 hrs, Volume= 266 cf, Atten= 88%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.17 hrs, Volume= 266 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.23' @ 12.37 hrs Surf.Area= 811 sf Storage= 76 cf

Plug-Flow detention time= 143.4 min calculated for 266 cf (100% of inflow)
Center-of-Mass det. time= 143.4 min (902.4 - 759.0)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
14.55	811	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.17 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 3.94" for SC-010yr event
Inflow = 0.06 cfs @ 9.97 hrs, Volume= 366 cf
Outflow = 0.01 cfs @ 9.17 hrs, Volume= 366 cf, Atten= 88%, Lag= 0.0 min
Discarded = 0.01 cfs @ 9.17 hrs, Volume= 366 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.23' @ 12.37 hrs Surf.Area= 1,117 sf Storage= 105 cf

Plug-Flow detention time= 143.4 min calculated for 366 cf (100% of inflow)
Center-of-Mass det. time= 143.4 min (902.4 - 759.0)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.17 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 8,718 sf, 83.85% Impervious, Inflow Depth = 5.00" for SC-010yr event
Inflow = 0.54 cfs @ 9.96 hrs, Volume= 3,632 cf
Outflow = 0.18 cfs @ 10.45 hrs, Volume= 3,454 cf, Atten= 67%, Lag= 29.3 min
Discarded = 0.01 cfs @ 2.34 hrs, Volume= 2,067 cf
Primary = 0.17 cfs @ 10.45 hrs, Volume= 1,387 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 16.31' @ 10.45 hrs Surf.Area= 1,408 sf Storage= 1,579 cf

Plug-Flow detention time= 996.6 min calculated for 3,454 cf (95% of inflow)
Center-of-Mass det. time= 963.2 min (1,672.2 - 709.1)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 2.34 hrs HW=12.74' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.08 cfs @ 10.45 hrs HW=16.31' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.08 cfs @ 0.23 fps)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 4.25" for SC-010yr event
Inflow = 0.24 cfs @ 9.96 hrs, Volume= 1,594 cf
Outflow = 0.15 cfs @ 10.16 hrs, Volume= 1,594 cf, Atten= 38%, Lag= 11.7 min
Discarded = 0.00 cfs @ 4.22 hrs, Volume= 840 cf
Primary = 0.14 cfs @ 10.16 hrs, Volume= 753 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.45' @ 10.16 hrs Surf.Area= 811 sf Storage= 471 cf

Plug-Flow detention time= 507.6 min calculated for 1,594 cf (100% of inflow)
Center-of-Mass det. time= 507.6 min (1,249.6 - 741.9)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 4.22 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.12 cfs @ 10.16 hrs HW=15.45' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.12 cfs @ 0.26 fps)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 3.94" for SC-010yr event
Inflow = 0.03 cfs @ 9.97 hrs, Volume= 221 cf
Outflow = 0.00 cfs @ 9.33 hrs, Volume= 221 cf, Atten= 88%, Lag= 0.0 min
Discarded = 0.00 cfs @ 9.33 hrs, Volume= 221 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.49' @ 12.37 hrs Surf.Area= 673 sf Storage= 66 cf

Plug-Flow detention time= 153.6 min calculated for 221 cf (100% of inflow)
Center-of-Mass det. time= 153.6 min (912.6 - 759.0)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 9.33 hrs HW=13.27' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 878 sf, 47.01% Impervious, Inflow Depth = 4.34" for SC-010yr event
Inflow = 0.04 cfs @ 9.96 hrs, Volume= 245 cf
Outflow = 0.00 cfs @ 8.62 hrs, Volume= 245 cf, Atten= 93%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.62 hrs, Volume= 245 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.59' @ 14.05 hrs Surf.Area= 479 sf Storage= 94 cf

Plug-Flow detention time= 340.1 min calculated for 245 cf (100% of inflow)
Center-of-Mass det. time= 340.1 min (1,077.5 - 737.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.62 hrs HW=13.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 4.24" for SC-010yr event
Inflow = 0.10 cfs @ 9.96 hrs, Volume= 645 cf
Outflow = 0.01 cfs @ 8.82 hrs, Volume= 645 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.82 hrs, Volume= 645 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.51' @ 13.65 hrs Surf.Area= 1,424 sf Storage= 231 cf

Plug-Flow detention time= 279.8 min calculated for 645 cf (100% of inflow)
Center-of-Mass det. time= 279.8 min (1,022.1 - 742.3)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.82 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 4.11" for SC-010yr event
Inflow = 0.06 cfs @ 9.96 hrs, Volume= 422 cf
Outflow = 0.00 cfs @ 8.31 hrs, Volume= 422 cf, Atten= 94%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.31 hrs, Volume= 422 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.21' @ 18.50 hrs Surf.Area= 620 sf Storage= 200 cf

Plug-Flow detention time= 565.1 min calculated for 422 cf (100% of inflow)
Center-of-Mass det. time= 565.1 min (1,318.3 - 753.1)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.31 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 4.27" for SC-010yr event
Inflow = 0.08 cfs @ 9.96 hrs, Volume= 512 cf
Outflow = 0.00 cfs @ 7.52 hrs, Volume= 512 cf, Atten= 95%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.52 hrs, Volume= 512 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.05' @ 20.14 hrs Surf.Area= 635 sf Storage= 266 cf

Plug-Flow detention time= 702.6 min calculated for 512 cf (100% of inflow)
Center-of-Mass det. time= 702.6 min (1,446.8 - 744.1)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 7.52 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 5.08" for SC-010yr event
Inflow = 0.58 cfs @ 9.96 hrs, Volume= 3,924 cf
Outflow = 0.51 cfs @ 10.03 hrs, Volume= 3,780 cf, Atten= 12%, Lag= 4.0 min
Discarded = 0.01 cfs @ 1.88 hrs, Volume= 1,658 cf
Primary = 0.51 cfs @ 10.03 hrs, Volume= 2,122 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.31' @ 10.03 hrs Surf.Area= 1,126 sf Storage= 1,286 cf

Plug-Flow detention time= 744.3 min calculated for 3,780 cf (96% of inflow)
Center-of-Mass det. time= 718.6 min (1,424.9 - 706.4)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 1.88 hrs HW=11.64' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.50 cfs @ 10.03 hrs HW=15.31' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 0.50 cfs @ 1.08 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 5.22" for SC-010yr event
Inflow = 0.85 cfs @ 9.96 hrs, Volume= 5,748 cf
Outflow = 0.80 cfs @ 10.00 hrs, Volume= 4,931 cf, Atten= 6%, Lag= 2.6 min
Discarded = 0.01 cfs @ 10.00 hrs, Volume= 1,584 cf
Primary = 0.79 cfs @ 10.00 hrs, Volume= 3,347 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 15.21' @ 10.00 hrs Surf.Area= 605 sf Storage= 1,955 cf

Plug-Flow detention time= 637.4 min calculated for 4,931 cf (86% of inflow)
Center-of-Mass det. time= 551.0 min (1,252.5 - 701.5)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 10.00 hrs HW=15.21' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.77 cfs @ 10.00 hrs HW=15.21' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 0.77 cfs @ 1.09 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 2.27" for SC-010yr event
Inflow = 2.07 cfs @ 10.20 hrs, Volume= 17,434 cf
Primary = 2.07 cfs @ 10.20 hrs, Volume= 17,434 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 1.82" for SC-010yr event
Inflow = 1.86 cfs @ 10.01 hrs, Volume= 11,263 cf
Primary = 1.86 cfs @ 10.01 hrs, Volume= 11,263 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 3.74" for SC-010yr event
Inflow = 0.16 cfs @ 9.97 hrs, Volume= 1,037 cf
Outflow = 0.01 cfs @ 13.46 hrs, Volume= 1,037 cf, Atten= 91%, Lag= 209.9 min
Discarded = 0.01 cfs @ 13.46 hrs, Volume= 1,037 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.45' @ 13.46 hrs Surf.Area= 2,515 sf Storage= 357 cf

Plug-Flow detention time= 246.7 min calculated for 1,037 cf (100% of inflow)
Center-of-Mass det. time= 246.7 min (1,014.9 - 768.2)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 13.46 hrs HW=14.45' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 3.94" for SC-010yr event
Inflow = 0.34 cfs @ 9.88 hrs, Volume= 1,440 cf
Outflow = 0.01 cfs @ 24.00 hrs, Volume= 1,276 cf, Atten= 98%, Lag= 847.3 min
Discarded = 0.01 cfs @ 24.00 hrs, Volume= 1,276 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.19' @ 24.00 hrs Surf.Area= 730 sf Storage= 1,056 cf

Plug-Flow detention time= 1,554.4 min calculated for 1,276 cf (89% of inflow)
Center-of-Mass det. time= 1,485.9 min (2,232.9 - 747.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.01 cfs @ 24.00 hrs HW=12.19' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=10.00' (Free Discharge)
└**1=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 5.11" for SC-010yr event
Inflow = 0.54 cfs @ 9.87 hrs, Volume= 2,345 cf
Outflow = 0.54 cfs @ 9.88 hrs, Volume= 2,224 cf, Atten= 0%, Lag= 0.6 min
Discarded = 0.00 cfs @ 9.88 hrs, Volume= 626 cf
Primary = 0.53 cfs @ 9.88 hrs, Volume= 1,598 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.62' @ 9.88 hrs Surf.Area= 275 sf Storage= 563 cf

Plug-Flow detention time= 486.5 min calculated for 2,223 cf (95% of inflow)
Center-of-Mass det. time= 451.5 min (1,147.8 - 696.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 9.88 hrs HW=10.62' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.53 cfs @ 9.88 hrs HW=10.62' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.53 cfs @ 1.92 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 5.29" for SC-010yr event
Inflow = 0.85 cfs @ 9.87 hrs, Volume= 3,724 cf
Outflow = 0.71 cfs @ 9.93 hrs, Volume= 3,440 cf, Atten= 16%, Lag= 3.7 min
Discarded = 0.01 cfs @ 9.93 hrs, Volume= 1,384 cf
Primary = 0.71 cfs @ 9.93 hrs, Volume= 2,055 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.51' @ 9.93 hrs Surf.Area= 730 sf Storage= 1,376 cf

Plug-Flow detention time= 709.7 min calculated for 3,440 cf (92% of inflow)
Center-of-Mass det. time= 658.9 min (1,346.7 - 687.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	6.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.93 hrs HW=11.51' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.71 cfs @ 9.93 hrs HW=11.51' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.71 cfs @ 2.44 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: A-1

Runoff = 0.59 cfs @ 9.96 hrs, Volume= 3,841 cf, Depth= 5.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 3S: B-1

Runoff = 0.05 cfs @ 9.96 hrs, Volume= 339 cf, Depth= 5.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 5S: C-1

Runoff = 0.07 cfs @ 9.96 hrs, Volume= 467 cf, Depth= 5.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 7S: D-1

Runoff = 0.66 cfs @ 9.96 hrs, Volume= 4,462 cf, Depth= 6.14"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 9S: E-1

Runoff = 0.30 cfs @ 9.96 hrs, Volume= 2,007 cf, Depth= 5.35"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 11S: F-1

Runoff = 0.04 cfs @ 9.96 hrs, Volume= 282 cf, Depth= 5.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 13S: G-1

Runoff = 0.05 cfs @ 9.96 hrs, Volume= 308 cf, Depth= 5.45"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 15S: H-1

Runoff = 0.12 cfs @ 9.96 hrs, Volume= 813 cf, Depth= 5.34"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 17S: I-1

Runoff = 0.08 cfs @ 9.96 hrs, Volume= 535 cf, Depth= 5.21"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.10 cfs @ 9.96 hrs, Volume= 644 cf, Depth= 5.38"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.71 cfs @ 9.96 hrs, Volume= 4,809 cf, Depth= 6.22"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 1.03 cfs @ 9.96 hrs, Volume= 7,017 cf, Depth= 6.38"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 1.74 cfs @ 9.87 hrs, Volume= 7,203 cf, Depth= 5.16"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.14 cfs @ 9.87 hrs, Volume= 618 cf, Depth= 6.33"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 12.93 cfs @ 9.87 hrs, Volume= 54,369 cf, Depth= 5.73"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.21 cfs @ 9.97 hrs, Volume= 1,334 cf, Depth= 4.81"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.44 cfs @ 9.88 hrs, Volume= 1,836 cf, Depth= 5.02"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.66 cfs @ 9.87 hrs, Volume= 2,874 cf, Depth= 6.26"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 1.03 cfs @ 9.87 hrs, Volume= 4,539 cf, Depth= 6.45"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-025yr Rainfall=6.71"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 3.12" for SC-025yr event
Inflow = 4.88 cfs @ 9.90 hrs, Volume= 23,950 cf
Outflow = 3.92 cfs @ 10.12 hrs, Volume= 23,950 cf, Atten= 20%, Lag= 13.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.39 fps, Min. Travel Time= 6.2 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 31.2 min

Peak Storage= 1,937 cf @ 9.99 hrs
Average Depth at Peak Storage= 0.74'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 '/' Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 5.02" for SC-025yr event
Inflow = 0.59 cfs @ 9.96 hrs, Volume= 3,841 cf
Outflow = 0.05 cfs @ 8.95 hrs, Volume= 3,841 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.05 cfs @ 8.95 hrs, Volume= 3,841 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.36' @ 13.42 hrs Surf.Area= 9,182 sf Storage= 1,338 cf

Plug-Flow detention time= 251.3 min calculated for 3,840 cf (100% of inflow)
Center-of-Mass det. time= 251.3 min (1,003.0 - 751.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (83% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 8.95 hrs HW=13.02' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
2=Orifice/Grate (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 811 sf, 25.00% Impervious, Inflow Depth = 5.02" for SC-025yr event
Inflow = 0.05 cfs @ 9.96 hrs, Volume= 339 cf
Outflow = 0.00 cfs @ 8.79 hrs, Volume= 339 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.79 hrs, Volume= 339 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.36' @ 13.42 hrs Surf.Area= 811 sf Storage= 116 cf

Plug-Flow detention time= 241.6 min calculated for 339 cf (100% of inflow)
Center-of-Mass det. time= 241.6 min (993.3 - 751.7)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
14.55	811	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.79 hrs HW=14.01' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 5.02" for SC-025yr event
Inflow = 0.07 cfs @ 9.96 hrs, Volume= 467 cf
Outflow = 0.01 cfs @ 8.79 hrs, Volume= 467 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.79 hrs, Volume= 467 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.38' @ 13.42 hrs Surf.Area= 1,117 sf Storage= 159 cf

Plug-Flow detention time= 241.6 min calculated for 467 cf (100% of inflow)
Center-of-Mass det. time= 241.6 min (993.3 - 751.7)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.79 hrs HW=14.01' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 8,718 sf, 83.85% Impervious, Inflow Depth = 6.14" for SC-025yr event
Inflow = 0.66 cfs @ 9.96 hrs, Volume= 4,462 cf
Outflow = 0.60 cfs @ 10.08 hrs, Volume= 4,282 cf, Atten= 9%, Lag= 7.3 min
Discarded = 0.01 cfs @ 1.85 hrs, Volume= 2,075 cf
Primary = 0.59 cfs @ 10.08 hrs, Volume= 2,207 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 16.33' @ 10.08 hrs Surf.Area= 1,408 sf Storage= 1,585 cf

Plug-Flow detention time= 815.7 min calculated for 4,281 cf (96% of inflow)
Center-of-Mass det. time= 787.9 min (1,493.6 - 705.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 1.85 hrs HW=12.74' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.42 cfs @ 10.08 hrs HW=16.33' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 0.42 cfs @ 0.40 fps)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 5.35" for SC-025yr event
Inflow = 0.30 cfs @ 9.96 hrs, Volume= 2,007 cf
Outflow = 0.31 cfs @ 9.97 hrs, Volume= 2,007 cf, Atten= 0%, Lag= 0.4 min
Discarded = 0.00 cfs @ 3.18 hrs, Volume= 850 cf
Primary = 0.31 cfs @ 9.97 hrs, Volume= 1,157 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.46' @ 9.97 hrs Surf.Area= 811 sf Storage= 474 cf

Plug-Flow detention time= 410.5 min calculated for 2,007 cf (100% of inflow)
Center-of-Mass det. time= 410.5 min (1,146.9 - 736.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 3.18 hrs HW=14.02' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.30 cfs @ 9.97 hrs HW=15.46' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 0.30 cfs @ 0.35 fps)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 5.02" for SC-025yr event
Inflow = 0.04 cfs @ 9.96 hrs, Volume= 282 cf
Outflow = 0.00 cfs @ 8.95 hrs, Volume= 282 cf, Atten= 91%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.95 hrs, Volume= 282 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.61' @ 13.42 hrs Surf.Area= 673 sf Storage= 98 cf

Plug-Flow detention time= 251.8 min calculated for 281 cf (100% of inflow)
Center-of-Mass det. time= 251.7 min (1,003.5 - 751.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.95 hrs HW=13.27' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 5.45" for SC-025yr event
Inflow = 0.05 cfs @ 9.96 hrs, Volume= 308 cf
Outflow = 0.00 cfs @ 8.15 hrs, Volume= 308 cf, Atten= 94%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.15 hrs, Volume= 308 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.80' @ 16.83 hrs Surf.Area= 479 sf Storage= 135 cf

Plug-Flow detention time= 484.7 min calculated for 308 cf (100% of inflow)
Center-of-Mass det. time= 484.8 min (1,216.9 - 732.1)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.15 hrs HW=13.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 5.34" for SC-025yr event
Inflow = 0.12 cfs @ 9.96 hrs, Volume= 813 cf
Outflow = 0.01 cfs @ 8.45 hrs, Volume= 813 cf, Atten= 93%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.45 hrs, Volume= 813 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.69' @ 15.23 hrs Surf.Area= 1,424 sf Storage= 334 cf

Plug-Flow detention time= 409.8 min calculated for 813 cf (100% of inflow)
Center-of-Mass det. time= 409.8 min (1,146.5 - 736.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.45 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 5.21" for SC-025yr event
Inflow = 0.08 cfs @ 9.96 hrs, Volume= 535 cf
Outflow = 0.00 cfs @ 7.31 hrs, Volume= 535 cf, Atten= 96%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.31 hrs, Volume= 535 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.58' @ 20.85 hrs Surf.Area= 620 sf Storage= 292 cf

Plug-Flow detention time= 784.3 min calculated for 535 cf (100% of inflow)
Center-of-Mass det. time= 784.3 min (1,530.3 - 746.0)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 7.31 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 5.38" for SC-025yr event
Inflow = 0.10 cfs @ 9.96 hrs, Volume= 644 cf
Outflow = 0.00 cfs @ 6.77 hrs, Volume= 644 cf, Atten= 96%, Lag= 0.0 min
Discarded = 0.00 cfs @ 6.77 hrs, Volume= 644 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.50' @ 22.13 hrs Surf.Area= 635 sf Storage= 380 cf

Plug-Flow detention time= 960.4 min calculated for 644 cf (100% of inflow)
Center-of-Mass det. time= 960.5 min (1,698.5 - 738.0)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 6.77 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 6.22" for SC-025yr event
Inflow = 0.71 cfs @ 9.96 hrs, Volume= 4,809 cf
Outflow = 0.71 cfs @ 9.97 hrs, Volume= 4,664 cf, Atten= 0%, Lag= 0.5 min
Discarded = 0.01 cfs @ 1.52 hrs, Volume= 1,663 cf
Primary = 0.70 cfs @ 9.97 hrs, Volume= 3,001 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.34' @ 9.97 hrs Surf.Area= 1,126 sf Storage= 1,292 cf

Plug-Flow detention time= 613.9 min calculated for 4,664 cf (97% of inflow)
Center-of-Mass det. time= 592.5 min (1,295.6 - 703.1)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00 C= 0.600** Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 1.52 hrs HW=11.64' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.70 cfs @ 9.97 hrs HW=15.34' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 0.70 cfs @ 1.21 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 6.38" for SC-025yr event
Inflow = 1.03 cfs @ 9.96 hrs, Volume= 7,017 cf
Outflow = 1.02 cfs @ 9.97 hrs, Volume= 6,200 cf, Atten= 1%, Lag= 0.8 min
Discarded = 0.01 cfs @ 9.97 hrs, Volume= 1,595 cf
Primary = 1.02 cfs @ 9.97 hrs, Volume= 4,604 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 15.23' @ 9.97 hrs Surf.Area= 605 sf Storage= 1,969 cf

Plug-Flow detention time= 523.2 min calculated for 6,199 cf (88% of inflow)
Center-of-Mass det. time= 449.8 min (1,148.1 - 698.3)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00 C= 0.600** Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.97 hrs HW=15.23' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.01 cfs @ 9.97 hrs HW=15.23' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 1.01 cfs @ 1.20 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 3.12" for SC-025yr event
Inflow = 3.92 cfs @ 10.12 hrs, Volume= 23,950 cf
Primary = 3.92 cfs @ 10.12 hrs, Volume= 23,950 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 2.60" for SC-025yr event
Inflow = 3.27 cfs @ 9.97 hrs, Volume= 16,129 cf
Primary = 3.27 cfs @ 9.97 hrs, Volume= 16,129 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 4.81" for SC-025yr event
Inflow = 0.21 cfs @ 9.97 hrs, Volume= 1,334 cf
Outflow = 0.02 cfs @ 14.57 hrs, Volume= 1,334 cf, Atten= 93%, Lag= 276.1 min
Discarded = 0.02 cfs @ 14.57 hrs, Volume= 1,334 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.63' @ 14.57 hrs Surf.Area= 2,515 sf Storage= 534 cf

Plug-Flow detention time= 374.5 min calculated for 1,334 cf (100% of inflow)
Center-of-Mass det. time= 374.5 min (1,134.6 - 760.1)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.02 cfs @ 14.57 hrs HW=14.63' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 5.02" for SC-025yr event
Inflow = 0.44 cfs @ 9.86 hrs, Volume= 1,836 cf
Outflow = 0.02 cfs @ 17.77 hrs, Volume= 1,523 cf, Atten= 96%, Lag= 473.9 min
Discarded = 0.01 cfs @ 17.77 hrs, Volume= 1,347 cf
Primary = 0.01 cfs @ 17.77 hrs, Volume= 176 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.64' @ 17.77 hrs Surf.Area= 730 sf Storage= 1,254 cf

Plug-Flow detention time= 1,451.6 min calculated for 1,523 cf (83% of inflow)
Center-of-Mass det. time= 1,354.7 min (2,094.4 - 739.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate C= 0.600**
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.01 cfs @ 17.77 hrs HW=12.64' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.01 cfs @ 17.77 hrs HW=12.64' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.01 cfs @ 0.71 fps)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 6.26" for SC-025yr event
Inflow = 0.66 cfs @ 9.87 hrs, Volume= 2,874 cf
Outflow = 0.66 cfs @ 9.88 hrs, Volume= 2,753 cf, Atten= 0%, Lag= 0.5 min
Discarded = 0.00 cfs @ 9.88 hrs, Volume= 631 cf
Primary = 0.65 cfs @ 9.88 hrs, Volume= 2,122 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.66' @ 9.88 hrs Surf.Area= 275 sf Storage= 567 cf

Plug-Flow detention time= 402.8 min calculated for 2,752 cf (96% of inflow)
Center-of-Mass det. time= 373.7 min (1,066.2 - 692.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.98'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate C= 0.600**
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 9.88 hrs HW=10.66' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.65 cfs @ 9.88 hrs HW=10.66' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.65 cfs @ 2.03 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 6.45" for SC-025yr event
Inflow = 1.03 cfs @ 9.87 hrs, Volume= 4,539 cf
Outflow = 0.95 cfs @ 9.91 hrs, Volume= 4,254 cf, Atten= 7%, Lag= 2.5 min
Discarded = 0.01 cfs @ 9.91 hrs, Volume= 1,392 cf
Primary = 0.95 cfs @ 9.91 hrs, Volume= 2,862 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.65' @ 9.91 hrs Surf.Area= 730 sf Storage= 1,415 cf

Plug-Flow detention time= 587.7 min calculated for 4,254 cf (94% of inflow)
Center-of-Mass det. time= 544.9 min (1,229.5 - 684.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.91 hrs HW=11.65' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.95 cfs @ 9.91 hrs HW=11.65' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.95 cfs @ 2.74 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 1S: A-1

Runoff = 0.69 cfs @ 9.96 hrs, Volume= 4,458 cf, Depth= 5.83"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
9,182	85	1/2 acre lots, 25% Imp, HSG D
6,887	81	75.00% Pervious Area
2,296	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 3S: B-1

Runoff = 0.06 cfs @ 9.96 hrs, Volume= 394 cf, Depth= 5.83"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
811	85	1/2 acre lots, 25% Imp, HSG D
608	81	75.00% Pervious Area
203	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 5S: C-1

Runoff = 0.08 cfs @ 9.96 hrs, Volume= 542 cf, Depth= 5.83"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
1,117	85	1/2 acre lots, 25% Imp, HSG D
838	81	75.00% Pervious Area
279	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 7S: D-1

Runoff = 0.75 cfs @ 9.96 hrs, Volume= 5,071 cf, Depth= 6.98"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
7,310	98	Roofs, HSG D
1,408	80	>75% Grass cover, Good, HSG D
8,718	95	Weighted Average
1,408	80	16.15% Pervious Area
7,310	98	83.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 9S: E-1

Runoff = 0.35 cfs @ 9.96 hrs, Volume= 2,313 cf, Depth= 6.16"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
3,484	85	1/2 acre lots, 25% Imp, HSG D
1,019	98	Paved parking, HSG D
4,503	88	Weighted Average
2,613	81	58.03% Pervious Area
1,890	98	41.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 11S: F-1

Runoff = 0.05 cfs @ 9.96 hrs, Volume= 327 cf, Depth= 5.83"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
673	85	1/2 acre lots, 25% Imp, HSG D
505	81	75.00% Pervious Area
168	98	25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 13S: G-1

Runoff = 0.05 cfs @ 9.96 hrs, Volume= 354 cf, Depth= 6.26"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
479	85	1/2 acre lots, 25% Imp, HSG D
199	98	Paved parking, HSG D
678	89	Weighted Average
359	81	52.99% Pervious Area
319	98	47.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 15S: H-1

Runoff = 0.14 cfs @ 9.96 hrs, Volume= 937 cf, Depth= 6.16"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
1,424	85	1/2 acre lots, 25% Imp, HSG D
403	98	Paved parking, HSG D
1,827	88	Weighted Average
1,068	81	58.46% Pervious Area
759	98	41.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry,**

Summary for Subcatchment 17S: I-1

Runoff = 0.10 cfs @ 9.96 hrs, Volume= 619 cf, Depth= 6.03"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
620	85	1/2 acre lots, 25% imp, HSG D
172	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,232	87	Weighted Average
905	83	73.46% Pervious Area
327	98	26.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 19S: J-1

Runoff = 0.11 cfs @ 9.96 hrs, Volume= 743 cf, Depth= 6.20"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
635	85	1/2 acre lots, 25% imp, HSG D
363	98	Paved parking, HSG D
440	86	Woods/grass comb., Poor, HSG D
1,438	89	Weighted Average
916	83	63.72% Pervious Area
522	98	36.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 22S: K-1

Runoff = 0.80 cfs @ 9.96 hrs, Volume= 5,459 cf, Depth= 7.06"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
8,147	98	Roofs, HSG D
1,126	80	>75% Grass cover, Good, HSG D
9,273	96	Weighted Average
1,126	80	12.14% Pervious Area
8,147	98	87.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 23S: L-1

Runoff = 1.16 cfs @ 9.96 hrs, Volume= 7,949 cf, Depth= 7.22"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
12,599	98	Roofs, HSG D
605	80	>75% Grass cover, Good, HSG D
13,204	97	Weighted Average
605	80	4.58% Pervious Area
12,599	98	95.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 25S: M-1

Runoff = 2.01 cfs @ 9.87 hrs, Volume= 8,343 cf, Depth= 5.97"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
3,061	98	Paved roads w/curbs & sewers, HSG D
13,696	84	Pasture/grassland/range, Fair, HSG D
16,757	87	Weighted Average
13,696	84	81.73% Pervious Area
3,061	98	18.27% Impervious Area

Summary for Subcatchment 27S: Z-1 (unfiltered)

Runoff = 0.16 cfs @ 9.87 hrs, Volume= 700 cf, Depth= 7.17"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
1,067	98	Paved parking, HSG D
104	84	Pasture/grassland/range, Fair, HSG D
1,171	97	Weighted Average
104	84	8.88% Pervious Area
1,067	98	91.12% Impervious Area

Summary for Subcatchment 30S: Pre-Project

Runoff = 14.75 cfs @ 9.87 hrs, Volume= 62,303 cf, Depth= 6.56"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
32,878	98	Paved parking, HSG D
81,040	89	<50% Grass cover, Poor, HSG D
113,918	92	Weighted Average
81,040	89	71.14% Pervious Area
32,878	98	28.86% Impervious Area

Summary for Subcatchment 31S: N-1

Runoff = 0.24 cfs @ 9.96 hrs, Volume= 1,555 cf, Depth= 5.61"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
2,515	85	1/2 acre lots, 25% imp, HSG D
810	80	>75% Grass cover, Good, HSG D
3,325	84	Weighted Average
2,696	80	81.09% Pervious Area
629	98	18.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					Direct Entry,

Summary for Subcatchment 33S: O-1

Runoff = 0.51 cfs @ 9.87 hrs, Volume= 2,131 cf, Depth= 5.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
4,390	85	1/2 acre lots, 25% imp, HSG D
3,293	81	75.00% Pervious Area
1,098	98	25.00% Impervious Area

Summary for Subcatchment 35S: P-1

Runoff = 0.74 cfs @ 9.87 hrs, Volume= 3,262 cf, Depth= 7.10"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
4,390	98	Paved roads w/curbs & sewers, HSG D
1,121	89	<50% Grass cover, Poor, HSG D
5,511	96	Weighted Average
1,121	89	20.34% Pervious Area
4,390	98	79.66% Impervious Area

Summary for Subcatchment 38S: Q-1

Runoff = 1.16 cfs @ 9.87 hrs, Volume= 5,137 cf, Depth= 7.30"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type I 24-hr SC-050yr Rainfall=7.56"

Area (sf)	CN	Description
8,248	98	Paved roads w/curbs & sewers, HSG D
202	89	<50% Grass cover, Poor, HSG D
8,450	98	Weighted Average
202	89	2.39% Pervious Area
8,248	98	97.61% Impervious Area

Summary for Reach 28R: SCM M-1 Bioswale

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 3.77" for SC-050yr event
Inflow = 5.87 cfs @ 9.91 hrs, Volume= 28,996 cf
Outflow = 5.02 cfs @ 10.12 hrs, Volume= 28,996 cf, Atten= 14%, Lag= 12.6 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.43 fps, Min. Travel Time= 7.6 min
Avg. Velocity = 0.11 fps, Avg. Travel Time= 29.5 min

Peak Storage= 2,263 cf @ 9.99 hrs
Average Depth at Peak Storage= 0.85'
Bank-Full Depth= 3.00' Flow Area= 54.0 sf, Capacity= 45.65 cfs

12.00' x 3.00' deep channel, n= 0.200
Side Slope Z-value= 0.0 4.0 :1 Top Width= 24.00'
Length= 195.0' Slope= 0.0052 '/'
Inlet Invert= 9.60', Outlet Invert= 8.58'



Summary for Pond 2P: SCM A-1

Inflow Area = 9,182 sf, 25.00% Impervious, Inflow Depth = 5.83" for SC-050yr event
Inflow = 0.69 cfs @ 9.96 hrs, Volume= 4,458 cf
Outflow = 0.05 cfs @ 8.71 hrs, Volume= 4,458 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.05 cfs @ 8.71 hrs, Volume= 4,458 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.46' @ 13.94 hrs Surf.Area= 9,182 sf Storage= 1,701 cf

Plug-Flow detention time= 326.0 min calculated for 4,458 cf (100% of inflow)
Center-of-Mass det. time= 326.0 min (1,073.3 - 747.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.00'	4,591 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 11,478 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.00	9,182	0	0
14.00	9,182	9,182	9,182
14.50	1	2,296	11,478

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.45'	**0.5" x 20.0" Horiz. Orifice/Grate X 2.00 columns** X 24 rows C= 0.600 in 24.0" x 24.0" Grate (63% open area) Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 8.71 hrs HW=13.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.00' (Free Discharge)
└**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond 4P: SCM B-1

Inflow Area = 611 sf, 25.00% Impervious, Inflow Depth = 5.83" for SC-050yr event
Inflow = 0.06 cfs @ 9.96 hrs, Volume= 394 cf
Outflow = 0.00 cfs @ 8.57 hrs, Volume= 394 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.57 hrs, Volume= 394 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.45' @ 13.94 hrs Surf.Area= 611 sf Storage= 148 cf

Plug-Flow detention time= 316.2 min calculated for 394 cf (100% of inflow)
Center-of-Mass det. time= 316.2 min (1,063.5 - 747.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	178 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 446 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	611	0	0
14.55	611	446	446

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.57 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SCM C-1

Inflow Area = 1,117 sf, 25.00% Impervious, Inflow Depth = 5.83" for SC-050yr event
Inflow = 0.08 cfs @ 9.96 hrs, Volume= 542 cf
Outflow = 0.01 cfs @ 8.57 hrs, Volume= 542 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.57 hrs, Volume= 542 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.45' @ 13.94 hrs Surf.Area= 1,117 sf Storage= 203 cf

Plug-Flow detention time= 316.2 min calculated for 542 cf (100% of inflow)
Center-of-Mass det. time= 316.2 min (1,063.5 - 747.3)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	246 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 614 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	1,117	0	0
14.55	1,117	614	614

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.57 hrs HW=14.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 8P: SCM D-1 Bioretention

Inflow Area = 6,718 sf, 83.85% Impervious, Inflow Depth = 6.98" for SC-050yr event
Inflow = 0.75 cfs @ 9.98 hrs, Volume= 5,071 cf
Outflow = 0.74 cfs @ 9.98 hrs, Volume= 4,891 cf, Atten= 1%, Lag= 1.1 min
Discarded = 0.01 cfs @ 1.61 hrs, Volume= 2,079 cf
Primary = 0.73 cfs @ 9.98 hrs, Volume= 2,812 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 16.34' @ 9.98 hrs Surf.Area= 1,408 sf Storage= 1,588 cf

Plug-Flow detention time= 721.3 min calculated for 4,890 cf (96% of inflow)
Center-of-Mass det. time= 696.5 min (1,400.2 - 703.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.70'	1,690 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.70	1,408	0.0	0	0
14.70	1,408	40.0	1,126	1,126
16.70	1,408	20.0	563	1,690

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.70'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	16.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 1.61 hrs HW=12.74' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.71 cfs @ 9.98 hrs HW=16.34' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.71 cfs @ 0.47 fps)

Summary for Pond 10P: SCM E-1

Inflow Area = 4,503 sf, 41.97% Impervious, Inflow Depth = 6.16" for SC-050yr event
Inflow = 0.35 cfs @ 9.96 hrs, Volume= 2,313 cf
Outflow = 0.35 cfs @ 9.97 hrs, Volume= 2,313 cf, Atten= 0%, Lag= 0.2 min
Discarded = 0.00 cfs @ 2.63 hrs, Volume= 855 cf
Primary = 0.35 cfs @ 9.97 hrs, Volume= 1,458 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.46' @ 9.97 hrs Surf.Area= 811 sf Storage= 474 cf

Plug-Flow detention time= 361.2 min calculated for 2,313 cf (100% of inflow)
Center-of-Mass det. time= 361.2 min (1,094.1 - 732.9)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	519 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,298 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	811	0	0
15.44	811	1,168	1,168
15.60	811	130	1,298

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.44'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 2.63 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.33 cfs @ 9.97 hrs HW=15.46' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.33 cfs @ 0.37 fps)

Summary for Pond 12P: SCM F-1

Inflow Area = 673 sf, 25.00% Impervious, Inflow Depth = 5.83" for SC-050yr event
Inflow = 0.05 cfs @ 9.96 hrs, Volume= 327 cf
Outflow = 0.00 cfs @ 8.72 hrs, Volume= 327 cf, Atten= 92%, Lag= 0.0 min
Discarded = 0.00 cfs @ 8.72 hrs, Volume= 327 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.71' @ 13.94 hrs Surf.Area= 673 sf Storage= 125 cf

Plug-Flow detention time= 326.5 min calculated for 327 cf (100% of inflow)
Center-of-Mass det. time= 326.5 min (1,073.8 - 747.3)

Volume	Invert	Avail.Storage	Storage Description
#1	13.25'	417 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,043 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.25	673	0	0
14.80	673	1,043	1,043

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.25'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.75'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 8.72 hrs HW=13.27' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.25' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 14P: SCM G-1

Inflow Area = 678 sf, 47.01% Impervious, Inflow Depth = 6.26" for SC-050yr event
Inflow = 0.05 cfs @ 9.96 hrs, Volume= 354 cf
Outflow = 0.00 cfs @ 7.40 hrs, Volume= 354 cf, Atten= 95%, Lag= 0.0 min
Discarded = 0.00 cfs @ 7.40 hrs, Volume= 354 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 13.98' @ 18.54 hrs Surf.Area= 479 sf Storage= 169 cf

Plug-Flow detention time= 595.9 min calculated for 354 cf (100% of inflow)
Center-of-Mass det. time= 596.0 min (1,324.9 - 728.9)

Volume	Invert	Avail.Storage	Storage Description
#1	13.10'	297 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 742 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.10	479	0	0
14.65	479	742	742

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.61'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 7.40 hrs HW=13.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 16P: SCM H-1

Inflow Area = 1,827 sf, 41.54% Impervious, Inflow Depth = 6.16" for SC-050yr event
Inflow = 0.14 cfs @ 9.96 hrs, Volume= 937 cf
Outflow = 0.01 cfs @ 8.05 hrs, Volume= 937 cf, Atten= 94%, Lag= 0.0 min
Discarded = 0.01 cfs @ 8.05 hrs, Volume= 937 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.84' @ 17.19 hrs Surf.Area= 1,424 sf Storage= 420 cf

Plug-Flow detention time= 507.4 min calculated for 937 cf (100% of inflow)
Center-of-Mass det. time= 507.4 min (1,240.7 - 733.2)

Volume	Invert	Avail.Storage	Storage Description
#1	12.10'	911 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,278 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
12.10	1,424	0	0
13.70	1,424	2,278	2,278

Device	Routing	Invert	Outlet Devices
#1	Discarded	12.10'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	13.67'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 8.05 hrs HW=12.12' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=12.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 18P: SCM I-1

Inflow Area = 1,232 sf, 26.54% Impervious, Inflow Depth = 6.03" for SC-050yr event
Inflow = 0.10 cfs @ 9.96 hrs, Volume= 619 cf
Outflow = 0.00 cfs @ 6.86 hrs, Volume= 619 cf, Atten= 96%, Lag= 0.0 min
Discarded = 0.00 cfs @ 6.86 hrs, Volume= 619 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 14.87' @ 22.05 hrs Surf.Area= 620 sf Storage= 365 cf

Plug-Flow detention time= 951.8 min calculated for 619 cf (100% of inflow)
Center-of-Mass det. time= 951.9 min (1,693.7 - 741.7)

Volume	Invert	Avail.Storage	Storage Description
#1	13.40'	397 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 992 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
13.40	620	0	0
15.00	620	992	992

Device	Routing	Invert	Outlet Devices
#1	Discarded	13.40'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	14.90'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 6.86 hrs HW=13.42' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=13.40' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 20P: SCM J-1

Inflow Area = 1,438 sf, 36.28% Impervious, Inflow Depth = 6.20" for SC-050yr event
Inflow = 0.11 cfs @ 9.96 hrs, Volume= 743 cf
Outflow = 0.01 cfs @ 13.29 hrs, Volume= 743 cf, Atten= 91%, Lag= 199.6 min
Discarded = 0.00 cfs @ 6.27 hrs, Volume= 655 cf
Primary = 0.01 cfs @ 13.29 hrs, Volume= 88 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.50' @ 13.29 hrs Surf.Area= 635 sf Storage= 381 cf

Plug-Flow detention time= 872.1 min calculated for 743 cf (100% of inflow)
Center-of-Mass det. time= 872.1 min (1,606.3 - 734.2)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	406 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,016 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
14.00	635	0	0
15.60	635	1,016	1,016

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.50'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 6.27 hrs HW=14.02' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 13.29 hrs HW=15.50' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.08 fps)

Summary for Pond 21P: SCM K-1 Bioretention

Inflow Area = 9,273 sf, 87.86% Impervious, Inflow Depth = 7.06" for SC-050yr event
Inflow = 0.80 cfs @ 9.96 hrs, Volume= 5,459 cf
Outflow = 0.80 cfs @ 9.97 hrs, Volume= 5,314 cf, Atten= 0%, Lag= 0.5 min
Discarded = 0.01 cfs @ 1.34 hrs, Volume= 1,666 cf
Primary = 0.79 cfs @ 9.97 hrs, Volume= 3,648 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 15.35' @ 9.97 hrs Surf.Area= 1,126 sf Storage= 1,295 cf

Plug-Flow detention time= 545.3 min calculated for 5,313 cf (97% of inflow)
Center-of-Mass det. time= 526.5 min (1,227.6 - 701.1)

Volume	Invert	Avail.Storage	Storage Description
#1	11.60'	1,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
11.60	1,126	0.0	0	0
13.60	1,126	40.0	901	901
15.60	1,126	20.0	450	1,351

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.60'	**0.250 in/hr Exfiltration over Horizontal area**
#2	Primary	15.20'	**8.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 1.34 hrs HW=11.64' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.79 cfs @ 9.97 hrs HW=15.35' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 0.79 cfs @ 1.26 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 24P: SCM L-1 Bioretetnion

Inflow Area = 13,204 sf, 95.42% Impervious, Inflow Depth = 7.22" for SC-050yr event
Inflow = 1.16 cfs @ 9.96 hrs, Volume= 7,949 cf
Outflow = 1.16 cfs @ 9.97 hrs, Volume= 7,131 cf, Atten= 1%, Lag= 0.8 min
Discarded = 0.01 cfs @ 9.97 hrs, Volume= 1,602 cf
Primary = 1.15 cfs @ 9.97 hrs, Volume= 5,528 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 15.24' @ 9.97 hrs Surf.Area= 605 sf Storage= 1,975 cf

Plug-Flow detention time= 464.5 min calculated for 7,131 cf (90% of inflow)
Center-of-Mass det. time= 398.1 min (1,094.6 - 696.5)

Volume	Invert	Avail.Storage	Storage Description
#1	8.00'	2,009 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
8.00	605	0.0	0	0	605
13.30	605	40.0	1,283	1,283	1,067
14.30	605	20.0	121	1,404	1,154
15.30	605	100.0	605	2,009	1,242

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.10'	**8.0" Horiz. Orifice/Grate X 3.00** C= 0.600 Limited to weir flow at low heads
#3	Primary	15.30'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.97 hrs HW=15.24' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.13 cfs @ 9.97 hrs HW=15.24' (Free Discharge)
├**2=Orifice/Grate** (Weir Controls 1.13 cfs @ 1.24 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 26P: Culvert under Via Real

Inflow Area = 92,260 sf, 57.78% Impervious, Inflow Depth = 3.77" for SC-050yr event
Inflow = 5.02 cfs @ 10.12 hrs, Volume= 28,996 cf
Primary = 5.02 cfs @ 10.12 hrs, Volume= 28,996 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 29P: Treated and Retained

Inflow Area = 74,332 sf, 66.17% Impervious, Inflow Depth = 3.22" for SC-050yr event
Inflow = 4.48 cfs @ 9.97 hrs, Volume= 19,953 cf
Primary = 4.48 cfs @ 9.97 hrs, Volume= 19,953 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond 32P: SCM N-1

Inflow Area = 3,325 sf, 18.91% Impervious, Inflow Depth = 5.61" for SC-050yr event
Inflow = 0.24 cfs @ 9.96 hrs, Volume= 1,555 cf
Outflow = 0.02 cfs @ 16.58 hrs, Volume= 1,555 cf, Atten= 94%, Lag= 396.7 min
Discarded = 0.02 cfs @ 16.58 hrs, Volume= 1,555 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 14.78' @ 16.58 hrs Surf.Area= 2,515 sf Storage= 680 cf

Plug-Flow detention time= 468.1 min calculated for 1,555 cf (100% of inflow)
Center-of-Mass det. time= 468.2 min (1,223.3 - 755.2)

Volume	Invert	Avail.Storage	Storage Description
#1	14.10'	1,559 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.10	2,515	0.0	0	0	2,515
15.65	2,515	40.0	1,559	1,559	2,791

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.10'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	15.60'	**40.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.02 cfs @ 16.58 hrs HW=14.78' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=14.10' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 34P: SCM O-1 Chamber

Inflow Area = 4,390 sf, 25.00% Impervious, Inflow Depth = 5.83" for SC-050yr event
Inflow = 0.51 cfs @ 9.87 hrs, Volume= 2,131 cf
Outflow = 0.03 cfs @ 13.62 hrs, Volume= 1,818 cf, Atten= 95%, Lag= 224.6 min
Discarded = 0.01 cfs @ 13.62 hrs, Volume= 1,359 cf
Primary = 0.02 cfs @ 13.62 hrs, Volume= 458 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 12.67' @ 13.62 hrs Surf.Area= 730 sf Storage= 1,263 cf

Plug-Flow detention time= 1,256.5 min calculated for 1,817 cf (85% of inflow)
Center-of-Mass det. time= 1,170.7 min (1,905.9 - 735.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	10.00'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	10.50'	827 cf	**ADS_StormTech SC-740 +Cap** x 18 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	12.60'	**12.0" Vert. Orifice/Grate** C= 0.600
#2	Discarded	10.00'	**0.250 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.01 cfs @ 13.62 hrs HW=12.67' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.02 cfs @ 13.62 hrs HW=12.67' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.02 cfs @ 0.88 fps)

Summary for Pond 36P: SCM P-1 Chamber

Inflow Area = 5,511 sf, 79.66% Impervious, Inflow Depth = 7.10" for SC-050yr event
Inflow = 0.74 cfs @ 9.87 hrs, Volume= 3,262 cf
Outflow = 0.74 cfs @ 9.88 hrs, Volume= 3,141 cf, Atten= 0%, Lag= 0.5 min
Discarded = 0.00 cfs @ 9.88 hrs, Volume= 634 cf
Primary = 0.74 cfs @ 9.88 hrs, Volume= 2,507 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 10.68' @ 9.88 hrs Surf.Area= 275 sf Storage= 570 cf

Plug-Flow detention time= 358.9 min calculated for 3,141 cf (96% of inflow)
Center-of-Mass det. time= 332.6 min (1,022.9 - 690.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	7.00'	329 cf	**11.00'W x 24.96'L x 4.00'H Field A** 1,099 cf Overall - 276 cf Embedded = 823 cf x 40.0% Voids
#2A	7.50'	276 cf	**ADS_StormTech SC-740 +Cap** x 6 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 2 Rows of 3 Chambers
		605 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	7.00'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	10.30'	**18.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	13.89'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Discarded OutFlow Max=0.00 cfs @ 9.88 hrs HW=10.68' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.73 cfs @ 9.88 hrs HW=10.68' (Free Discharge)
├**2=Orifice/Grate** (Orifice Controls 0.73 cfs @ 2.09 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 39P: SCM Q-1 Chamber

Inflow Area = 8,450 sf, 97.61% Impervious, Inflow Depth = 7.30" for SC-050yr event
Inflow = 1.16 cfs @ 9.87 hrs, Volume= 5,137 cf
Outflow = 1.06 cfs @ 9.91 hrs, Volume= 4,851 cf, Atten= 8%, Lag= 2.7 min
Discarded = 0.01 cfs @ 9.91 hrs, Volume= 1,397 cf
Primary = 1.06 cfs @ 9.91 hrs, Volume= 3,455 cf

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 11.73' @ 9.91 hrs Surf.Area= 730 sf Storage= 1,438 cf

Plug-Flow detention time= 523.7 min calculated for 4,851 cf (94% of inflow)
Center-of-Mass det. time= 485.3 min (1,168.1 - 682.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	8.50'	691 cf	**15.75'W x 46.34'L x 3.50'H Field A** 2,554 cf Overall - 827 cf Embedded = 1,727 cf x 40.0% Voids
#2A	9.00'	827 cf	**ADS_StormTech SC-740 +Cap x 18 Inside #1** Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 3 Rows of 6 Chambers
		1,518 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	8.50'	**0.250 in/hr Exfiltration over Wetted area**
#2	Primary	11.00'	**8.0" Vert. Orifice/Grate C= 0.600**
#3	Primary	13.50'	**2.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.01 cfs @ 9.91 hrs HW=11.73' (Free Discharge)
└1=**Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.06 cfs @ 9.91 hrs HW=11.73' (Free Discharge)
├2=**Orifice/Grate** (Orifice Controls 1.06 cfs @ 3.02 fps)
└3=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

25. APPENDIX G

NOISE ASSESSMENT REPORT

Sound Level Assessment for
Proposed Via Real Hotel
4110 Via Real
Carpinteria, CA

prepared for
RAM Hotels
P.O. Box 52098
Amarillo, TX 78159

July 1, 2016
revised August 18, 2016

45dB.com
David Lord, PH.D.
Acoustics Consulting

David Lord

P.O. Box 1406
San Luis Obispo
California 93406
tel 805.704.8046
email: dl@45db.com

Sound Level Assessment for
Proposed Via Real Hotel
4110 Via Real
Carpinteria, CA

1.0 Description

This report describes the sound level assessment for the proposed Via Real Hotel, located at 4110 Via Real, Carpinteria, CA. The report is intended to define all off-site and on-site noise impacts associated with the proposed project. The following topics are presented in this report:

- A description of the study area, project site, and proposed project.
- A description of the regulatory setting, including guidelines and standards.
- An evaluation of the existing noise environment.
- An assessment of potential short-term construction-related noise and vibration impacts.
- An assessment of future potential noise and vibration impacts.
- Information on fundamentals of noise and vibration.

2.0 Location and Acoustic Setting

The general vicinity of the site is in southern Santa Barbara County, within the city of Carpinteria, CA. The vicinity of the site is shown in "Figure 2. Site Plan, vicinity" on page 10.

The site location in relation to the nearest lane of US Highway 101 is shown "Figure 4. Site Relationship to Noise Source" on page 12. The site of the future Via Real Hotel is separated from the major noise source, US Highway 101, by the frontage road, Via Real. The south boundary of the site is approximately 103 feet from the nearest lane of the highway. The grade level of the highway lanes are at approximately the same level as the site. The flow of traffic is relatively straight and uniform in an east-west direction. The approximate daily traffic flow, published by Caltrans, is shown in "Figure 9. Average Daily Traffic, ADT" on page 16.

3.0 Regulatory Setting

The proposed project will be located in the City of Carpinteria. Noise regulations are addressed by federal, state, and local government agencies, discussed below. Local policies are generally adaptations of federal and state guidelines, adjusted to prevailing local condition.

3.1 Federal Regulation

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

(a) Promulgating noise emission standards for interstate commerce.

(b) Assisting state and local abatement efforts.

(c) Promoting noise education and research.

The Department of Transportation (DOT) assumed a significant role in noise control. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by the Federal Transit Administration (FTA). Freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA).

3.2 State Regulation

California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regulatory tools to control and abate noise for use by local agencies. One significant model, which is shown in "Figure 1. Regulatory Matrix" on page 4, depicts land use compatibility for community noise environments, which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60 dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels do not exceed the 45 dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms shall have an interior CNEL of 45 dBA or less due to aircraft noise.

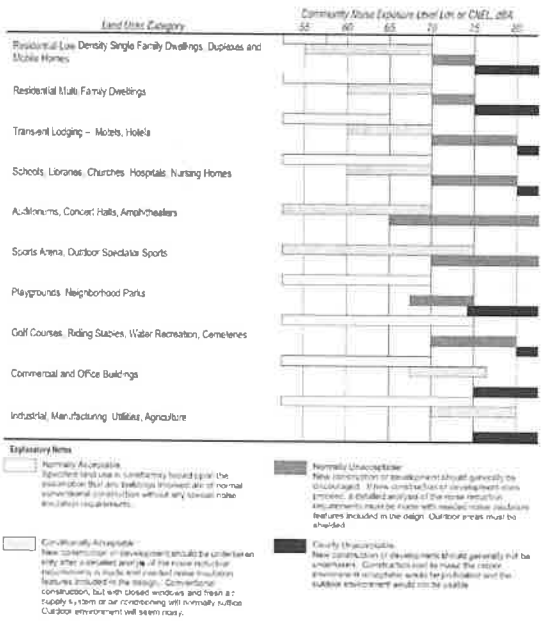
Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

3.3 Local Regulation

The City of Carpinteria Noise Element of the General Plan establishes the following applicable conclusions, recommendations, standards, policies, and regulations regarding potential noise and vibration impacts.

Figure 1. Regulatory Matrix

Land Uses Category and Community Noise Exposure Level (Ldn or CNEL) dBA



4.0 Existing Sound Level

To ascertain the existing sound levels at and adjacent to the project site, field monitoring was conducted between for a 24-hour period during June 21/22, 2016. Sound levels were measured continuously near the Via Real boundary of the property, south of the proposed building site. By observation it was noted that ambient noise within the project area is characterized and heavily dominated by U.S. Highway 101 traffic running parallel to the boundary south of the proposed building site.

Sound level monitoring was performed using a Larson Davis Model 820, Type 1 integrating sound level meter. The Larson Davis meter was programmed in A-weighted "slow" mode to record the sound pressure level at Leq = 10-second intervals. The sound level meter and microphone was mounted approximately five feet above the ground and equipped with a windscreen during all measurements. See "9.0 Measurements, Calculations and Modeling" on page 26 for further details on sound level measurement and protocol. Weather data was collected periodically at the measurement locations. Weather data was also correlated with weather conditions at the closest weather station.

The sound level monitoring location was selected in order to measure the existing noise source impacting the project site and to provide a baseline for any potential noise impacts that may be created by construction, development and operation of the proposed project. The measurement location is shown in "Figure 5. Sound Level Measurement Location." on page 13.

The existing sound level measurement includes a typical workday commute time period. Recorded sound level data consist of average Leq 1 hour sound levels, dBA. Results are shown in "Figure 7. Measurement Results." on page 15 and in "Figure 8. Hourly Average Sound Levels, Leq 1 hr." on page 16. From the measured data, existing hourly LEQ values were calculated. For an explanation of technical definitions, see "7.0 APPENDIX A: Glossary of Acoustical Terms" on page 9.

5.0 Future Sound Levels

5.1 Short Term Construction Noise

Short-term noise impacts could potentially occur during project construction activities from either the noise impacts created from the transport of workers and movement of construction materials to and from the project site, or from the noise generated on-site during demolition and ground clearing activities; excavation, grading, and similar ground-disturbing activities; and construction activities.

Construction noise levels vary significantly based upon the size and topographical features of the active construction zone, duration of the workday, and types of equipment employed, as indicated in "Table 3. Construction Equipment Vibration Levels" on page 22. A typical eight-hour construction day may generate 84 dBA CNEL at a distance of 50 feet from the noise source. Typical operating cycles may involve a short period of full power operation followed by a longer period at lower power settings. Although there would be potential for a

relatively high single-event noise exposure, resulting in potential short-term intermittent annoyances, the effect on long-term ambient noise levels would be nominal when averaged over a longer period. As shown by the ambient noise level measurements in "Table 1. Existing Sound Level Measurements" on page 8, maximum noise levels in project vicinity are already up to 82 dBA Lmax.

Project construction is anticipated to utilize a mix of construction equipment on the project site, including tractors for excavation and grading activities, backhoes for trenching, earth rollers for compaction, and asphalt rollers for paving.

The Federal Highway Administration (FHWA) Roadway Construction Model (RCNM Version 1.1), allows the preliminary prediction of construction noise levels for a variety of construction operations based on a compilation of empirical data and the application of acoustical propagation formulas.

"Table 1. Construction Equipment Noise Levels" on page 6 shows the calculated noise levels at 150 feet for typical items of equipment to be utilized on the project site. The results of modeling show that the average (Leq) noise level of the backhoe, paver, and roller are less than 60 dBA. The tractor will generate a noise level of 64 dBA Leq, below the 65 dBA standard for sensitive receptors.

Table 1. Construction Equipment Noise Levels

Equipment	*calculated dBA at 150 feet from source*	
	Lmax	Leq
Backhoe	62	58
Paver	61	57
Roller	65	57
Tractor	69	64
Total	69	65
Source: FHWA Roadway Construction Model, RCNM ver. 1.1, 2012		

5.2 Short Term Construction Vibration

Potential construction vibration from the project would be a localized event and is typically only perceptible to a receptor that is in close proximity to the vibration source. As an example, the potential vibration from worst-case construction equipment, a small bulldozer, is: PPV at 100 feet = 0.0004 inches / second. This vibration level is far below the Federal Transit Administration Significant Impact guideline maximum of 0.2 inches / second.

A vibration impact would be generally considered significant if it involves any construction-related or operations-related impacts in excess of 78 VdB at sensitive receptors. The construction and operations-related vibration impacts have been analyzed separately below. Construction activities can produce vibration that may be felt by adjacent uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which

are known to generate substantial construction vibration levels. The project site is relatively small—approximately 0.68 acre—and will not utilize many pieces of construction equipment. The primary source of vibration during project construction would likely be from a bulldozer (tractor), which would generate 0.089 inch per second PPV at 25 feet with an approximate vibration level of 87 VdB.

It is anticipated that vibration levels generated by a bulldozer operating on the periphery of the area of disturbance during project construction and experienced at the nearest off-site structure will be approximately 69 VdB, which is below the acceptable threshold of 78 VdB for residential (sensitive) uses during the day.

The City of Carpinteria does not have any specific provisions regarding vibration that would be applicable to the project site as currently zoned; nonetheless, the increase in off-site vibration generated by on-site construction activities would represent only a nominal increase whose impact would not be considered significant. Therefore, impacts associated with construction vibration would be considered less than significant.

5.3 Future Noise Level

Future traffic noise on U.S. Highway 101 is expected to increase by the year 2035 at a 1.25 percent annual growth rate. The resulting sound level will be one to two decibels above existing sound level. The increase in surrounding traffic flow attributable to the proposed project would result in an increase in sound level less than one dBA, and is therefore judged to be a less than significant increase.

5.4 Noise Mitigation

As the noise levels at the south elevation of the building are "conditionally acceptable," it will be necessary to take protective measures in the design and construction of the building envelope or wall / roof-ceiling on the south side of the proposed hotel in order to meet requirements of the 2013 California Green Building Standards Code which governs exterior noise transmission requirements for construction in areas above CNEL = 65 dBA, as follows:

Prescriptive Method:

"5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30.

Performance Method:

"...5.507.4.2 Performance method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq -1Hr) of 50 dBA in occupied areas during any hour of operation.

If the Performance Method is chosen, the noisiest hour at this location is at 4 pm, when exterior sound level = Leq 1 hr. 68 dBA. A composite wall and roof-ceiling of STC = 50 and exterior window assemblies facing the noise source of STC = 35 will satisfy the Performance Method requirement.

Exterior Walls:

An example of a typical exterior wall construction which would satisfy the requirements would consist of wood frame, composed of 7/8" stucco, 30 lb felt vapor barrier, 6" studs with R-13 or thicker batt insulation and two layers of 5/8" type X gypsum board wall for the interior face, with a minimum Outside Inside Transmission Class (OITC) 40 (comparable to STC 50).

Ceiling/Roof:

Standard construction techniques (roofing, 30 lb. felt, truss or joists, R-30 insulation and 5/8" gypsum board) will provide the necessary 20 dBA noise reduction.

Windows/Doors:

Glazing for all sound rated windows should be of unequal thickness, or with one glazing light of laminated glass, in order avoid harmonic resonance at certain low frequencies. The windows should have the performance characteristics listed below to provide the required (or recommended) noise reduction for the south elevation.

In addition to specifying the required Sound Transmission Class of building assemblies, flanking paths for noise should be reduced by sealing all potential leaks in construction by use of acoustical sealant and putty pads. We recommend that notes and details be included on the design drawings to insure that the construction details achieve the sound insulation potential of the basic building assemblies. The following are recommended additional notes and details:

- Use permanently non-hardening acoustical sealant around perimeter of window frames and at joints of all wall and roof/ceiling building assemblies. Gypsum board seams and joints should be sealed with acoustical sealant to prevent all air leaks. If double-layer gypsum board is used, panels should be staggered.
- Select window assemblies with effective, airtight, nonporous gaskets or weatherstripping to minimize air infiltration and sound leakage.
- Provide airtight construction at all exterior walls with acoustical sealant at interior and exterior of sole plates and sill plates, headers and top plate, where warping and drying may open construction joints over time.
- Use door jamb and head gasketing and door bottom gasketing at entry doors to seal solid core doors against weather and sound. Caulk entry door thresholds as they are placed, provide rubber-seal door thresholds, such as those by Trademark Hardware.

Some of the above steps are also necessary for compliance with CCR Title 24 Thermal Insulation requirements.

HVAC:

A central HVAC system is far superior to unitary, through-the-wall systems in the noisy environment of the elevation facing Highway 101. Unlined ventilation or exhaust ducts directly exposed to exterior noise sources can readily transmit that noise to the interior of the building. Therefore, unlined ducts or other elements having unshielded exterior openings with a line-of-sight to the highway noise source are not recommended. To the extent feasible, any penetrations in the exterior walls having a direct exposure to traffic, outdoor air intakes, exhaust openings and roof venting should be located on the side the building away from the noise source. Alternately, Z-ducts can be used to provide silencing of air flow, such as those by Vibro-Acoustics, IAC or Silence-Air.

6.0 Discussion and Conclusions

The 24-hour existing sound levels on the undeveloped site and future sound levels for the developed project are shown in relation to U.S. Highway 101. Careful design detailing and construction of windows, doors, HVAC and wall and roof /ceiling for habitable spaces on first and second floor facing the highway will result in all habitable spaces that meet minimum standards. This project will therefore be compatible with the City of Carpinteria General Plan Noise Element. The proposed project is in compliance with applicable regulations governing noise and vibration.

Figure 2. Site Plan, vicinity

The vicinity site plan shows the proposed mixed use project, with adjacent ground transportation noise sources. U.S. Highway 101 is located to the south of the project.



Figure 3. Site Relation to Noise Contours

This figure shows the proposed location of the hotel in relation to existing noise contours. From City of Carpinteria General Plan Noise Element, Fig. N-1

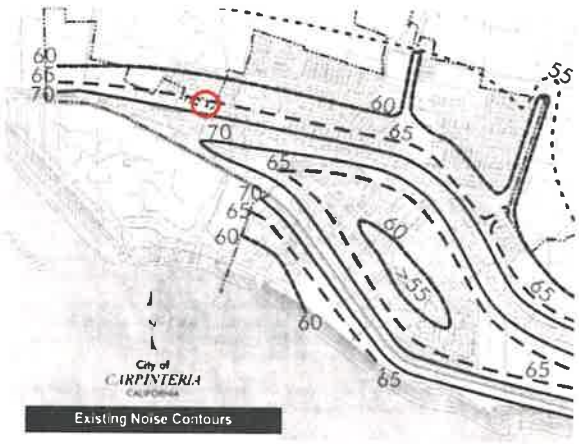


Figure 4. Site Relationship to Noise Source

The site is near the Carpinteria Road exit from U.S. Highway 101. Relationship of the site to the primary noise source is shown below. Also shown is the location of the sound level measurement station.



Figure 5. Sound Level Measurement Location

Location of the sound level measurement is shown below, in relation to the proposed building and the nearest lane of U.S. Highway 101 to the south.

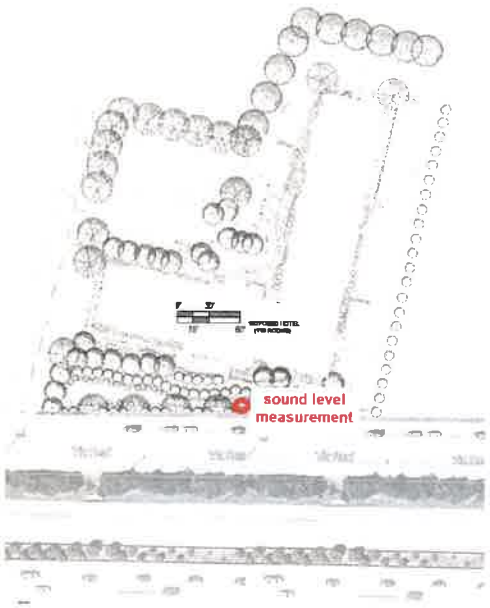


Figure 6. Site Vicinity, Airport Distance

This figure shows the relationship of the site to Santa Barbara Airport, located to the west. The airport is not considered to be a significant source of noise at the proposed site. However, weather data from the airport was used for documentation during the sound level measurement period.



Figure 7. Measurement Results

Measurement of Existing Sound Level shown on this chart.

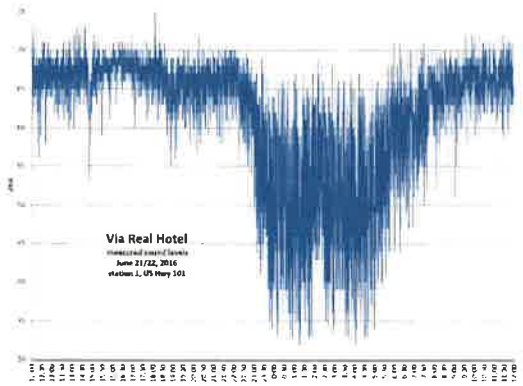


Figure 8. Hourly Average Sound Levels, Leq 1 hr

The 10 second sound level readings shown previously are averaged to show "equivalent sound level" for each hour.

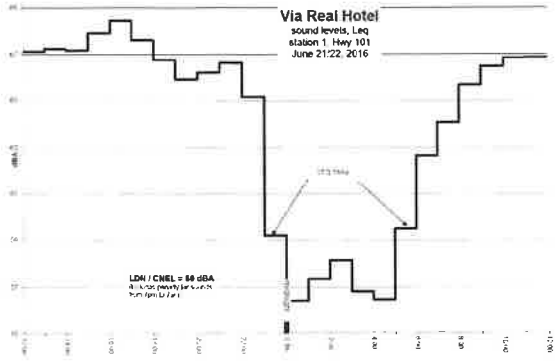


Figure 9. Average Daily Traffic, ADT

Caltrans provides traffic counts for each segment of US Highway 101. The site is nearest Linden Avenue segment shown below.



Figure 10. CNEL Calculation

The location of Existing Sound Level measurements is shown on this plan as "station 1" and "station 2".

Via Real Hotel
Carpinteria, CA

Hwy 101 Station 1

LEQ (hour) calculated from 10-second continuous measurements

	dBA	hour
Calculated DAY LEQ:	64.1	0700
Calculated DAY LEQ:	65.7	0800
Calculated DAY LEQ:	66.5	0900
Calculated DAY LEQ:	66.8	1000
Calculated DAY LEQ:	66.9	1100
Calculated DAY LEQ:	67.1	1200
Calculated DAY LEQ:	67.2	1300
Calculated DAY LEQ:	67.2	1400
Calculated DAY LEQ:	67.9	1500
Calculated DAY LEQ:	68.5	1600
Calculated DAY LEQ:	67.6	1700
Calculated DAY LEQ:	66.8	1800
Calculated DAY/EVE LEQ:	65.9	1900
Calculated DAY/EVE LEQ:	66.2	2000
Calculated DAY/EVE LEQ:	66.6	2100
Calculated NIGHT LEQ:	65.2	2200
Calculated NIGHT LEQ:	59.2	2300
Calculated NIGHT LEQ:	56.4	0000
Calculated NIGHT LEQ:	57.3	0100
Calculated NIGHT LEQ:	58.1	0200
Calculated NIGHT LEQ:	56.8	0300
Calculated NIGHT LEQ:	56.5	0400
Calculated NIGHT LEQ:	59.5	0500
Calculated NIGHT LEQ:	62.6	0600

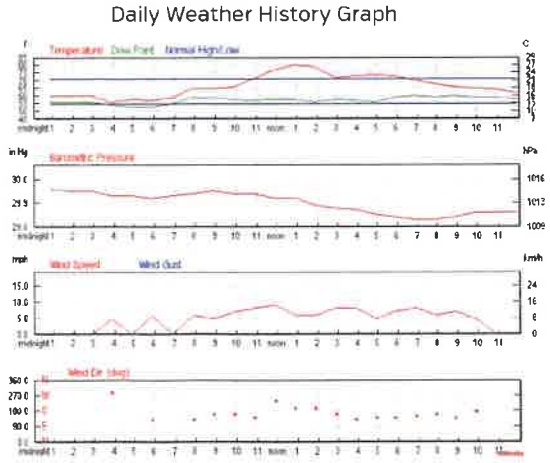
65.3 LEQ 24 hrs:
66.8 LEQ Day 15hr:
67.0 LEQ Day 12hr:
60.2 LEQ Night 9hr:
66.3 LEQ Eve 3hr:

LDN: 68.4 dBA Day / Night Level Calculation
C.N.E.L.: 69.1 dBA Community Noise Equivalent Level Calculation

LDN Calculation from continuous sound level measurements

Figure 11. Average Weather Conditions

Sound measurement and sound propagation can be influenced by the wind speed and wind direction. The data graphed below represent average conditions at Santa Barbara Airport, for one day of the June 21/22, 2016 period. During the time of measurement over a 24 hour period, wind speed was less than 10 mph from the south to southwest, and therefore had a less than significant impact on the measurement accuracy.



7.0 Sound and Vibration Fundamentals

7.1 Terminology / Noise Descriptors

Noise is most often defined as unwanted sound. Although sound can be easily and objectively measured, the perception of noise and the physical, subjective response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

The following are brief definitions of terminology used in this report:

- Sound: A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- Noise: Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- Decibel ("dB"): A unitless measure of sound on a logarithmic scale.
- A-Weighted Decibel ("dBA"): An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- Equivalent Continuous Noise Level ("Leq"): The mean of the noise level averaged over the measurement period, regarded as an average level.
- Day-Night Level ("Ldn"): The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- Community Noise Equivalent Level ("CNEL"): The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

Note that Ldn and CNEL values rarely differ by more than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment.

7.2 Characteristics of Sound

When an object vibrates, it radiates part of its energy as acoustical pressure in the form of a sound wave. Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human frequency-dependent response, the A-weighted filter system is used to adjust measured sound levels. The normal range of human hearing extends from approximately 0 dBA to 140 dBA. Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. Because of

the physical characteristics of noise transmission and of noiseperception, the relative loudness of sound does not closely match the actual amounts of sound energy.

"Table 3 " below presents the subjective effect of changes in sound pressure levels.

Table 2. Decibel Changes

Decibel Changes, Loudness, Energy Loss		
Sound level change	***Relative Loudness***	***Acoustic Energy Loss***
0 dBA	Reference	0%
-3 dBA	Barely Perceptible Change	50%
-5 dBA	Readily Perceptible Change	67%
-10 dBA	Half as Loud	90%
-20 dBA	1/4 as Loud	99%
-30 dBA	1/8 as Loud	99.9%

Source: Highway Traffic Noise Analysis and Abatement Policy and Guidance. U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, June 1995.

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as spreading loss. Generally, sound levels from a point source will decrease by 6.0 dBA for each doubling of distance. Sound levels for a highway line source vary differently with distance because sound pressure waves propagate along the line and overlap at the point of measurement. A closely spaced, continuous line of vehicles along a roadway becomes a line source and produces a 3.0 dBA decrease in sound level for each doubling of distance. However, experimental evidence has shown that where sound from a highway propagates close to "soft" ground (e.g., plowed farmland, grass, crops, etc.), a more suitable drop-off rate to use is not 3.0 dBA but rather 4.5 dBA per distance doubling (FHWA 2010).

When sound is measured for distinct time intervals, the statistical distribution of the overall sound level during that period can be obtained. The Leq is the most common parameter associated with such measurements. The Leq metric is a single-number noise descriptor that represents the average sound level over a given period of time. For example, the L50 noise level is the level that is exceeded 50 percent of the time. This level is also the level that is exceeded 30 minutes in an hour. Similarly, the L02, L08 and L25 values are the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. Other values typically noted during a noise survey are the Lmin and Lmax. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet-time noise levels in a 24-hour noise descriptor called the CNEL or Ldn. This increment is incorporated in the calculation of CNEL or Ldn, described earlier.

7.3 Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. Vibration displacement is the distance that a point on a surface moves away from its original static position. The instantaneous speed that a point on a surface moves is described as the velocity and the rate of change of the speed is described as the acceleration. Each of these descriptors can be used to correlate vibration to building damage, and acceptable equipment vibration levels.

During construction of a development project, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may experience annoyance due to noise generated from vibration of a structure or items within a structure. This type of vibration is best measured in velocity and acceleration.

The three main wave types of concern in the propagation of groundborne vibrations are surface or Rayleigh waves, compression or P-waves, and shear or S-waves.

- Surface or Rayleigh waves travel along the ground surface. They carry most of their energy along an expanding cylindrical wave front, similar to the ripples produced by throwing a rock into a lake. The particle motion is more or less perpendicular to the direction of propagation (known as retrograde elliptical).
- Compression or P-waves are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal, in a push-pull motion. P-waves are analogous to airborne sound waves.
- Shear or S-waves are also body waves, carrying their energy along an expanding spherical wave front. Unlike P-waves, however, the particle motion is transverse, or perpendicular to the direction of propagation.

The peak particle velocity ("PPV") or the root mean square ("RMS") velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal and RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage.

The units for PPV velocity is normally inches per second (in/sec). Often, vibration is presented and discussed in dB units in order to compress the range of numbers required to describe the vibration. In this study, all PPV and RMS velocity levels are in in/sec and all vibration levels are in dB relative to one microinch per second (abbreviated as VdB). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Even the more persistent Rayleigh waves decrease relatively quickly as they move away from the source of the vibration. Human-made vibration problems are, therefore, usually confined to short distances (500 feet or less) from the source.

Construction operations generally include a wide range of activities that can generate groundborne vibration. In general, blasting and demolition of structures generate the highest vibrations. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at distances within 200 feet of the vibration sources. Heavy trucks can also generate groundborne vibrations, which vary depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, etc., all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions. Trains generate substantial quantities of vibration due to the mass and momentum of their engines, vibration transmission from steel wheels to steel track, and heavy loads.

Table 3. Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level (Lv) at 25 feet
Pile driver (impact)	1.518 (upper range) 0.644 (typical)	112 104
Pile driver (sonic)	0.734 (upper range) 0.170 (typical)	105 93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 in soil 0.017 in rock	66 75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006

8.0 Appendix: Glossary of Acoustical Terms

A-Weighted Sound Level (dBA)

The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

Airborne Sound

Sound that travels through the air, differentiated from structure-borne sound.

Ambient Sound Level

The prevailing general sound level existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far. The ambient level is typically defined by the Leq level.

Background Sound Level

The underlying, ever-present lower level noise that remains in the absence of intrusive or intermittent sounds. Distant sources, such as traffic, typically make up the background. The background level is generally defined by the L90 percentile noise level.

Community Noise Equivalent Level (CNEL):

The Leq of the A-weighted noise level over a 24-hour period with a 5 dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.

Day-Night Sound Level (Ldn):

The Leq of the A-weighted noise level over a 24-hour period with a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.

Decibel (dB):

The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

DBA or dB(A)

A-weighted sound level. The ear does not respond equally to all frequencies, but is less

sensitive at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound level of a noise containing a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dBA. The A-weighted sound level is also called the noise level.

Energy Equivalent Level (LEQ):

Because sound levels can vary markedly in intensity over a short period of time, some method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, one describes ambient sounds in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called LEQ. In this report, an hourly period is used

Field Sound Transmission Class (FSTC):

A single number rating similar to STC, except that the transmission loss values used to derive the FSTC are measured in the field. All sound transmitted from the source room to the receiving room is assumed to be through the separating wall or floor-ceiling assembly

Outdoor-Indoor Transmission Class (OITC):

A single number classification, specified by the American Society for Testing and Materials (ASTM E 1332 issued 1990), that establishes the A-weighted sound level reduction provided by building facade components (walls, doors, windows, and combinations thereof), based upon a reference sound spectra that is an average of typical air, road and rail transportation sources. The OITC is the preferred rating when exterior facade components are exposed to a noise environment dominated by transportation sources.

Percentile Sound Level, Ln:

The noise level exceeded during *n* percent of the measurement period, where *n* is a number between 0 and 100 (e.g., L10 or L90)

Sound Transmission Class (STC):

STC is a single number rating, specified by the American Society for Testing and Materials, which can be used to measure the sound insulation properties for comparing the sound transmission capability, in decibels, of interior building partitions for noise sources such as speech, radio, and television. It is used extensively for rating sound insulation characteristics of building materials and products.

Structure-Borne Sound:

Sound propagating through building structure. Rapidly fluctuating elastic waves in gypsum board, joists, studs, etc.

Sound Exposure Level (SEL)

SEL is the sound exposure level, defined as a single number rating indicating the total energy of a discrete noise-generating event (e.g., an aircraft flyover) compressed into a 1-

second time duration. This level is handy as a consistent rating method that may be combined with other SEL and Leq readings to provide a complete noise scenario for measurements and predictions. However, care must be taken in the use of these values since they may be misleading because their numeric value is higher than any sound level which existed during the measurement period.

Subjective Loudness Level

In addition to precision measurement of sound level changes, there is a subjective characteristic which describes how most people respond to sound:

•A change in sound level of 3 dBA is ***barely perceptible*** by most listeners.

•A change in level of 6 dBA is ***clearly perceptible***

•A change of 10 dBA is perceived by most people as being *twice* (or ***half***) as loud.

9.0 Measurements, Calculations and Modeling

9.1 Wind Measurement

Sound level measurements become less reliable when average wind speed is greater than 11 m.p.h. at the measurement site. Therefore, wind speed and direction were measured periodically at the measurement site and the results are correlated with wind data from a nearby established weather station. A Larson Davis WS 001 windscreen is used as wind protection for all microphones and is left in place at all times.

Wind speed and direction were noted throughout the measurement period and compared with data from the nearby National Weather Service weather station at Santa Barbara Airport. A Davis Turbo Wind meter was used to measure wind speed at the measurement site to cross-check wind speeds at the airport. The Turbo Wind meter is a high performance wind speed indicator with exceptional accuracy.

9.2 Precision of Sound Level Meters.

The American National Standards Institute (ANSI) specifies several types of sound level meters according to their precision. Types 1,2, and 3 are referred to as "precision," "general purpose," and "survey" meters, respectively. Most measurements carefully taken with a type 1 sound level meter will have an error not exceeding 1 dB. The corresponding error for a type 2 sound level meter is about 2 dB.

The sound level meters used for measurements shown in this report are Larson-Davis Laboratories Model 820, and Norsonic Model 140, used for spot-checking. These sound level meters meet all requirements of ANSI s1.4, IEC 651 for Type 1 accuracy and include the following features: 110 dB dynamic range for error free measurements, Measures FAST, SLOW, Unweighted PEAK, Weighted PEAK, Impulse, Leq, LDOD, LOSHA, Dose, Time Weighted Average, SEL, Lmax, Lmin, Ldn. Time history sampling periods from 32 samples per second up to one sample every 255 seconds.

Field calibration of each sound level meter with an external Type 1 calibrator is accomplished before and after all field measurements. Laboratory calibration accuracy of the all instruments can be traced to the U.S. National Institute of Science and Technology standard.

9.3 Sound Level Measurement Method

The accepted method for conducting sound level measurements is described in detail by the American Society for Testing and Materials (ASTM) in their E 1014 "Measurement of Outdoor A-Weighted Sound Levels" publication and the CalTrans Traffic Noise Analysis Protocol. The procedures and standards in those documents are met or exceeded for sound level measurements shown in this report. The standards of ASTM E 1014 are exceeded by using Type 1 sound level meters for all measurements in this report instead of the less accurate Type 2 meters. Therefore, the precision of the measurements in this report is likely to be better than +/- 2 dB as stated in ASTM E1014. Particular and specific local sound sources are identified by listening to synchronous audio recordings of peak sound level events.

Caltrans Noise Measurement Guidelines: Caltrans makes available general guidelines for taking into account environmental elements in noise measurements. The following is an excerpt from their guidelines. The Traffic Noise Analysis Protocol contains Caltrans noise policies, which fulfill the highway noise analysis and abatement/mitigation requirements stemming from the following State and Federal environmental statutes:

- California Environmental Quality Act (CEQA)
- National Environmental Policy Act (NEPA)
- Title 23 United States Code of Federal Regulations, Part 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise" (23 CFR 772)
- Section 216 et seq. of the California Streets and Highways Code

Noise Contour Modeling

Noise contours incorporating the measured sound level values were generated for this assessment using CADNA/A, an acoustical modeling program that is in conformance with the TNM 2.5 algorithms, and which was developed to predict hourly Leq values for free-flowing traffic conditions. This computer modeling tool, made by Datakustik GmbH, is an internationally accepted acoustical modeling software program, used by many acoustics and noise control professional offices in the U.S. and abroad. The software has been validated by comparison with actual values in many different settings. The program has a high level of reliability and follows methods specified by the International Standards Organization in their ISO 9613-2 standard, "Acoustics – Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation." The standard states that, "this part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level under meteorological conditions favorable to propagation from sources of known sound emissions. These conditions are for downwind propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night."

The computer modeling software takes into account source sound power levels, surface reflection and absorption, atmospheric absorption, geometric divergence, meteorological conditions, walls, barriers, berms, and terrain variations. The CADNA/A software uses a grid of receivers covering the project site.

10.0 References

1. American National Standards Institute, Inc. 2004. ***ANSI 1994 American National Standard Acoustical Terminology***, ANSI S.1.-1994, (R2004), New York, NY
2. American Society for Testing and Materials. 2004. ***ASTM E 1014 - 84 (Reapproved 2000) Standard Guide for Measurement of Outdoor A-Weighted Sound Levels.***
3. Berglund, Birgitta, World Health Organization. 1999. ***Guidelines for Community Noise*** chapter 4, Guideline Values.
4. Bolt, Beranek and Newman. 1973. ***Fundamentals and Abatement of Highway Traffic Noise.*** Report No. PB-222-703. Prepared for Federal Highway Administration.
5. California Department of Transportation (Caltrans). 1982. ***Caltrans Transportation Laboratory Manual.***
6. _____. 1998. ***Caltrans Traffic Noise Analysis Protocol For New Highway Construction and Highway Reconstruction Projects.***
7. _____. 2006. ***California Transportation Plan 2025***, chapter 6
8. California Resources Agency. 2007. ***Title 14. California Code of Regulations*** Chapter 3. Guidelines for Implementation of the California Environmental Quality Act Article 5 Preliminary Review of Projects and Conduct of Initial Study Sections. 15060 to 15065
9. City of Carpinteria. ***General Plan/Local Coastal Land Use Plan & Environmental Impact Report***. April 2003
10. Federal Highway Administration. 2006. ***FHWA Roadway Construction Noise Model User's Guide Final Report.*** FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01
11. Harris, Cyril M., editor. 1979. ***Handbook of Noise Control.***

25. APPENDIX H

TRAFFIC STUDY

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805) 687-4418 • FAX (805) 682-8509
Since 1978
Richard L. Pool, P.E.
Susan A. Schell, AICP, PTP

July 26, 2019 1302602.L03

Ms. Mina Patel
7300 Parkridge Drive
Amarillo, TX 79119

TRAFFIC AND PARKING ASSESMENT FOR THE REVISED PATEL HOTEL PROJECT – CITY OF CARPINTERIA, CA

Associated Transportation Engineers (ATE) prepared a Traffic, Circulation and Parking Study for the Patel Hotel Project in February 2016. That study, which was used to complete the environmental review documents, was based on a 110-room hotel with 110 parking spaces. The revised project includes 72 rooms and 77 parking spaces. Exhibit A1 (attached) shows the revised site plan.

TRIP GENERATION COMPARISON

Table 1 compares the trip generation estimates for the current Project (72 rooms) with the previously analyzed project (110 rooms). The trip generation analysis is based on rates contained in the current 10th edition of the Institute of Transportation Engineers (ITE) Trip Generation manual, which are slightly different than the rates used in the previous analysis.[1]

Table 1
Project Trip Generation

Land Use	Size	ADT		AM Peak Hour		PM Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Current Project	72 Rooms	8.36	602	0.47	34	0.60	43
Previous Project	110 Rooms	8.36	912	0.47	52	0.60	66
Net Change	-38 Rooms		-310		-18		-23

[1] Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017.

The data presented in Table 1 show that currently proposed Project (decrease in 38 rooms) will generate 310 fewer average daily trips (ADT), 18 fewer AM peak hour trips, and 23 fewer PM peak hour trips. Thus, the traffic impact analysis completed for the previous project is conservative since the currently proposed 72-room project generates less traffic than was analyzed in the study prepared for the 110-room project.

PARKING ANALYSIS

The current project includes 77 parking spaces in a surface-level parking lot with 72 spaces provided for hotel guests and 5 spaces provided for employees (including 4 accessible spaces – see attached site plan). The parking supply also include 2 loading spaces. The City's Zoning Ordinance requires 1 parking space per hotel room plus 1 parking space per employee. Table 2 presents the Zoning Ordinance parking requirement for the currently proposed project.

Table 2
Zoning Ordinance Parking Requirement

Variable	Size	Parking Rate	Required Parking	Parking Provided
Hotel Rooms	72 Rooms	1 Space/Room	72 spaces	72 spaces
Hotel Employees	5 Employees	1 Space/Employee	5 spaces	5 spaces
Total:			*77 spaces*	*77 Spaces*

As shown in Table 2, the Zoning Ordinance parking requirement for the proposed project is 77 spaces. The proposed parking supply of 7 spaces therefore meets the City's Zoning Ordinance requirement.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP
Principal Transportation Planner

SAS/DLD

Attachment



25. APPENDIX I

MITIGATION MONITORING AND REPORTING PROGRAM

Appendix I: Mitigation, Monitoring and Reporting Program

Mitigation Measure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Monitoring Compliance Complete (Name/Date)
1. AESTHETICS			
AES-1. Architectural Review Board (ARB) Review. The design, scale, character, colors, and materials of the project architecture shall be compatible with vicinity development and consistent with the City's "small beach town" character.	City of Carpinteria Community Development Department (CDD) staff	**Plan Requirement and Timing:** The applicant shall submit plans for the project for review by the Architectural Review Board prior to approval of any Building Permit for physical development. **Monitoring:** Community Development Department staff (CDD) shall review submitted plans, provide direction to the ARB regarding this mitigation measure and site inspect during the construction phase for compliance with the approved plans.	
AES-2. Equipment Screening. All mechanical equipment, including but not limited to, heating and air conditioning units, and trash receptacle areas, shall be completely screened from surrounding properties by use of a wall or fence, or shall be enclosed within a building or roof parapet/equipment well.	CDD staff Architectural Review Board (ARB) Building Inspector	**Plan Requirements:** The locations of all exterior mechanical equipment shall be depicted on a Roof and/or Mechanical Equipment Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and ARB shall review the Roof and/or Mechanical Equipment Plan for compliance with this measure prior to approval of a Building Permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that mechanical equipment has been installed consistent with the approved Plan.	
AES-3. Lighting. Any exterior night lighting installed on the project site shall be of low intensity, low glare design, minimum height, and shall be hooded to direct light downward onto the subject parcel and	CDD staff ARB Building Inspector	**Plan Requirements:** Specifications for all selected exterior lighting fixtures shall be included in the plans. The locations of all exterior lighting fixtures and photometric exhibit showing the direction and	

prevent spill-over onto adjacent parcels and into the protected riparian habitats and their associated buffers. Applicant shall develop a Lighting Plan incorporating these requirements and provisions for dimming lights after 10:00 pm.		intensity of light being cast by each fixture and the height of the fixtures shall be depicted on a Lighting Plan to be reviewed and approved by CDD with input from the ARB. **Monitoring:** CDD and ARB shall review a Lighting Plan for compliance with this measure prior to approval of a building permit for structures. Building Inspector/CDD staff shall inspect structures upon completion to ensure that exterior lighting fixtures have been installed consistent with their depiction on the final Lighting Plan.	
AES-4. Illuminated Signs. Building and grounds signage shall be reviewed by the Architectural Review Board to ensure the size, design, colors, and intensity of signage is appropriate to the neighborhood setting and does not create distracting or intrusive impacts on surrounding uses.	CDD staff	**Plan Requirements:** Detailed sign plans, depicting the location, construction, size, and dimensions of all project-related signage shall be submitted to the Architectural Review Board for review and approval prior to Building Permit issuance. All illuminated signage shall be outfitted with dimmable controls to control light intensity. **Monitoring:** CDD staff shall ensure compliance with the Architectural Review Board-approved sign plans during Building Permit review and prior to occupancy clearance.	
2. AGRICULTURAL & FORESTRY RESOURCES			
AG-1. Right to Farm Notification. The following informational notice shall be recorded with the Santa Barbara County Clerk Recorder's office for appearance on any future property owners' Title Reports; shared with hotel employees; and disclosed to hotel guests prior to check-in:	CDD staff	**Plan Requirements:** The applicant shall prepare and submit to the Community Development Department for review and approval the informational notice containing the above disclosure statement. The notice shall be recorded prior to granting of occupancy clearance by the City of Carpinteria. Hotel operator shall	

IMPORTANT: PROPERTY OWNER, EMPLOYEE & HOTEL GUEST NOTIFICATION *This property is located adjacent to property zoned for agriculture and is located in an area that has been planned for agricultural uses. Existing agricultural growing operations are located north of the property. Vehicles associated with the agricultural use of this property utilize the adjacent driveway located immediately west and north of this property to access agricultural lands. While the Via Real Hotel project design includes landscape buffers and physical setbacks from the adjacent agricultural lands to reduce possible noise, light, odors and dust from impacting guests and employees of the Via Real Hotel project, property/business owners, employees and guests are to be notified that these are existing conditions and will not be considered by the City of Carpinteria to be a nuisance requiring extraordinary actions by the adjacent agricultural operators or landowners. It is in the public interest to preserve agricultural land and operations within the Carpinteria Valley and to specifically protect these lands for exclusive agricultural use. Any inconvenience or discomfort from properly conducted agricultural operations, including noise, lights, odors, dust, and chemicals, will not be deemed a nuisance.*		be made aware of this disclosure requirement in writing and shall provide a copy of the disclosure document(s) used to notify hotel guests and employees of the adjacent agricultural land's "right to farm" protections. **Monitoring:** Following recordation and prior to granting of occupancy clearance, CDD staff shall be provided with a conformed copy of the recorded informational notice, and a copy of the disclosure document that will be used to notify hotel guests and employees.	
4. BIOLOGICAL RESOURCES			
BIO-1. Nesting Bird Surveys. To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC, activities	CDD staff Project Biologist	Plan **Requirements:** The most suitable bird nesting habitat shall be identified on the building and grading plans. This Measure shall	

related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 30), if feasible. If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the Project Boundary, including a 300-foot buffer (500-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/ nesting is completed, and the young have fledged the nest. Encroachment		be printed on all building and grading plans. **Timing:** A Qualified Biologist will conduct a pre-construction nesting bird survey, no more than 14 days prior to the initiation of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. The qualified biologist shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program. A report summarizing the results of the nesting bird survey and monitoring activities shall be prepared and submitted to the City, once all survey and monitoring activities are completed.	

into the buffer shall occur only at the discretion of the qualified biologist.			
BIO-2. Riparian Habitat Restoration Plan. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will restore and enhance the riparian habitat associated with drainage swales A and B. Enhancement would include removal of non-native plants and planting of native plants such as arroyo and red willows. As part of this MM, a Riparian Habitat Restoration / Enhancement Plan (Plan) will be prepared for the project. This Plan will provide details on the restoration of the riparian areas associated with swales A and B and will include such elements as a planting plan, location of enhancement/restoration, irrigation (if needed), and success and monitoring criteria. The Plan will also incorporate biological aspects of the stormwater wetland treatment system (see MM BIO-3); that will be created to enhance stormwater quality. Details such as design of the wetland treatment system, planting plan and monitoring of this water quality enhancement; will be included in the Plan.	CDD staff Project Biologist	**Plan Requirements/Timing:** The Applicant shall provide a copy of the Riparian Habitat Restoration Plan (Plan) to the CDD for review and approval, prior to issuance of building permits, and will require that the restoration work be completed prior to Occupancy clearance for the building. The Plan must also outline protective measures for the riparian habitats that must be implemented during construction (i.e., fencing, exclusion zones, etc.) to avoid potential impacts to sensitive riparian habitats. The Restoration Plan will also require approval from CDFW as a Streambed Alteration Agreement will be required. **Monitoring:** Following the enhancement/restoration of the riparian habitat, a qualified biologist will conduct one (1) annual inspection of Swales A and B and associated riparian habitat for 5 years, to document that the habitat is viable and providing the intended ecological functions and values. The monitoring frequency for the riparian habitat restoration/enhancement associated with Swales A and B may be conducted in tandem with the monitoring for the Stormwater Treatment Wetland Habitat (MM BIO-3). The monitoring & reporting elements will be detailed in the Plan. The Biologist will submit annual reports to CDD, based on the annual monitoring criteria. The CDD shall inspect the wetland	

		habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.	
BIO-3. Stormwater Treatment Wetland. In adherence to LCP/LUP goals and Policies, City's Creek Preservation Program and CCC requirements, the project will design and construct a stormwater treatment wetland habitat as part of the proposed treatment swale to enhance stormwater quality. The small freshwater wetland will be designed to provide both enhancement of stormwater quality and serve as a wetland habitat for wildlife.	CDD staff	**Plan Requirements/Timing:** The Applicant will provide the final design plans showing the stormwater treatment wetland, on all grading plans submitted to the City, for review and approval prior to issuance of any permits for construction. The biological aspects of the stormwater treatment wetland habitat (including planting plan); will be detailed in the Riparian Habitat Restoration / Enhancement Plan (Plan), as identified in MM BIO-2. The Stormwater Treatment Wetland Plan will also require approval from the RWQCB, if a Section 402 water quality certification or other regulatory permitting is required. **Monitoring:** Following the construction of the treatment wetland, a qualified biologist will conduct one (1) annual inspection of the treatment wetland and swale, for 5 years, to document that the system is viable and providing the intended ecological functions and values. CDD shall review and approve the design, prior to the issuance of grading or building permits. The monitoring and reporting program for the treatment wetland can be integrated with the Riparian Habitat Enchantment/Creation program (MM BIO-2). The CDD shall inspect the wetland habitat once a year after construction of the habitat, with the final inspection at the end of the 5 years.	

5. CULTURAL RESOURCES			
CR-1. Cultural Resources Discovery. In the event archaeological remains are encountered during grading, work shall be stopped immediately or redirected until a CDD-qualified archaeologist and Native American representative are retained by the applicant to evaluate the significance of the find pursuant to Phase 2 investigation specifications of the City Archaeological Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with City Archaeological Guidelines and funded by the applicant.	CDD staff	**Plan Requirements/Timing:** This condition shall be printed on all building and grading plans. **Monitoring:** CDD shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field. In the event that potentially significant cultural or archaeological resources are uncovered during ground-disturbing activities, all work on the site will cease and a qualified archaeologist will be contacted in addition to the Native American Heritage Commission.	
7. GEOLOGY & SOILS			
GEO-1. Geotechnical Report Compliance. Project construction and grading shall comply with all recommendations for Grading, Foundations and Retaining Walls, contained in the Geotechnical Engineering Report prepared by Pacific Materials Laboratory, to the satisfaction of the City Engineer.	City Engineer Building Inspector	**Plan Requirements:** Grading and building plans shall include all required measures as determined by the City Engineer. **Timing:** Prior to issuance of building and grading permits and during grading and construction. **Monitoring:** The City Engineer shall site inspect during grading. The City Building Inspector shall ensure that all recommendations are implemented during construction, by conducting periodic site inspections during and at the completion of construction.	
10. HYDROLOGY & WATER QUALITY			
WQ-1 Implementation of Low Impact Design (LID) Development Measures. The following LID measures will be incorporated with the stormwater treatment design for the project:	CDD staff Public Works (PW) staff	**Plan Requirements:** The set back from the existing drainage, LID and all storm water treatment design features shall be depicted on all building and grading plans. A final copy of the design plans showing these features will be	

• *Limitation of development envelope.* The project development footprint will be limited to provide areas for treatment and retention of stormwater runoff by means of a treatment swale along the southerly boundary, high groundwater, and preservation of historic drainage patterns. • *Preservation of natural drainage features.* The drainage runoff from the northerly adjacent properties is currently draining along the western side of the property in a drainage swale. This drainage pattern is proposed to be preserved. A 50-foot setback from the existing drainage swales will be accommodated and depicted on project designs. • *Incorporation of existing drainage into stormwater treatment design/treatment wetland.* The stormwater treatment system for the project will be so designed to direct all stormwater runoff into the existing drainages and into a stormwater treatment swale along the southern property line. The vegetated stormwater treatment will act as an aesthetic feature at the entry to the property. A freshwater treatment wetland will also be created at the end of the detention basin, to further clarify water and to provide a habitat for wildlife.		submitted to CDD and Public Works for review and approval. **Timing:** All stormwater treatment measures shall be completed prior to occupancy clearance. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	

• *Minimization of imperviousness.* The project will utilize porous pavement within the northwesterly parking lot to reduce the amount of impervious material. • *Use of permeable pavements.* The project utilizes porous asphalt concrete pavement at various locations on the site to allow infiltration of the parking areas, treat stormwater, and minimize runoff. • *Dispersal of runoff to pervious areas.* To meet the Tier 3 requirement for retaining 95th percentile rainfall intensity on the site, a large percentage of roof water will be discharged to bioretention devices. The remaining drainage runoff will be directed to the existing swales along the eastern and western sides of the project site, which will then be routed through the treatment swale and wetlands, before it discharges off-site. In addition to the stormwater treatment, the vegetated swale will be designed to promote infiltration of water during rainfall events.			
WQ-2. Compliance with NPDES Permit Requirements. The project shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Since the project would disturb one or more acres from construction activities, the construction	CDD staff PW staff	**Plan Requirements:** The BMPs will be depicted on all building and grading plans and will be submitted to the CDD and Public Works for review and approval. The Applicant shall prepare a SWPPP and provide a copy of the document and a copy of the project's NPDES Construction	

operators must obtain coverage under a NPDES permit, which is administered by the State, prior to the start of construction. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The following measures are examples of construction Best Management Practices (BMPs) that may be included in the SWPPP: • *Stockpiling of Soil.* City Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient. • *Protecting Construction Materials from Run-On and Runoff.* At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants. • *Designating Waste Disposal Areas.* Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff. • *Installing Perimeter Controls on Downhill Lot Line.* Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.		General Permit to the CDD and Public Works Department. **Timing:** All stormwater treatment measures and structural BMPs shall be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	

• *Maintaining a Stabilized Exit Pad.* Minimize sediment track-out from vehicles exiting the site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track- out occurs, remove deposited sediment by the end of the same workday.			
WQ-3. Soil Erosion & Sediment Control Plan. To control erosion and potential discharge of soil during construction into the drainage swales, the applicant shall prepare a Soil Erosion and Sediment Control Plan. This plan can be part of the SWPPP.	CDD staff PW staff	**Plan Requirements:** Specific BMPs that would be implemented from the Soil and Erosion Control Plan that are not otherwise covered under the SWPPP shall also be depicted on all grading plans. **Timing:** All Soil Erosion & Sediment Control BMPs shall be in place prior to commencement of construction. **Monitoring:** City of Carpinteria's Community Development Department (CDD) and Public Works Department shall check plans prior to issuance of a Grading or Building Permit and shall spot check in the field.	
WQ-4. Minimum Finished Floor Elevation. The project shall be designed to have a minimum finished floor elevation of 17.0. Applicant shall obtain a Letter of Map Revision based on fill from FEMA to remove the new structure built on the property from the Special Flood Hazard Area (SFHA).	CDD staff PW staff	**Plan Requirements:** Project plans submitted for Building and Engineering Permits shall depict a minimum finished floor elevation of 17.0 feet. A copy of the Letter of Map Revision based on fill shall be submitted to the City for review and approval prior to submittal to the Federal Emergency Management Agency (FEMA) for approval and issuance of a Letter of Map Revision Based on Fill Determination Document (LOMR). Timing: Project plans depicting the minimum required finished	

		floor elevation shall be submitted prior to Building and Engineering Permit approvals. A copy of the application for LOMR shall be submitted to City prior to submittal to FEMA. A copy of the approved LOMR shall be submitted to the City following FEMA approval. **Monitoring:** CDD and Public Works shall review building and engineering plans for conformance with this Measure. Public Works staff shall review and approve submittal of LOMR request to FEMA prior to submittal.	
WS-1. Compliance for Carpinteria Valley Water District Requirements. The Project will comply with the requirements of the Carpinteria Valley Water District (District) to ensure domestic water supply for the project. The following items shall be submitted to the District for their review and approval: • Final design plan set that shows profiles for water, sewer, and storm drainage • Signed plans set by the City of Carpinteria planning department and public work department. • The City completed Plan Set shall include all of the District's comments • All required fees (including the Capital Cost Recovery Fee [CCRF], and any fees associated with inspection of the installation or cost to cover any system improvement required by the project shall be paid prior to Plan set submittal.	Carpinteria Valley Water District (CVWD) staff CDD staff	**Plan Requirements:** Profiles for water, sewer, and storm drainage shall be depicted on all final Plan set for submittal to the District. **Timing:** Final Plan set, and applicable fees shall be submitted to the District, prior to obtaining a grading permit for the project. **Monitoring:** The Applicant shall provide proof of District approval/sign-off prior to issuance of building permits.	

• Main Extension Agreement with the District for the Construction of any new water mains or other facilities requiring upgrades or improvements to meet the demand for the project shall be completed prior to final Plan set submittal. • Construction deposits and bonds per the main extension agreement shall also be paid prior to final Plan set submittal			
13. NOISE			
N-1. Construction Hours. Construction activity for site preparation and for future development shall be limited to the hours between 7:00 a.m. and 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions.	Building Inspector	**Plan Requirements:** Two signs stating these restrictions shall be provided to the applicant and posted on site. **Timing:** Signs shall be in place prior to the beginning of and throughout all grading and construction activities. Violations may result in suspension of permits. **Monitoring:** Building Inspector shall spot check and respond to complaints.	
N-2. Mechanical Equipment. Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. Equipment engine shrouds shall be closed during equipment operation. Whenever feasible, electrical power shall be used to run air compressors and similar power tools rather than diesel equipment. The developer shall require all contractors, as a	CDD staff	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	

condition of contract, to maintain and tune-up all construction equipment to minimize noise emissions.			
N-3. Construction Vehicles. Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.	CDD staff	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	
N-4. Stationary Equipment. Stationary construction equipment that generates noise that exceeds 60 dBA Leq at the boundaries of the nearby residential uses shall be shielded.	CDD staff	**Plan Requirements:** Temporary noise barriers used during construction activity shall be made of noise resistant material sufficient to achieve a Sound Transmission Class (STC) rating of STC 40 or greater, based on sound transmission loss data taken according to ASTM Test Method E90. Such a barrier may provide as much as a 10 dB insertion loss, provided it is positioned as close as possible to the noise source or to the receptors. To be effective, the barrier must be long and tall enough (a minimum height of eight feet) to completely block the line-of-site between the noise source and the receptors. The gaps between adjacent panels must be filled-in to avoid having noise penetrate directly through the barrier. The recommended minimum noise barrier or sound blanket requirements would reduce construction noise levels by at least 10 dBA. **Timing/Monitoring:** The equipment area with appropriate acoustical shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the	

		designated location throughout construction activities.	
N-5. Sound Curtains. Temporary sound curtains shall be installed for the closest sensitive receptors if construction-related noise would exceed City thresholds. A sound curtain shall be installed and maintained along the easterly and northerly property lines throughout the duration of all construction activities on the project site.	CDD staff Building Inspector	**Plan Requirements:** The notes on all building and grading plans shall include these requirements. Applicant shall provide an acoustical analysis prepared by a licensed acoustical engineer to demonstrate whether earthwork and/or construction activities would exceed City noise thresholds for nearby sensitive receptors. **Timing:** The acoustical analysis shall be submitted prior to issuance of any building or engineering permits. If the use of a sound curtain is found to be necessary to mitigate construction-related noise, the sound curtain(s) shall be in place prior to the beginning of and throughout all demolition, grading, and construction activities. **Monitoring:** CDD shall be responsible for receipt and review of the acoustical analysis. If sound curtains are required, CDD shall ensure sound curtains are in place prior to start of construction. Building inspector shall spot check and respond to complaints.	
N-6. Noise Monitor. A disturbance coordinator shall be designated by the contractor. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g. starting too early, bad muffler, etc.) and shall require that	CDD staff	**Plan Requirements:** A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site. **Timing/Monitoring:** CDD shall monitor implementation of this measure throughout building and grading.	

reasonable measures warranted to correct the problem be implemented.			
N-7. Exterior Walls Construction. The exterior wall construction shall consist of wood frame, composed of 7/8" stucco, 30 lbs. felt vapor barrier, 6" studs with R-13 or thicker batt insulation and two layers of 5/8" type X gypsum board wall for the interior face, with a minimum Outside Inside Transmission Class (OITC) 40 (comparable to STC 50).	CDD staff Building Inspector	**Plan Requirements:** The exterior wall specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of grading permit.	
N-8. Ceiling/Roof Construction. Standard construction techniques shall be implemented (roofing, 30 lb. felt, truss or joists, R-30 insulation and 5/8" gypsum board) to provide the necessary 20 dBA noise reduction.	CDD staff Building Inspector	**Plan Requirements:** The construction techniques/specifications shall be shown on all building construction plans. **Timing:** Construction techniques for ceiling/roof shall be provided to CDD for verification, prior to initiating project construction activities. **Monitoring:** CDD/Building Inspector check construction techniques/specifications prior to issuance of grading permit.	
N-9. Windows/Doors Specifications. Glazing for all sound rated windows shall be of unequal thickness, or with one glazing light of laminated glass, in order avoid harmonic resonance at certain low frequencies. The windows should have the performance characteristics listed below to provide the required (or recommended) noise reduction for the south elevation. In addition to specifying the required Sound Transmission Class of building assemblies, flanking paths for	CDD staff Building Inspector	**Plan Requirements:** The windows/doors specifications shall be shown on all building construction plans. **Timing:** Final exterior wall specifications shall be provided to CDD for verification, prior to initiation of project construction activities. **Monitoring:** CDD/Building Inspector check plans prior to issuance of grading permit.	

noise should be reduced by sealing all potential leaks in construction by use of acoustical sealant and putty pads. Notes and details shall be included on the design drawings to insure that the construction details achieve the sound insulation potential of the basic building assemblies. The following are recommended additional notes and details that shall be followed: • Use permanently non-hardening acoustical sealant around perimeter of window frames and at joints of all wall and roof/ceiling building assemblies. Gypsum board seams and joints should be sealed with acoustical sealant to prevent all air leaks. If double-layer gypsum board is used, panels should be staggered. • Select window assemblies with effective, airtight, nonporous gaskets or weather stripping to minimize air infiltration and sound leakage. • Provide airtight construction at all exterior walls with acoustical sealant at interior and exterior of sole plates and sill plates, headers and top plate, where warping and drying may open construction joints over time. • Use door jamb and head gasketing and door bottom gasketing at entry doors to seal solid core doors against weather and sound. Caulk entry door thresholds as they are placed, provide rubber-seal door thresholds.			

such as those by Trademark Hardware. Some of the above steps are also necessary for compliance with CCR Title 24 Thermal Insulation requirements.			

25. APPENDIX J

RESPONSE TO COMMENTS

Appendix J – Response to Comments

COMMENTS AND RESPONSES

The following section contains comment letters and written responses to comments on the Draft Initial Study Mitigated Negative Declaration (ISMND). CEQA Guidelines Section 15088(b) requires that responses be made to only those comments that are specific to the Draft ISMND. Beyond the requirements set by CEQA and relevant court cases, every attempt has been made to respond to comments that address the project in general, in an effort to provide the most complete information possible.

Table 1 lists those persons, organizations, and public agencies that provided written comments on the Draft ISMND. The assigned comment letter number, letter date, letter author and affiliation with a particular organization, if presented in the comment letter or if representing a public agency, is also listed.

RESPONSIBILITIES OF THE COMMENTOR

CEQA Guidelines Section 15132(d) requires that the ISMND consist of the responses of the Lead Agency to significant environmental points raised in the review and consultation process. In addition, CEQA Guidelines Sections 15201 and 15204 discuss public participation regarding the review and evaluation of the ISMND. Specifically, Section 15204 states the following:

(a) In reviewing the Draft ISMND, persons and public agencies should 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. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an ISMND is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the ISMND.

(b) Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to [CEQA Guidelines] Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

(c) Reviewing agencies or organizations should include with their comments the name of a contact person who would be available for later consultation if necessary. Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility.

(d) This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section.

(e) Prior to the close of the public review period for an Initial Study Mitigated Negative Declaration, a responsible or trustee agency which has identified significant effects on the environment may submit to the lead agency proposed mitigation measures which would address those significant effects. Any

such measures shall be limited to impacts affecting those resources that are subject to the statutory authority of that agency. If mitigation measures are submitted, the responsible or trustee agency shall either submit to the lead agency complete and detailed performance objectives for the mitigation measures, or shall refer the lead agency to appropriate, readily available guidelines or reference documents which meet the same purpose.

Table 1: Comment Letters

Letter	Date	Commenter	Affiliation
1	10/17/2022	Julie Tumamait	Chumash Elder
2	11/07/2022	Sam Fearer	California Coastal Commission
3	11/04/2022	Sam Fearer	California Coastal Commission
4	11/ 08/ 2022	Ted Hamilton-Rolle	Santa Barbara County Air Pollution Control District
5	11/29/2022	Crystal Mendoza	Santa Ynez Band of Chumash Indians
6	11/01/2022	Environmental Review Committee	City of Carpinteria

Letter 1 Julie Tumamait-Stenslie, Chumash Elder

1-1: Julie Tumamait-Stenslie Comments

Nick Bobroff with the Community Development Department addressed Julie Tumamait-Stenslie comments and deferred to her expertise for the issue of monitoring during construction. Julie had no further comments. Mitigation Measure CR-1 has been updated to require initial ground disturbance activities (i.e., grading and excavation) to be monitored by a qualified archaeologist and Chumash Native American observer.

Letter 2 Sam Fearer, Coastal Program Analyst, California Coastal Commission

2-1: General Comment

Redacted previous comment for a 50-ft setback surrounding Swale B in Response 3-1. Redaction has been noted.

Letter 3 Sam Fearer, Coastal Program Analyst, California Coastal Commission

3-1: General Comment

Recommended that protected riparian areas and their required setbacks be planted with native riparian species. The planting of native drought tolerant species in the protected riparian habitat areas and their setbacks, as applicable, is addressed in Mitigation Measure BIO-2, Riparian Habitat Restoration Plan.

3-2: General Comment

The issue of providing low cost overnight accommodations is not a CEQA matter. It will be addressed through a project condition of approval on the Coastal Development Permit in order to meet the requirements of Section 30213 of the Coastal Act and the City's LUP.

Letter 4 Ted Hamilton-Rolle, Santa Barbara County Air Pollution Control District

4-1: General Comment

Update references to the current 2019 Ozone Plan and correct District website. Document updated to reflect comments in Section 3, Air Quality, Existing Environmental Setting, Page 18, Paragraph 1.

4-2: General Comment

Update Air Quality summary table to show County's State designation for Ozone (O_3) to "Nonattainment." Document updated to reflect comments in Section 3, Air Quality, Table 3.3-2, Page 19.

Letter 5 Crystal Mendoza, Santa Ynez Band of Chumash Indians

5-1: General Comment

No comments on the project at this stage.

Letter 6 City of Carpinteria, Environmental Review Committee

6-1: General Comment

ERC Member, Natasha Lohmus, sought clarification that the "Right to Farm" Notice would be recorded against the property's deed. She also suggested the project utilize permeable paving materials and rooftop solar. Mitigation Measure AG-1 (page 17) requires the "Right to Farm" notice to be recorded against the title of the property. The proposed project includes use of permeable concrete pavers for parts of its parking lot to address stormwater requirements and will be required to include rooftop solar and battery storage per the most current Title 24 requirements of the California Building Code (CBC). No changes to the ISMND are required to address these comments.

6-2: General Comment

ERC Member, Vince Semonsen, sought clarification on the cut and fill quantities for proposed earthwork and inquired on the extent of earthwork and excavation. Earthwork quantities were corrected in the "description of project" section of the ISMND (page 2) to account for total cut, fill and export quantities. The project description (pages 1 through 3) and Geological Resources section (pages 44 through 48) of the ISMND describe proposed earthwork and grading activities. No further changes are required.

6-3: General Comment

ERC Member, Natasha Lohmus, recommended that ongoing protection of habitat areas and their required buffers need to be protected for the life of the project. This has been acknowledged and addressed as part of Mitigation Measure BIO-2 (page 39).

6-4: General Comment

ERC Member, John Ilasin, inquired whether the traffic study was sent to CalTrans for review. The ISMND and the Traffic Study have been routed to CalTrans as part of the public review of the draft. He also requested that the references to "finished floor" be changed to instead refer to the "lowest floor" in the flood zone discussions of the ISMND. This change has been made (see pages 56 through 65).

6-5: General Comment

ERC Member, Steve Goggia, recommended that the discussion about water resources acknowledge the project's requirements to comply with WELO, and also asked that the Noise discussion of the ISMND discuss noise mitigation measures incorporated into the Caltrans highway widening project. These comments have been updated and reflected in the ISMND. The water resources discussion in the Utilities and Services section of the ISMND includes reference to the project's requirement to comply with WELO (see page 91). CalTrans' use of quiet pavement and construction of sound walls for the adjacent U.S. Highway 101 widening project to cut down on highway noise for adjacent land uses has been included in the future noise sources discussion of the ISMND (page 71).

6-6: General Comment

ERC Member, Vince Semonsen, asked whether there would be an opportunity for the City Biologist to review the restoration plan. The Draft Plan will be routed to the City Biologist for review and comments prior to City acceptance of the plan. Mitigation Measure BIO-2 (page 39) has been updated to include City Biologist review and approval of the restoration plan prior to City acceptance of the Plan.

CITY OF CARPINTERIA
5775 Carpinteria Avenue
Carpinteria California 93013

ARCHITECTURAL REVIEW BOARD
Meeting Date: January 26, 2023

ACTION MINUTES

The meeting was called to order at 5:31 p.m. by Chair Stein.

ROLL CALL

Boardmembers present: Brad Stein, Chair
Amy Blakemore, Vice Chair
Richard Johnson

Boardmembers absent: Patrick O'Connor
Jim Reginato

OTHERS PRESENT: 1 member of the public were in attendance.

PUBLIC COMMENT: None.

PROJECT REVIEW

1) Project: City of Carpinteria Storage Building, Project 22-2194-DP/CDP
Address: 5775 Carpinteria Avenue
Applicant: Matt Roberts, Director of Parks, Recreation, and Public Facilities
Planner: Syndi Souter

Request of Matt Roberts, Director of Parks, Recreation, and Public Facilities, agent for the City of Carpinteria, to consider project 22-2194-DP/CDP for preliminary review of a request to construct a new 1,500 square-foot storage building with a maximum height of 15-feet on the city hall campus. The property is a 4.81-acre parcel zoned Community Facility (CF) and shown as APN 001-170-018, addressed as 5775 Carpinteria Avenue.

No ex parte communications were disclosed.

Staff presented the project and explained that the purpose of the building was to store the City's archive files and other documents. Staff clarified that several trees, including a pepper tree and several fruit trees, would be removed for the project, but that the avocado tree would remain.

Boardmember Johnson inquired about the number of exterior lights on the building, and staff responded there would be five lights and named the locations. He then asked about the wattage, and staff responded the lights would be LEDs. Lastly, he asked about why the area to the west of the existing Public Works building was not considered to be the site for the new building, and staff responded that the area to the west is the Public Works yard where they store the dumpsters and other materials that are unsightly and that should be out of the public view.

Boardmember Stein mentioned Boardmember O'Connor's letter, and asked about the impacts to the parking lot. Staff clarified that the parking areas would remain as-is and that the new building would not change the parking.

Matt Roberts, Parks, Recreation and Facilities Director, added that he chose the building style with the largest roof overhang, which is approximately 2 feet. He added that he thought the existing avocado

DRAFT

tree would screen approximately half the building from Carpinteria Avenue. The Boardmembers requested to see a better aerial view of the project area, so staff provided an aerial and street views from the internet. The Boardmembers determined that the avocado tree would screen a small amount of the building, and that the location would not impact the parking lot. Mr. Roberts continued on to explain the overall plan for the City Hall campus growth in the future, but stressed the urgent need for a storage building now. He added that the current City storage system is inefficient, and that the building would also allow the storage to be more accessible and better organized. Boardmember Johnson asked about the 10-foot plate heights, and Mr. Roberts responded that the taller walls would allow more shelves for storage.

Public Comment:
A comment letter was submitted by Patrick O'Connor prior to the meeting. The letter is briefly summarized below. A copy of the letter is on file with the Community Development Department.

Patrick O'Connor submitted a letter with his comments and concerns about the project because he was unable to attend the meeting and participate in the Board's discussion. His main concerns were the current state of the existing Public Works building and yard area, removal of trees for the project, potential impacts to parking, how the proposed building will relate to the existing Public Works building, and the need to enhance the aesthetics of the building as viewed from Carpinteria Avenue.

Boardmember Discussion:
Boardmember Blakemore began the discussion with comments about the proposed landscaping. She suggested mulch instead of the silver carpet to eliminate irrigation lines and save water. She suggested alternatives for taller plants along the north elevation (Carpinteria Avenue) in addition to the sage. She added that the location of the building would help define the area and screen the Public Works parking lot. Mr. Roberts added that the persimmon tree could be transplanted to provide additional screening.

Boardmember Stein stated that he did not have a problem with the project and that he understood the necessity for the building. He agreed with Boardmember Blakemore's comments about using mulch and planting taller plants and trees to screen the building from Carpinteria Avenue.

Boardmember Johnson suggested a tall, dense, evergreen hedge, perhaps lemonade berry, to screen the building from Carpinteria Avenue. He said the project needs a landscaping plan with a variety of species to soften and screen views from Carpinteria Avenue. He suggested adding some architectural elements to the roof, such as a cupola or roof monitor, to add visual interest to the building. He suggested a wall with materials similar to City Hall could also be constructed for screening.

ACTION: Motion by Boardmember Johnson, seconded by Boardmember Blakemore, to recommend preliminary/final approval to the Planning Commission with the following comments:

- Use a vertical landscaping element or screening element along the north-facing elevation of the building to help soften views of the building;
- Consider the introduction of dormers, cupolas or similar decorative features to the roof to add architectural interest; and
- Final review of the proposed landscape plan by Boardmember Blakemore prior to issuance of building permits.

VOTE: 3-0

DRAFT

OTHER BUSINESS: None

CONSENT CALENDAR:

2. Action Minutes of the Architectural Review Board Meeting of December 15, 2022

ACTION: Item continued to next meeting due to lack of quorum present

MATTERS REFERRED BY THE PLANNING COMMISSION/CITY COUNCIL: None

MATTERS PRESENTED BY BOARDMEMBERS/STAFF:

- 5030 Carpinteria Avenue Exterior Paint Colors: The ARB reviewed and approved the proposed new paint colors for the building at 5030 Carpinteria Avenue. Approved colors are Benjamin Moore "Coventry Gray" (HC-169) for the body; and "Amherst Gray" (HC-167) for the accent color (used for downspouts, parking railings, etc.). Exposed brick would remain as-is.
- Boardmembers encouraged Matt Roberts to explore permanent shelter ideas for the beach tractor stored at the Elm Avenue street end.

ADJOURNMENT

Chair Stein adjourned the meeting at 6:18 p.m. to the next regularly scheduled meeting to be held at 5:30 pm on Thursday, February 16, 2023. All Boardmembers indicated they expected to be present.

_____
Chair, Architectural Review Board

ATTEST:

_____
Secretary, Architectural Review Board

DRAFT

CITY OF CARPINTERIA
5775 Carpinteria Avenue
Carpinteria California 93013

ARCHITECTURAL REVIEW BOARD
Meeting Date: February 16, 2023

ACTION MINUTES

The meeting was called to order at 5:30 p.m. by Chair Stein.

ROLL CALL

Boardmembers present: Brad Stein, Chair
Amy Blakemore, Vice Chair
Richard Johnson
Patrick O'Connor

Boardmembers absent: Jim Reginato

OTHERS PRESENT: 8 members of the public were in attendance.

PUBLIC COMMENT: None

PROJECT REVIEW

1) Project: Rolph Residence Addition and Remodel, Project 22-2182-ARB/CDP
Address: 4715 Aragon Drive
Applicant: Alex Pujo, architect, for Mark Rolph
Planner: Syndi Souter

Request of Alex Pujo, architect, for Mark Rolph, to consider project 22-2182-ARB/CDP for preliminary review of a request to construct a new 1,274 square-foot two-story addition, a new 619 square-foot attached two-car garage, two new covered patios totaling 717 square feet with a jacuzzi and outdoor kitchen, an interior remodel, new landscape/hardscape, and demolition of an existing bedroom and detached garage. The resultant residence would be 3,461 square feet in size and the maximum roof ridge height of the residence would remain unchanged at 22 feet. The property is a 9,147 square-foot parcel zoned Single Family Residential (7-R-1) and shown as APN 003-600-036, addressed as 4715 Aragon Drive.

No ex parte communications were disclosed.

Staff presented the project and explained the difference between the actual new proposed square footage and the perceived square footage due to the additional large covered patios, the location in a predominantly single-story neighborhood, and that the existing residence is already one of the largest in the area. She also presented the proposed materials and example photographs, along with the landscaping and hardscape improvements. She shared photographs of the story poles, including photographs from different public views in the vicinity. Boardmember Johnson inquired about the locations of the brick and plaster on the exterior, and staff responded that the entire exterior would be brick veneer with plaster walls under the covered patios.

Mark Rolph, owner, introduced himself and his wife to the Board, and shared that he is a home builder. He explained that the existing house has a number of problems, including a small kitchen and minimal mountain views. He eliminated the second-story rear windows to increase privacy, and added additional windows on the front to maximize mountain views. He shared that he got the proposed style from Montecito. He noted that there are 38 other two-story homes in the neighborhood, most of which have stacked second stories. He added that a prior owner had plans to extend the second story. He

explained that he wanted to balance the house by extending the second floor over the new garage. He described the unusual lot shape and siting of the additions, and shared photographs of other two-story homes with the Board.

Charles McClure, landscape architect, explained that the landscaping plan would be 100% new plantings with the exception of the existing perimeter hedge. There would be a new planter in the front yard, a new walkway to the front door, and simple plantings to upgrade the exterior. Mr. Rolph added that additional trees were not proposed in the front yard because he did not want to block the mountain views.

Boardmember Blakemore asked how high the existing hedge was, and the owner responded that it is 7-8 feet tall. She also asked about some of the proposed landscaping features, and Mr. McClure responded that they were plinths for urns to sit upon. Boardmember O'Connor asked about the depth of the roof eaves, and questioned if the design with the second stairway to the new master bedroom could eventually lead to a second dwelling instead of a bedroom. The owner replied that the second staircase was necessary to achieve the desired vaulted ceiling in the new master bedroom.

Public Comment:
Paul Wright spoke and shared that he is a neighbor to the south of the project site. He said he is concerned about the project blocking his mountain views, that the size of the house is massive for the neighborhood, and that he objects to the project as proposed. He noted that the existing residence is already close to the property lines in some places, and that the additions would also be tight. He said the proposal is just too much house for the area.

Nancy Garrison commented that the project is incompatible with the surrounding homes and not compatible with Carpinteria. She commented that it would better fit in Montecito. She cited several Objectives, Policies, and Design Guidelines that were applicable to the project. She shared statistics regarding the four other two-story homes in the immediate vicinity and sizes of other surrounding homes in the neighborhood with data from the Assessor's Office. She shared concerns about solar access compliance, maxing out the setbacks, total loss of her mountain views, and impacts to public mountain views. She presented photographs of the story poles with the addition areas blocked out to the Board. She questioned the size, bulk, scale, and neighborhood compatibility of the project and requested that the Board ask the applicant to scale down the project.

Doug Garrison spoke and shared his and his wife's history in Carpinteria and the purchase of their forever home with foothill and mountain views. He commented that the proposal maximizes the property owner's mountain views at the cost of eliminating the neighbors' mountain views. He suggested that a re-designed project with a single-story addition would be better and more compatible with the neighborhood.

Cheryl Wright spoke and shared that the proposal reminds her of a home on a large lot in Palm Springs with an expansive outdoor patio area. She expressed concerns about the size of the house, noise from parties on the patios, construction dust and noise, and losing her mountain views. She also noted that public views of the mountains would be lost.

Public comment letters were submitted prior to the meeting by Nancy Garrison and Cheryl Wright. The content of the letters largely mirrored their respective verbal comments shared at the meeting. A third letter, from an anonymous source was submitted via Granicus and suggested that the curved

entry way was not consistent with the rest of the appearance of the home. Copies of the comment letters are on file with the Community Development Department.

Boardmember Discussion:
Boardmember O'Connor began the discussion by sharing that he can see the look that is trying to be achieved with the design, materials, and landscaping. He was concerned about the drainage, and suggested the design should be more centered to reduce the size, bulk, and scale. He added that the windows and garage doors appeared heavy.

Boardmember Johnson commented that he is okay with the design theme, but that the style is not beachy. He acknowledged that the large lot allows for a larger house, and that second stories are going to become more common in the neighborhood in the future, but that others' mountain views should not be completely eliminated. He suggested that the applicant should work with the neighbors to come up with an acceptable design. He commented that the patios could be covered with trellises instead of a roof. He questioned the possibility of the proposed master suite becoming a rental unit due to the oddly located second staircase. He commented that the all brick exterior is more of an East Coast/Long Island look and not "Carp Cod." He liked the arch over the entry, but felt it needed to be better integrated into the design. He said the mass over the garage needs to be reduced, and he likes the landscaping plan.

Boardmember Blakemore shared that she is very familiar with the neighborhood, and that this proposal blows the other homes, "out of the water." She said the project is maxed-out and needs to be re-designed to reduce the size, bulk, and scale, and not block mountain views. She added that she does not like the arch above the entry. She liked the landscaping plan and thought it had a great plant palette with low maintenance and low water use. She summarized that the design is too bulky, big, and heavy for the space.

Boardmember Stein concurred with the other Boardmembers' comments. He said that it was a nice project that would fit in Montecito on a 1-2 acre lot. He commented that the project is too massive for the neighborhood, and that the size, bulk, and scale are issues. He said he also did not like the arch over the front entry. He suggested that the applicant work with the neighbors on a new design. He added that he did like the landscaping plan.

Mr. Rolph and the Board had a discussion about ways to modify the design to address the Board and neighbor comments.

ACTION: Motion by Boardmember O'Connor, seconded by Boardmember Blakemore to recommend continuance of the project to the March 16th meeting with direction to respond to the Board's provided comments.

VOTE: 4-0

OTHER BUSINESS: None

CONSENT CALENDAR:

2. Action Minutes of the Architectural Review Board Meeting of December 15, 2022

Boardmember Blakemore pointed out a typographical error in her deliberations on the Flourish pool and patio structure item.

ACTION: Motion by Boardmember Johnson, seconded by Boardmember Blakemore to approve the Minutes as revised.

VOTE: 3-0-1 (Stein abstain)

MATTERS REFERRED BY THE PLANNING COMMISSION/CITY COUNCIL: None

MATTERS PRESENTED BY BOARDMEMBERS/STAFF: None

ADJOURNMENT

Chair Stein adjourned the meeting at 6:45 p.m. to the next scheduled meeting to be held at 5:30 pm on Thursday, March 16, 2023.

_____
Chair, Architectural Review Board

ATTEST:

_____
Secretary, Architectural Review Board

DRAFT

April

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
						1 9am Carp Beautiful
2	3 10am Admin Services Mtg. CM 3pm FY 23-24 Budget Review CM 5:30pm Planning Comm. Mtg. CCTV	4 10am Supervisor's meeting CC 2pm CIP Study CC 4pm FY 23-24 Budget Review CM 5:30pm School District CCTV	5 1:30pm Town Hall CC 2pm PW Staff Meeting CM 1pm FY 23-24 Budget Review CM 2:30pm FY 23-24 Budget Review CM 5:00pm Fire District. Mtg. CCTV	6 8am DTBAB 10am Admin Services Mtg. CM 11am Parks Department Mtg. CM 1:30 Skate Park Meeting LR 2:30pm All CDD Staff Mtg. CM	7	8 9am -1pm ABOP – PW Yard
9	10 8:30am Senior Serv. committee CC 10am Admin Services Mtg. CM 3pm City Council Closed Sess. CM 5:30pm City Council Mtg. CCTV	11 10am Supervisor's meeting CC 1:30pm PW/Admin EP Meeting LR 2:30pm CDD Staff Mtg. CM 4pm H/R Admin meeting CM 4:30pm School Dist. Closed Sess. SR 5:30pm School Dist. Mtg. CCTV	12 2pm PW Staff Meeting CC 5:30pm Water District. Mtg. CCTV	13 9am Special Council Meeting CC 10:30am IDAG Mtg. CC 11am Parks Department Mtg. CM 1:30 Skate Park Meeting LR 2:30pm Code Compliance Mtg. CM 5:30pm ARB CC	14	15
16	17 10am Admin Services Mtg. CM 3pm FY 23-24 Budget Review CM 5:30pm City Council Special Meeting CCTV	18 10am Supervisor's meeting CC 2:30pm CDD Staff Mtg. CM 3pm FY 23-24 Budget Review CC	19 10am Admin Services Mtg. CM 1pm FLSA Compensation Issues CM 2pm PW Staff Meeting CC 5:30pm Traffic Safety Committee CC	20 10:30 Library Staff Mtg. LR 11am Parks Department Mtg. CM 1:30 Skate Park Meeting LR 2:30pm Code Comp Mtg. CM LR	21 8am Public Official Social Media Training CC	22 9am -1pm ABOP – PW Yard
23	24 10am Admin Services Mtg. CM 3pm City Council Closed Sess. CM 5:30pm City Council Mtg. CCTV	25 10am Supervisor's meeting CC 2:30pm CDD Staff Mtg. CM 4pm H/R Admin meeting CM 4:30pm School Dist. Closed Sess. SR 5:30pm School Dist. Mtg. CCTV	26 8am AUDIT (all day) LR 2pm PW Staff Meeting CC 5:30pm Water District. Mtg. CCTV	27 11am Parks Department Mtg. CM 1:30 Skate Park Meeting LR 2:30pm Code Comp Mtg. CM 3:30pm Monthly Finance Budget CM 5:30pm ARB CC	28	29
30		LR: Lobby Meeting Room SR: Side Conference Room CC: Council Chamber CCTV: Council Chamber Televised CM: Council Meeting Room				

City of Carpinteria
Planning Activity Summary

March 2023

1. In 30-day review process
2. Incomplete
3. Schedule for ARB
4. Director's Decision
5. Schedule for PC
6. PC approved
7. Schedule for CC
8. CC Approved
9. Schedule for final ARB
10. Final ARB Approval
11. Schedule for CCC
12. In plan check
13. BP issued
14. Under construction
15. C of O issued

Last Edited 03/30/2023

Project #	Owner / Applicant	Address	Street	Project Description	Activity	Planner	Status	Code Violation
23-2217-CUPR	AT&T Wireless	850	Linden (adj)	AT&T small cell wireless facility co-located on an SCE streetlight pole within the public right-of-way.	Submitted 3/24/2023. Under review.	Nick	1	
23-2216-CUPR	AT&T Wireless	323	Elm Avenue (adj)	AT&T small cell wireless facility co-located on an SCE streetlight pole within the public right-of-way.	Submitted 3/24/2023. Under review.	Nick	1	
23-2215-SIGN	Neon Plus Signs / Fancy Floors	1015	Casitas Pass Road	1 wall electric channel letter sign and 1 hanging sign	Submitted 3/23/2023. Under review.	Marysol	1	
23-2214-CDP/ADU	David Pinkernell	5556	Calle Ocho	Convert 580sf detached garage to a 390sf ADU and a 190 sf garage	Submitted 3/20/2023. Under review.	Syndi	1	
23-2213-CDP/ADU	John & Koreen Pagano	1286	Casitas Pass Road	Convert 489sf detached family room to an ADU	Submitted 3/15/2023. Under review.	Syndi	1	
23-2212-CDP/ADU	Colleen Albert	1387	Vallecito Place	Convert 304sf detached garage to an ADU	Submitted 3/6/2023. Under review.	Syndi	1	
23-2206-DPR/CDP	Randy Jones	5217	Cambridge Lane	Demo 123sf sunroom and add 148sf bedroom addition	Submitted 1/31/2023. Incomplete 2/28/2023. Resubmittal 3/20/2023.	Syndi	1	
23-2200-CUP/CDP	Patrick O'Connor	5395	Eighth Street	New driveway & garage remodel.	Submitted 1/18/23.	Nick	1	
22-2183-ARB/CDP	Tyler Mayer	5557	Calle Arena	Addition to SFD	Submitted 9/12/2022. On hold pending project redesign. Resubmittal 12/14/2022. Incomplete 1/11/2023. Resubmittal 3/28/2023.	Syndi	1	
23-2209-CDP/ARB	Mark & Megan Pfaff	5559	Calle Arena	New 2,631 sf 2-story SFD with a 401sf attached 2-car garage.	Submitted 2/8/2023. Incomplete 3/10/2023.	Syndi	2	
23-2207-DP/LCPA/TPM/CDP	Carp Bluff, LLC	5669 &5885	Carpinteria Avenue	New 99-room resort and 41-unit apartment building.	Submitted 2/3/2023. Incomplete 3/3/2023.	Syndi	2	
22-2191-CDP/ARB	Richard and Lisa Shattuck	5631	Canalino Drive	Remodel and 429 square foot addition.	Submitted 10/31/2022. Incomplete 11/29/2022. Resubmittal 12/21/2022. Incomplete 01/18/2023. Resubmittal 3/21/2023. Under review.	Marysol	2	
22-2175-DP/CDP	Tim Finnigan / Saticoy Development LLC	4253	Carpinteria Ave	Construct 3 new units	Submitted 8/8/22. Incomplete 9/7/22.	Nick	2	
22-2164-DPR/CDP	Parga Construction for The Spot	389	Linden Avenue	Patio Cover over steel structure and canvas shades	Submitted 6/23/2022. Incomplete 7/21/22. Resubmittal 12/22/2022. Incomplete 1/19/2023. Schedule for ARB 3/16/2023.	Marysol	2	
22-2145-ARB/CDP	Heather & Sean Findley	864	Arbol Verde Street	Garage conversion to living space and 567sf addition with new garage and foyer.	Submitted 3/15/2022. Incomplete 4/14/2022. On hold pending ADU ordinance.	Syndi	2	
21-2099-CUP	Family Baptist Church	5026	Foothill Road	New portable classrooms for elementary school	Submitted 3/15/2021. Incomplete 4/13/2021. Resubmitted 5/26/2021. Incomplete 6/24/2021. Prelim ARB 6/17/2021, continued to 7/1/2021 with comments. Project on hold per applicants.	Marysol	2	

20-2073-SIGN	Ramiro Vega	830	Maple Avenue	New illuminated sign (as-built)	Submitted 11/6/2020. Incomplete 12/3/2020. Pending resubmittal.	Marysol	2	yes
20-2067-DP/CUP/CDP	Jens Amlie	845	Concha Loma Drive	460 sf master bedroom addition to (e) SFD	Submitted 10/1/2020. Incomplete 10/30/2020. Resubmitted 8/16/2022. Incomplete #2 9/15/2022.	Syndi	2	
20-2047-DP/CDP	Chevron	5663	Carpinteria Ave	Seal rookery overlook improvements	Submitted 3/26/2020. Under review. Incomplete 4/23/2020. Awaiting resubmittal.	Syndi	2	
20-2045-LM	Rafael Hernandez	4950 & 4954	Fifth Street	Voluntary lot merger	Submitted 3/11/2020. Sent to City Surveyor for review 3/23/2020. 1st corrections received & sent to applicant 4/9/2020.	Syndi	2	
20-2033-SIGN	Yummy Yogurt	1005	Casitas Pass Road	New sign	Submitted 2/7/2020. Incomplete 3/6/2020. Resubmitted 4/10/2020. Under review. Pending resubmittal.	Marysol	2	Yes
20-2030-CUP	Procore	6395 B&C	Cindy Lane	Convert 2 warehouse buildings to a business training center. Total square footage is 60,522 sf, and includes a new kitchen and mezzanine	Submitted 1/8/2020. Incomplete 2/7/2020. Awaiting resubmittal.	Syndi	2	
19-2018-FENCE	Ernesto Verburgt	4516	El Carro Lane	7 foot side yard fence (resulting from grade difference)	Submitted 10/25/2019. Incomplete. Partial resubmittal 12/10/2019. Building Permit in plan check. Awaiting solution for last incompleteness item.	Marysol	2	Yes
18-1954-DPR/CDP	Winfred Van Wingerden	4180	Via Real	New gazebo, paint colors, and landscaping	Submitted 12/27/18. Incomplete 1/25/19. Resubmitted 2/11/19; under review. Revised scope; complete 3/7/19. Revised scope, resubmitted materials 4/19/19. Roy H. advised applicant new gazebo triggers ADA issues.	Syndi	2	Yes
15-1783-SIGN/FENCE	Arbor Trailer Park	4677	Carpinteria Avenue (Ninth Street)	New frontage fences and signage	Submitted 08/05/15. Need survey from PW. Incomplete 08/17/15. See Matt M for PW status.	Marysol	2	
23-2199-CON	Brandon Bono	4788 & 4792	Dorrance Way	Remodel and 354sf 2nd-story addition to duplex	Submitted 1/18/2023. Tentatively scheduled for ARB on 4/27/2023.	Syndi	3	
22-2195-ARB/CDP	Laura Mickelson	5518	Calle Arena	New 344sf addition to SFD & 300sf accessory structure	Submitted 12/27/2022. Incomplete 1/26/2023. Resubmittal 2/15/2023. Complete 3/17/2023. Tentatively scheduled for ARB on 5/11/2023.	Syndi	3	
22-2184-DP/CDP/ARB	Gregg & Beth Scerni	4610	Fourth Street	New 2,257sf 2-story SFD with 504sf detached 2-car garage	Submitted 9/13/2022. Incomplete 10/13/2022. Resubmittal 3/6/2023. Complete 3/21/2023. Tentatively scheduled for ARB on 4/13/2023.	Syndi	3	
22-2182-ARB/CDP	Mark Rolph	4715	Aragon Drive	1,375sf two-story addition to (e) SFD	Submitted 9/6/2022. Incomplete 10/6/2022. Resubmittal 11/6/2022. 2nd Incomplete 12/7/2022. Resubmittal 12/12/2022. Complete 1/3/2023. Prelim review at ARB on 2/16/2023. Awaiting revised plans.	Syndi	3	

22-2168-DP/CDP	Sandpiper MHP	3950	Via Real	Phase 2-new solar canopies in side yard setback.	Submitted 7/13/2022. Incomplete 8/11/2022. Resubmitted 8/31/2022. Complete 9/28/2022. To ARB for Preliminary review on 10/27/2022. Awaiting revised plans.	Syndi	3	
22-2167-ARB	Sandpiper MHP	3950	Via Real	Phase 1-new solar canopies over parking & common open space area.	Submitted 7/13/2022. Incomplete 8/11/2022. Resubmitted 8/31/2022. Complete 9/28/2022. To ARB for Preliminary review on 10/27/2022. Awaiting revised plans.	Syndi	3	
22-2162-DP/CDP/ARB	John Howard	4818	Dorrance Way	New 1,895sf 2-story SFD and a detached 471sf garage with a 408sf workshop above.	Submitted 6/9/2022. Incomplete 7/8/2022. Resubmitted 9/8/2022. 2nd Incomplete 10/3/2022. Resubmittal 12/7/2022. Complete 12/28/2022. To ARB on 3/16/2023. Awaiting revised plans.	Syndi	3	
21-2128-DP/CDP	Chevron	5675	Carpinteria Avenue	Decommissioning and Remediation of the Carpinteria Oil and Gas Processing Facilities	Submitted 10/25/2021. Labels Submitted 11/10/21. Complete 3/8/22. NOP Issued 8/1/2022. IS comment period extended to 9/30/2022.	Steve/Luis	3	
19-2006-CON	Richard Smith	5510	Callejon Dr	Remodel (E) SFD, construct 2nd story addition, & addition of ADU	Submitted 9/6/19. ARB concept review 11/21/19. Revised ARB concept review 8/27/20.	Nick	3	
18-1942-DP/CDP	Carp Unified School Dist.	5201	Eighth Street	Replace portables with Modulars	Submitted 10/15/2018. Incomplete 11/14/18. Resubmitted 3/6/19, Complete 4/4/19. Waiting for requested materials for ARB.	Steve	3	
23-2211-SIGN	Pro Deo Foundation / Coastland	5036	Carpinteria Avenue	New retail signs	Submitted 3/3/2023. Approved 3/30/2023.	Marysol	4	
22-2185-CDP	City of Carpinteria		Poplar Street & 5800 block Via Real	Via Real Stormwater Project	Submitted 9/16/22. Incomplete 10/7/22. Complete 12/1/22.	Nick	4	
22-2170-SIGN	City of Carpinteria	5781	Carpinteria Avenue	New ground sign for the skate park	Submitted 7//2022. Director approval 8/2/2022.	Marysol	4	
22-2159-ARB/CDP	Greg Lee	501	Concha Loma Drive	New 497sf garage, 97sf addition, interior remodel, and demo (e) 323sf carport.	Submitted 5/26/2022. Incomplete 6/23/2022. Resubmittal 7/8/2022. Complete 7/27/2022. To ARB for Preliminary review on 9/15/2022. Resubmittal 12/19/2022. Final ARB review on 3/16/2023. Revised plans received 3/20/2023. BP#13859 in at-risk plan check.	Syndi	4	
21-2116-ARB	Motel 6	5550	Carpinteria Avenue	Lighting and landscaping	Submitted 7/14/2021. Incomplete 8/12/2021. Resubmitted 11/10/2021. Incomplete 12/9/2021. Resubmittal 12/20/2021. Incomplete 1/19/2022. Pending Resubmittal. ARB 4/28/2022. Director approved 7/5/22. Coastal Commission Appeal period ends 8/4/2022. Property ownership has changed.	Marysol	4	Yes

21-2112-LCPA	City of Carpinteria		City wide	Downtown Design Overlay Program	RRM Drafting DDO amendments. Edits and comments to Ch 14 resubmitted to RRM.	Rita	4	
21-2111-LCPA	City of Carpinteria		City wide	Density Bonus Program	In progress. Public Draft in preparation.	Rita	4	
20-2074-CDP	AT&T / Eukon Group	323	Elm Avenue	new small wireless facility in City ROW.	Submitted 11/11/20. Incomplete 11/19/20. Resubmitted 5/24/21. Incomplete 6/3/21. Resubmitted 10/28/21. Complete 11/22/21. Director Approved 1/7/22.	Nick	4	
19-1986-LCPA	City of Carpinteria		Citywide	Development Design and Housing Regulation Changes	See 21-2112 for Downtown Overlay.	Steve/Rita	4	
18-1935-ARB	Gerardo Celio	1466	Azalea Drive	Demo of structures, new California roof over flat roof garage, addition of 181 sf	Submitted 08/30/2018. Incomplete 9/28/2018. ARB 10/11/2018. Pending resubmittal. Resubmitted 05/14/2019. Complete 06/13/2019. Resubmittal 10/14/2019. Pending another resubmittal for Director-level final review. BP submitted for demo of unpermitted construction only.	Marysol	4	
22-2194-DP/CDP	City of Carpinteria	5775	Carpinteria Avenue	New 1,500sf storage building	Submitted 10/12/2022. Incomplete 11/9/2022. Resubmittal 11/29/2022. Complete 12/28/2022. To ARB for prelim/final on 1/26/2023. Tentatively scheduled for PC on 5/1/2023.	Syndi	5	
22-2157-GPA	City of Carpinteria		Citywide	Housing Element Update	Kick off Meeting June 6, 2022. Discussion of strategies at PC 8/1/2022.	Steve	5	
21-2131-DP/CDP/ARB	Tim Finnigan	4775	Seventh Street	New SFD with 4-car garage below	Submitted 11/8/2021. Incomplete 12/8/2021. Resubmittal 3/18/2022. Incomplete #2 4/14/2022. Resubmittal 4/25/2022. Incomplete #3 5/24/2022. Resubmittal 6/7/2022. Complete 7/6/2022. To ARB for Preliminary review on 9/15/2022. Awaiting revised plans.	Syndi	5	

16-1822-DP/CDP	Via Real Hotel	4110	Via Real	New 110-room hotel	Submitted 4-19-16. Incomplete 5-18-16. Resubmittal 7/14/16. Incomplete 8/11/16. Resubmittal 9-12-16. Incomplete 10/11/16. Resubmitted 10/31/16. Complete 11/30/16. Prelim ARB 12/15/16, cont'd to future meeting. In-progress ARB review 2/16/17. Prelim ARB approval 3/30/17. Env. review underway. Reviewed updated biological/wetland reports; CCC determined creek regulations apply. Site visit w/ CCC 6/8. Revised project submitted 7/24/19; under review. Revised preliminary ARB review 8/29/19; continued to 11/21/19 ARB meeting. Revised prelim ARB approval 11/21/19. Draft MND released for 30-day public comment period 10/15/22. ERC recommended approval of MND 11/1/22 to PC. Proposed Final MND underway. To PC early 2023.	Nick	5	
16-1810-LCPA	City of Carpinteria		Citywide	General Plan/Coastal Land Use Plan Update	kick off meeting April 27, 2016. Ongoing through 2024.	Steve	5	
15-1781-DP/CDP	Bernardo Cruz	4675	Carpinteria Ave	Construct (N) 2-story mixed use building	Submitted 07/09/2015. Incomplete 8/06/15. Concept ARB review 03/29/20. Resubmittal 07/22/20. Incomplete 8/21/20. Resubmitted 2/8/21. Incomplete 3/8/21. Resubmitted 5/17/21. Prelim ARB Approved 9/16/21. to PC 2/6/23.	Nick	5	
05-1210-ZTA/LCPA	City of Carpinteria		Citywide	Zoning Code Update	Kick-off meeting 4/20/05. Joint Study Session 5/16/05. All administrative draft chapters delivered 5/12/06. Now connected to the 3-year Principal Planner position work effort through a CCC grant.	Steve	5	
22-2147-DP/CDP	City of Carpinteria		Linden to Holly	Interim Coastal Vista Trail Spur	Submitted 3/28/2022. Complete 4/27/2022. Prelim ARB approved 5/26/2022. PC approved 7/5/2022.	Syndi	6	
22-2140-CUP	Carpinteria Valley Water District	5300	El Carro (El Carro Park)	New groundwater wells	Submitted 1/18/2022. Incomplete 2/9/22. CC granted City Manager authorization to sign application 6/27/22. Resubmittal 8/2/22. GC 65402 Determination to PC 9/6/22. PC approved 1/3/23.	Nick	6	

21-2083-DP/TPM/CDP/ARB	Jerry & Lisa Zins	4905	Eighth Street	New condominium triplex	Submitted 1/13/2021. Incomplete 2/12/2021. Owners have decided to do condos instead of apts. Resubmitted 9/17/2021. 2nd Incomplete 10/11/2021. Revised duplex apt. project submitted 2/4/2022. Complete 3/7/2022. To ARB for prelim 4/28/2022. Revised plans for 3 condos submitted 6/27/2022. Revised plans submitted 8/30/2022. To ARB for cont'd prelim review on 9/15/2022. Revised plans submitted 11/15/2022. Approved by PC on 2/6/2023.	Syndi	6	
20-2072-CUP/CDP	Ben Paul	4652	Fourth Street	Exterior and interior remodel of two existing detached dwelling (as-built).	Submitted 10/20/2020. Incomplete 11/19/2020. Resubmittal 01/08/2021. Prelim/Final ARB 01/14/2021. Incomplete 2/4/2021. Resubmittal 3/8/2021. Complete 3/25/2021. Planning Commission 6/7/2021. Approved. Pending Building Permit submittal.	Marysol	6	yes
18-1926-DP/CDP	Steadfast Grand Vida II	5464	Carpinteria Ave	Phase II Assisted Living Facility expansion	Submitted 7/12/18. Incomplete 8/10/18. Resubmitted 1/28/19; incomplete 3/7/19. Resubmitted 3/21/19; incomplete 4/18/19. Resubmitted 6/11/19; complete 7/11/19. To prelim ARB 10/17/19; continued to ARB 12/12/19. Prelim ARB approval 12/12/19. To PC 1/6/2020-approved. To ARB for in-progress review 1/30/2020. TEX requested 5/26/2020. TEX approved by PC on 8/3/2020. Approval expires 1/16/2024. 2nd COVID-19 TEX extends expiration date to 1/16/2025.	Syndi	6	
14-1722-TPM/CDP	Godfrey	1056	Eugenia Place	Subdivide (e) mixed use building into three condominiums	Submitted 6/19/14. Incomplete 7/17/14. Resubmitted 10/20/14. Complete 10/29/14. PC approved 11/3/14. FLAN sent 11/18/14.	Nick	6	
22-2171-ORD	City of Carpinteria		Downtown T	Parklet Permit Program	Reviewed by ARB 7/28/22. PC approved 12/5/22. To CC 1/23/23.	Nick	7	
22-2151-LCPA	City of Carpinteria		Citywide	Formula Business Regulations	First presentation at City Council February 14, 2022, CC meetings 5/9/2022, 5/23/2022. Urgency Ordinance adopted 6/27/2022. Initiation at CC 7/11/2022.	Steve	7	

19-2015-CUP/CDP	City of Carpinteria		Carpinteria Ave	Construct Carpinteria Rincon Trail	Submitted 10/17/19. AB52 Notification 10/29/19. Release of public draft MND 11/1/19. To ERC 11/14/19. PC acceptance & certification of MND 1/6/20. Appeal of PC filed 1/15/20. Appeal set aside. NOP Released for EIR 10/30/20. NOP Scoping Hearing 11/17/20. NOP Scoping Period closed 11/30/20. Draft EIR released for 45-day review period 3/12/21. To ERC 4/13/21. DEIR commented period ended 4/26/21. ARB Prelim Approval 10/28/21. Proposed Final EIR published 1/3/22. PC approved 1/18/22. Appeals filed 1/28/22. City Council conceptually upheld appeals 3/28/22. Stakeholder outreach underway. Back to Council TBD.	Nick	7	
19-1982-MCA	City of Carpinteria		Citywide	Seismic Retrofitting of Soft-Story Buildings	Initiated by the City Council on 5/13/19. To City Council for first read on 1/13/2020. Public Workshop held 2/22/2020. Second first read yet to be scheduled this summer when meetings go live due to public interest.	Dan / Steve	7	
20-2057-DP/CUP/CDP	Martha Marquez	4684	Seventh Street	Construct a 258 SF addition and new entry porch to Unit A on the existing duplex.	Submitted 7/22/2020. Incomplete 8/21/2020. Resubmittal 3/23/2021. Incomplete 4/21/2021. Resubmittal 3/16/2022. Complete 4/15/2022. To ARB for preliminary review on 5/26/2022. Approved by PC on 12/5/2022. Tentatively scheduled for final ARB on 4/27/2023.	Syndi	9	
17-1883-DP/CDP/TPM	Michael Haber	4716	Seventh St	remodel (E) SFD, construct carport, construct 2 (N) 2-story residential units, subdivide property for condominium purposes.	Submitted 6/22/17. Incomplete 7/20. Resubmitted 10/2/17. Incomplete 11/1/17. Resubmitted 1/11/18, under review. Prelim ARB approval 3/15/18. PC approved 6/4/18. FLAN sent to CCC 06/21/18. Submitted for Final ARB 11/20/20. Awaiting revised drawings. Final Parcel Map submitted for review 2/1/21. In BP plan check. 24-mo. time extension to PC 12/5/22.	Nick	9	
21-2138-DPR/CDP	Santa Cruz Island Foundation	4994	Carpinteria Ave	Exterior site & building improvements for new Channel Islands Center	Submitted 12/22/21. Routed 1/7/22. Under review. Incomplete 1/21/22. Resubmitted 3/17/22, under review. Preliminary ARB approval 5/26/22. PC approved 8/1/22. FLAN sent 8/15/22. Final ARB approved 8/25/22. Building Permit issued for re-painting & signage.	Nick	10	

21-2079-ARB	Lynette & Jason Fernandes	1330	Vallecito Place	New entry porch, exterior updates, & interior remodel	Submitted 1/8/2021. Incomplete 2/5/2021. Resubmittal 2/19/2021. Complete 3/18/2021. To ARB for prelim/final 3/25/2021. Director approval 11/10/2021. 1-year TEX approved 7/28/2022; now expires 11/10/2023.	Syndi	10	
19-1980-ARB	Stengel	5420	Cameo	Remodel SFD & 1st floor addition	Submitted 4/19/19. Comments back to applicant 5/13/19. Complete 5/22/19. Prelim ARB approval 6/13/19. Director approved 7/30/19. Final ARB approval 9/26/19. Applicant submitted Time Extension Request granted 12/11/20.	Nick	10	
14-1719-CUP/CDP	City of Carpinteria		Carpinteria Ave Bridge	Replace Carpinteria Ave Bridge over Carpinteria Creek	NOP & Scoping Document released 7/3/14. Scoping Hearing 7/22/14. Project overview to PC 9/2/14. Project update to CC 11/10/14. ARB CON 2/12/15. EIR released for public comment 3/25/16. ERC 4-26-16. Public Comment Period closed 5-9-16. Prelim ARB approval 9/15/16. PC approved 11/7/16. Sent to CCC 11/18/16. PW completing 65% drawings 3/17. Utility relocation coordination underway 3/17. Construction easement acquisition underway Spring 2018. Entitlements expired, need CEQA Addendum to address CSD Siphon relocation. Final ARB 11/21/19. PC approval for reauthorization of CUP/CDP and acceptance of CEQA Addendum 6/01/20.	Nick	10	
17-1896-LCPA/ORD	City of Carpinteria			Citywide commercial cannabis regulations	12/11/17 briefing to CC. 1/22/18 briefing to CC. 4/23/18 CC initiates Ord development. PC 10/1/18 cont'd. 11/5/18 PC recommended approval to CC. CC approved 1st reading 11/26/18. CCC Approved LCPA 2/7/19. Ordinance 2nd reading approved by CC 3/25/19. Consultant contract for licensing program awarded by CC 4/08/19. CCC acceptance of LCPA 5/9/19. Drafting of Licensing program underway.	Nick	11	
22-2192-CUPR/CDP	Dish Wireless	4558	Carpinteria Ave	(N) wireless communications facility collocation	Submitted 10/24/22. Incomplete 11/17/22. Resubmitted 12/16/22. Complete 1/04/23. Director Approved 1/09/23. BP submitted 1/20/23.	Nick	12	

22-2172-ARB/CDP	Flourish Trust	5637	Calle Pacific	New swimming pool & shade trellis.	Submitted 7/20/2022. Incomplete 8/19/2022. Resubmitted 8/24/2022. Complete 9/8/2022. To ARB for Preliminary review 9/29/2022. Resubmittal 11/9/2022. Final ARB review on 12/15/2022. Resubmittal 2/8/2023. Director approval 3/21/2023. BP#13895 in plan check.	Syndi	12	
21-2132-TUP	Gigavac	6382	Rose Lane	TUP for portable offices during remodel	Submitted 11/9/21. Approved 12/16/21. BP submitted 1/31/22.	Nick	12	
21-2129-DPR/CDP	The Storage Place	6250	Via Real	New storage units (modular)	Submitted 10/27/2021. Incomplete 11/24/2021. Resubmitted 12/10/2021. Complete 1/4/2022. PC 3/7/2022. Building Permit in plan check. Plan check on hold at applicant's request.	Marysol	12	
18-1903-DP/CDP	Procore	6303	Carpinteria Ave	Renovation of exterior building facade, landscape and driveway/parking lot	Submitted 1/16/18. Incomplete 02/14/2018. Resubmitted 08/15/2018. Incomplete 9/14/2018. Concept ARB review 10/11/18. Continued Conceptual ARB review 11/15/2018. Complete 01/11/2018. Prelim ARB 02/13/2019. PC 07/01/2019. Final ARB 9/12/2019. In plan check, pending resubmittal. Proposal to proceed with partial relandscaping only under review. Project on hold at applicant's request.	Marysol	12	
15-1788-CDP	Gobbell	5398	Star Pine Road	Convert (E) accessory building into a second dwelling unit	Submitted 8/19/15. Incomplete 9/4/15. Resubmittal 9/11/15. Complete 9/28/15. Prelim/Final ARB 10/15/15. CDD Director approved 10/29/15. 1-year time extension approved 10/11/16. Submitted for Building Permits 10/4/17. In Plan Check.	Nick	12	
07-1407-ARB	6380 Via Real, LLC	6380	Via Real	Revised new office complex	Revised Final ARB 10/17/2019. BP #13512 submitted 12/14/2021. On hold pending project re-design.	Syndi	12	
22-2158-DPR/CDP	Joe & Kimberlee Franken	4745	Dorrance Way	420sf bedroom and bathroom addition, new mud room and closet in garage.	Submitted 5/24/2022. Incomplete 6/22/2022. Resubmitted 6/30/2022. Complete 7/12/2022. Director approval 7/27/2022. BP#13741 issued 1/20/2023.	Syndi	13	
22-2150-SIGN	US Bank	5420	Carpinteria Avenue	New signs	Submitted 4/27/2022. Incomplete. Resubmittal 09/30/2022. Complete 1/24/2023. Director Approved 1/26/2023. Building Permit in plan check. BP issued 2/1/2023.	Marysol	13	
22-2142-SIGN	John Crispis for Albertsons	1018	Casitas Pass Road	New illuminated wall sign and parking lot signs	Submitted 1/20/2022. Incomplete. Resubmittal 12/1/2022. Complete. Director approved 1/2023. Building Permit issued 1/23/2023.	Marysol	13	

21-2107-CUP/CDP/ARB	City of Carpinteria/S&S Seeds	6155	Carpinteria Avenue	Coastal Vista Trail Segment	Submitted 4/28/2021. Incomplete 5/27/2021. Resubmitted 12/28/2021. Complete 1/13/2022. Prelim/Final review at ARB on 3/31/2022. Approved by PC 5/2/2022. CCC appeal period ended 5/31/2022. Demo permit BP#13860 issued 1/9/2023.	Syndi	13	
21-2100-FENCE	Bruce Fincher	4759	Sandyland Rd	Rolling driveway security gate	Submitted 4/5/2021. Incomplete 4/29/2021. Complete 6/2/2021. Prelim ARB 6/17/2021. Under review with Public Works. Redesign and resubmittal under review. ARB Matters by Staff 5/26/2022. Director's review 6/20/2022. Building Permit issued.	Marysol	13	
21-2094-DPR/CDP	Carpinteria Valley Historical Society	956	Maple Avenue	Construct new storage shed	Submitted 3/2/2021. Incomplete 4/1/21. Resubmitted 6/4/21. Complete 7/26/21. Director approved 7/29/21. FLAN sent 8/31/21. BP submitted 9/17/21. BP issued 12/16/21.	Nick	13	
20-2037-ARB/CDP	John Cervini	5586	Retorno Dr	Remodel (E) SFD & construct 2nd story addition	Submitted 2/21/20. Incomplete 3/20/2020. Resubmittal 9/29/2020. Incomplete #2 10/27/2020. Resubmittal 11/12/2020. Complete 12/3/2020. Prelim ARB on 2/11/2021. Director approval 5/5/2021. No appeals filed. Final ARB on 7/29/2021. BP#13393 issued 8/18/2022.	Syndi	13	
19-1985-ARB	Brian Pera, HLW for Procore	6303	Carpinteria Ave	Renovation of exterior facade of an existing 1,315 accessory structure	Submitted 5/15/2019. Complete 6/12/2019. Substantial Conformity Determination 8/1/2019. Building Permit Application submitted 9/4/2019. BP issued.	Marysol	13	
17-1894-DP/CDP	M3 Multifamily, LLC	4819	Carpinteria Avenue	construct new 2-story mixed use building	Submitted 11/30/17. Incomplete 12/19/17. Resubmitted 2/22/18. Complete 2/23/28. PC approved 4/2/18. BP issued 2/19. PC approved 36-mo. Time Extension 5/4/20.	Nick	13	
22-2187-SIGN	West Coast Signs for Channel Islands Center	4994	Carpinteria Ave	(2) non-illuminated wall signs, individual letters	Submitted 10/06/2022. Approved 10/13/2022. Building Permit 10/27/2022. Under construction.	Marysol	14	
22-2186-ARB	Craig Schrager & Christina Murphy	4921	Third Street	Exterior alterations to SFD	Submitted 9/29/2022. To ARB as Matters by Staff 10/27/2022. Incomplete 10/28/2022. Resubmittal 11/14/2022. Under review. Approved 12/20/2022. BP#13831 issued 1/26/2023.	Syndi	14	
22-2181-SIGN	Wasanth Mohottige for Brass Bird	4835	Carpinteria Ave	New sign, existing location.	Submitted 9/6/2022. Approved 9/20/2022. Under construction, pending inspection.	Marysol	14	

22-2180-SIGN	Goleta Signs for Lao Thai Restaurant	1017	Casitas Pass Road	Wall sign and hanging sign	Submitted 8/30/2022. Approved 9/13/2022. Building Permit submitted and approved 9/26/2022. Under construction, pending inspection.	Marysol	14	
22-2169-SIGN	Carp Moon Café	4991	Carpinteria Avenue	New signs	Under review. Incomplete. Approved 8/25/2022. Building Permit issued 9/13/2022. Under construction, pending inspections,	Marysol	14	
22-2163-SIGN	City of Carpinteria	5141	Carpinteria Ave	New ground sign for the Carpinteria Community Library	Submitted 6/10/2022. Approved. Building Permit issued	Marysol	14	
22-2161-SIGN	Ben Mascari / Carpinteria	873	Linden Avenue	Redesign and reinstall previous hanging sign	Submitted 6/1/2022. Approved. Pending inspection.	Marysol	14	
22-2152-SIGN	Reese Corp Signs / Carp Physio	5432-34	Carpinteria Avenue	New signage	Under review. Complete. Director approved 6/28/2022. Building permit issued, pending inspections. Building Permit expired.	Marysol	14	
22-2143-DPR	Bega	1000	Bega Way	Energy storage system & sound wall	Submitted 2/7/2022. Complete 3/8/2022. Approved 4/5/2022. Building Permits issued 7/2022 (Phase 1 and 2). Phase 1 signed off. Pending Phase 2.	Marysol	14	
21-2134-SIGN	Carpinteria Business Park	4185, -88, -93	Carpinteria Avenue	Update existing signage of 4 tenants to meet the new sign program	Submitted 11/16/2021. Resubmittal under review for approval and building permit. Resubmittal pending. Resubmitted. Approved 4/19/2022. Building permit in plan check. Incomplete. Building Permit issued 6/23/2022. Under review for final signoff.	Marysol	14	
21-2127-ARB/CDP	Eva Sobesky & Todd Mathers	5353	Eighth Street	Exterior alterations to existing residence.	Submitted 10/25/2021. Incomplete 11/24/2021. Stop Work posted 11/30/2021. Complete 12/6/2021. Prelim ARB 12/16/2021. Final ARB 3/3/2022. Director approval 3/10/2022. BP#13557 issued 6/3/2022.	Syndi	14	
21-2126-FENCE/ARB	Jaime & Ericka Lopez	5458	Granada Way	As-built walls in front and side yards	Submitted 9/27/2021. Incomplete 10/20/2021. Resubmittal 2/8/2022. Incomplete #2 3/10/2022. Resubmittal 5/11/2022. Complete 6/10/2022. ARB approved 6/30/2022. Approved 12/20/2022. BP#13845 issued 3/3/2023.	Syndi	14	Yes
21-2123-CUPR	McCann Mini-Storage	1222	Cravens Lane	Interior mezzanine to add 13,000 sf of storage units to existing 13,000 sf building.	Submitted 8/11/2021. Incomplete 9/9/2021. Resubmitted 11/18/2021. Complete 11/23/2021. Approved by PC on 2/7/2022. BP#13374 issued 7/8/2022.	Syndi	14	
21-2122-CUP/CDP	Caltrans		US 101/Carpinteria Avenue	Santa Claus Ln Bike Path	Submitted 8/12/31. Additional submittals 9/20/21. Complete 9/27/21. Prelim ARB approved 11/10/21. PC approved 12/6/21. CCC appeal period ended 1/10/22, no appeals filed. CDP issued 8/25/22; construction underway 9/1/22.	Nick	14	

21-2121-FENCE/ARB/CDP	St. Joseph Catholic Church	1532	Linden Avenue	New perimeter fence and landscaping around playing field and school.	Submitted 8/9/2021. Incomplete 9/8/2021. Resubmittal 9/23/2021. Complete 10/12/2021. Preliminary & final review at ARB on 10/28/2021. Director approval 11/18/2021. BP #13491 issued 12/15/2021.	Syndi	14	
21-2119-SIGN	Jaime Leaf, Signature Signs	957	Maple #2	Monument sign reface	Submitted 7/19/2021. Approved 8/17/2021. Under construction.	Marysol	14	
21-2106-DP/CDP/ARB	Siegel Residence Addition	4755	Fourth Street	Second story addition to SFD	Submitted 4/28/2021. Incomplete 5/28/2021. Resubmitted 8/30/2021. Complete 10/14/2021. Prelim ARB on 12/16/2021. Approved by PC on 3/7/2022. BP submitted 4/5/2022. Final ARB on 4/28/2022. BP#13599 issued 8/5/2022.	Syndi	14	
21-2101-SIGN	Nhan Nguyen, Lavish Nails	991	Linden Ave	1 non-illuminated wall sign	Submitted 4/9/2021. Incomplete 5/5/2021. Resubmittals, pending corrections. Approved 8/17/2021. Building Permit issued. Pending inspection.	Marysol	14	
21-2097-DP/CDP	Kimberly and Gregory Garcia	4921	Sandyland Road	Exterior remodel, new siding, windows, relandscaping, new fence	Submitted 3/9/2021. Incomplete 3/30/2021. Resubmitted 5/17/2021. Complete 6/15/2021. ARB 7/1/2021. Director Approval 8/24/2021. Building Permit Issued 9/24/2021. Revision approved by Matters by Staff 11/10/2021. Final sign-off corrections pending.	Marysol	14	yes
21-2093-SIGN	Ben Mascari	879	Linden Ave	New sign	Submitted 2/26/2021. Approved 3/8/2021.	Marysol	14	
21-2092-SDU/CDP	J. Bradley Stein	1315	Casitas Pass Road	Validate (E) guest house as SDU & permit remodel of SDU & attached accessory structures	Submitted 2/26/2021. Complete 3/19/21. Prelim ARB approved 3/25/21. Director approved 6/1/21. BP issued 6/23/21. Under construction. BP extension granted.	Nick	14	
21-2090-DP/CDP	CHT, LLC	700	Linden Ave	Rehabilitate & Remodel (E) buildings; new 2nd floor addition	Submitted 2/17/21. Incomplete 3/19/21. Resubmitted 4/15/21. Prelim ARB approval 4/29/21. Resubmittal 5/21/21. Complete 6/11/21. PC approved 7/6/21. To ARB In-Progress Review 9/30/21. Hardware/Butler Buildings BP submitted 10/12/21. Butterfly Building BP submitted 11/23/21. Site Improvements BP submitted 12/14/21. Final ARB Review 6/30/22. Demolition permit issued and underway. Building Permit issued; under construction.	Nick	14	
21-2087-ARB	Paul & Michelle Sanchez	1481	Sterling Avenue	SFD remodel, 391sf of add'ns, new front porch, & full re-roof	Submitted 2/9/2021. Incomplete 3/5/2021. Resubmitted 3/26/2021. Complete 4/1/2021. Prelim & final at ARB 4/15/2021. Director approval 5/4/2021. BP#13369 issued 9/21/2021.	Syndi	14	

21-2086-ARB	Frank & Christine Isaac	5410	Cameo Road	SFD remodel, 70sf add'n., and new deck/trellis	Submitted 2/8/2021. Incomplete 3/5/2021. Resubmitted 6/29/2021. Complete 6/30/2021. To ARB for prelim/final review 7/29/2021. Director approved 10/20/2021. BP#13206 issued 2/8/2022.	Syndi	14	
21-2085-ARB/CDP	Forrest Carter	5251	Sixth Street	6' fence & gates	Submitted 2/4/21. Incomplete 2/25/21. Resubmitted 6/8/21. Complete 6/9/21. Prelim ARB approved 7/15/21. Director approved 8/26/21. BP submitted 9/22/21. BP issued 12/16/21. Construction underway; fence & landscape completed.	Nick	14	
21-2082-SIGN	Procore Technologies	6303	Carpinteria Ave	Reface existing monument sign and new illuminated wall sign	Submitted 01/13/2021. Approved 1/26/2021. BP issued 2/24/2021. Pending inspection.	Marysol	14	
21-2081-SIGN	Rincon Mountain Winery	4187	Carpinteria Ave	Wall sign, non-illuminated	Submitted 1/11/2021. Approved 1/26/2021. BP issued 2/3/2021. Under construction. Pending inspection.	Marysol	14	
20-2070-ARB/CDP	Manuel Martinez	1147	Vallecito Road	Remodel (e) SFD & construct 2nd story addition	Submitted 10/15/2020. Under review. Incomplete 11/13/2020. Resubmittal 11/24/2020. Incomplete 12/10/2020. Resubmittal 12/10/2020. Complete 12/11/2020. Prelim ARB on 2/11/2021, continued. Resubmittal 3/26/2021. Prelim at ARB 4/15/2021. Director approval 6/1/2021. Appeal filed 6/11/2021. Appeal to PC 8/2/2021. Appeal continued. Approved by PC on 9/7/2021. To ARB for final review 10/14/2021. BP#13346 issued 12/9/2021. Under construction.	Syndi	14	
20-2066-SIGN	Singing Springs	5455	Eighth Street	New monument sign	Submitted 8/17/2020. Director approval 9/15/2020. Building Permit issued 1/2021. Under construction, pending landscaping re-installation.	Marysol	14	
20-2061-ARB/CDP	Brandon and Julia Wheatley	1150	Vallecito Road	Master bedroom addition	Submitted 7/31/2020. Under review. Incomplete 8/25/2020. Incomplete 10/9/2020. Prelim/Final 10/29/2020 ARB. Incomplete 11/16/2020. Complete 01/14/2021. Director Approval 2/2/2021. BP issued. Under construction. Revision 1 issued.	Marysol	14	
20-2056-ARB	Rod Herman	1423	Camino Trillado	Exterior updates, new porch overhang, new curbs and 3' garden wall, new hardscape and landscaping.	Submitted 7/2/2020. Complete 7/30/2020. To ARB for prelim/final 9/17/2020. Director approved 9/23/2020. BP#13204 issued 4/26/2021. Under construction.	Syndi	14	

20-2051-SIGN	Coordinated Signs for LinkedIn	6410	Via Real	Campus-wide wayfinding signs	Submitted 3/30/2020. Incomplete 04/24/2020. Approved 5/19/2020. Pending BP Submittal. Minor revision to approved sign permit submitted. Revision approved. BP issued 9/29/2020. Under construction.	Marysol	14	
20-2043-DP/CDP	Strickland- Wahl	4854	Sandyland Road	Remodel & convert 2 apartments into 1 SFD	Submitted 03/06/20. Incomplete 4/3/20. Resubmitted 04/30/20. Complete 05/28/20. Preliminary ARB Approval 06/25/2020. PC Approved 9/8/20. CCC Appeal Period Ended 10/8/20. Final ARB approval 2/11/21. BP submitted 3/25/21. NTPO recorded 6/28/21. BP issued; under construction. Revised BP submitted for new rear fence & driveway gate.	Nick	14	
20-2042-ARB	Scouras Family Trust	1493	Trenora Street	SFD remodel, 89.5 sf addition to 1st floor, 451 sf addition to 2nd floor	Submitted 3/5/2020. Incomplete 3/31/2020. Resubmitted 5/21/2020. Complete 6/18/2020. Prelim ARB on 7/16/2020. Resubmittal 8/27/2020. In-progress ARB on 10/29/2020. Approval letters sent 11/25/2020. Final ARB on 7/1/2021. BP#13339 issued 11/3/21. Under construction.	Syndi	14	
20-2041-ARB/DP/CDP	Kyle & Andrea Zuvella	4756	Fifth Street	Remodel and 431 sf master suite addition	Submitted 3/4/2020. Incomplete 3/31/2020. Resubmittal 6/11/2020. To ARB 8/13/2020. Resubmittal 8/31/2020. To ARB for in-progress review 9/17/2020. To PC on 3/1/2021. Final ARB on 7/1/2021. BP#13276 issued 8/6/2021. Under construction.	Syndi	14	
19-2029-DPR/CDP	Carpinteria Arts Center	855	Linden Avenue	Courtyard improvements: new hardscape, landscaping, a living wall, storage, utility sink, fencing, and trash enclosures	Submitted 12/20/2019. Complete 01/16/2020. Prelim ARB 2/27/2020. Approvals pending. BP submitted 10/23/2020. BP issued.	Marysol	14	

19-2023-LLA	Lockwood/Segall	5139 & 5157	Eighth Street	LLA, demo and rebuild garage.	Submitted 11/15/2019. Incomplete 12/13/19. Resubmitted 3/10/2020. 2nd Incomplete 4/2/2020. Resubmitted 4/13/2020. Complete 4/16/2020. Corrections sent to City Surveyor 4/27/2020. ARB on 5/28/2020. Approved by PC on 7/6/2020. City Surveyor corrections to applicant 7/13/2020. 4th review to City Surveyor 10/8/2020. Corrections to applicant 11/2/2020. LLA docs to City Surveyor for recording 4/5/2021. Applicant making corrections to add'l docs per Recorder's Office. LLA recorded 12/30/2021. BP#13089 issued 1/14/2022. Under construction.	Syndi	14	
19-2021-ARB	Marsha Ota	5273	Cambridge Lane	Remodel and addition of 460 sq. ft.	Submitted 11/7/2019. Complete 12/18/19. To CDD Director for action. Approved by CDD 2/24/2020. BP#12889 issued 8/3/2020. Under construction.	Syndi	14	
19-2016-DP/CDP	City of Carpinteria	5775	Carpinteria Avenue	New skate park and amenities	Submitted 10/22/2019. Complete 11/20/2019. Prelim review at ARB on 1/30/2020. Approved at PC on 6/1/2020. Final ARB on 3/31/2022. BP#13622 submitted 4/27/2022, in plan-check. Demo permit issued 5/17/2022. PW Grading permit issued 5/25/2022. BP #13622 issued 9/26/2022. Under construction.	Syndi	14	
19-2012-DPR	Mac Partners / Jeremy Rogers	6384	Via real	Building facade renovation, addition of new patio areas, new permeable area for future parking area.	Submitted 10/7/2109. Incomplete 11/6/19. Partial resubmittal 12/4/19; under review. Incomplete 12/16/2019. Resubmitted 01/14/2020. Incomplete 02/13/2020. Complete 06/03/2020. Prelim ARB 06/25/2020. In Progress ARB 10/29/2020. PC 12/7/2020. Final ARB 5/13/2021. Building Issued. Under construction. Exterior light demonstration under review ARB matters by staff 3/3/2022. Minor revision pending.	Marysol	14	
19-1996-DP/CDP/PM	Justin Klentner	1075	Cramer Road	Demolish (E) units; construct (N) 4-unit condo development	Submitted 8/28/19. Incomplete 9/26/19. Resubmitted 10/24/19. Complete 11/22/19. Prelim ARB approval 12/12/19. PC approved 2/3/20. ARB In-Progress 2/27/20. Final ARB Approval 3/12/20. Revised Final ARB Review 4/30/20. Building Permit submittal 4/14/20. Final Map recorded. BP ready to issue 8/31/20. Under construction. Condo Plan & CCRs recorded 7/23/21. Temp CoO issued 9/23/21.	Nick	14	

19-1965-DPR/CDP	Carpinteria Business Park	4185-4195	Carpinteria Ave	Exterior architectural façade improvements to five of the buildings within the Flood Hazard and Coastal Appeals Overlay.	Submitted 2/5/2018.Incomplete 3/19/2019. Resubmitted 3/28/2019. Incomplete 4/25/2019. Prelim ARB 06/13/2019. Complete 6/21/2019. Resubmittal 8/23/2019. Director Approval 9/26/2019. Final ARB 10/31/2019. Building Permit application submitted 12/17/2019. Building Permit issued. Under construction. Revision to lights approved by ARB 1/14/2021. Minor awning revision 8/2021. Monument sign revision 11/2021.	Marysol	14	
18-1938-CDP	CA State Parks	205	Palm Avenue	Sewer replacement, Santa Rosa Campground	Submitted 9/25/2018. Complete 10/23/2018. NOE submitted. Approved 3/1/2019. Conditions of Approval and final plans received. Under construction.	Marysol	14	
18-1920-CUP/CDP	Caltrans		Citywide	Highway 101 HOV Lanes	Submitted 5/18/18. Incomplete letter 6/14/18. Applicant resubmittal 7/20/18. Complete 8/17/18. ARB Prelim/Final 10/11/2018. To PC 3/4/19, continued to 4/1/19. PC Approved 4/1/19. Under construction. Needs landscaping and minor flatwork.	Steve	14	
18-1909-ARB/CDP	Able, John	477	Concha Loma Dr	Addition & remodel to SFD, new pool, new ADU	Submitted 3/13/18. Incomplete 4/11/18. Resubmitted 6/11/18. Incomplete 7/11/18. Resubmitted 10/01/18. Incomplete 10/31/18. ARB conceptual review 11/15/18. Resubmitted 6/7/19; incomplete 7/5/19. Resubmitted 7/12/19. Incomplete 8/8/19. Resubmitted 9/12/19. Complete 10/10/19. Prelim ARB approval 11/21/19. Scheduled for In-progress ARB Review 4/30/20. CDD Director approval 6/23/20. Final ARB 6/25/20. CCC appeal period ended. BP issued 6/24/21; under construction.	Nick	14	
17-1850-CDP	CA Dept. of Parks and Recreation	205	Palm Avenue	State Beach Phase II ADA Improvements	Submitted 1/3/2017. Incomplete 1/31/2017. Resubmittal 5/22/2017. Complete 6/15/2107. Director Approval 9/13/2017. Pending resubmittal of minor modifications and signed Conditions of Approval. Received 9/6/2018. Time Extension approved 7/31/2019. Under construction.	Marysol	14	

16-1839-CDP	Thom Vernon	500	Maple Avenue	Install new windows & replacement roll-up doors	Submitted 8/12/16. Incomplete 9/8/16. Complete 9/14/16. To ARB 9/15/16, continued to 10/13/16. ARB approved 10/13/16. Director Approved 10/21/16. FLAN sent to CCC 11/1/16. BP application submitted 10/20/16. BP issued 2/2/17, under construction.	Nick	14	
15-1804-CDP	Hawkins	5567	Calle Arena	Construct (N) SFD w/ attached two-car garage	Submitted 12/29/15. Incomplete 1/28/16. Meeting w/ new agent 6/26/17. Concept ARB 8/17/17. Revised submittal 12/13/17. Incomplete 1/12/18. Concept ARB 2/15/18. Resubmitted 4/13/18. Incomplete 5/3/18. Resubmitted 5/9/18. Scheduled for Prelim ARB Review 5/31/18. Cont'd to Prelim 7/12/18. Cont'd to Prelim 7/26/18. ARB Prelim Approval 7/26/18. Complete 9/27/18. Revised ARB Prelim Approval 11/15/18. Director approval issued 12/18/18. Appeal filed 12/28/18. PC denied appeals 3/4/19. Appeal of PC decision filed 3/14/19. CC denied acceptance of appeal 4/22/19. FLAN sent to CCC 4/24/19. Appeal filed with CCC 5/9/19. CCC Appeal hearing 7/10/19, CCC found no substantial issue. City approvals stand. Final ARB approval 8/29/19. BP submitted 4/2/19. BP issued 12/19/19, under construction.	Nick	14	
15-1767-CDP	Wood	650	Concha Loma Drive	New Single Family Residence	Submitted 4/28/15. Incomplete 5/27/15. Resubmitted 7/13/15. Complete 8/10/15. CEQA Initial Study underway. ARB concept review 10/15/15. Draft MND public review period 7/15- 8/15/16. To ERC 8/4/16. Prelim ARB 8/11/16, continued with revisions. Revised plans submitted; Prelim ARB approved 9/14/17. PC Approved 8/5/19. FLAN sent to CCC 8/23/19. BP application submitted 12/24/19. Final ARB approved 5/28/20. In BP review. BP issued; under construction.	Nick	14	
08-1483-CDP	Salzgeber	447	Concha Loma Drive	Install water well and storage tank for agricultural purposes	Submitted 12/18/08. Incomplete 1/16/09. Resubmitted 3/20/09. Incomplete. Resubmitted 9/1/09. Director approved 5/7/10. Permit issued 10/19/10. Well constructed and sealed 11/10. Awaiting installation of pump and storage tank.	Nick	14	

04-1172-DP/CDP	Franssen	750	Palm Avenue	Construct one new SFD and create two condominiums	Revised plans submitted 9/15/06. Incomplete 10/9/06. Resubmitted 10/30/06. Prelim ARB 11/30/06. Complete 12/21/06. To PC 1/2/07. Revised Prelim ARB 1/25/07. PC approved 2/5/07. CC approved map clearance 12/10/07. PC approved one year TEX 2/4/08. Grading Permit issued 2/4/09. Final ARB for Unit 2 10/1/09. BP issued, under construction. CofO issued on rear unit.	Nick	14	
21-2120-DPR/ARB	Faydra Gage, Dawn Sherry Architects	4835	Carpinteria Ave	Exterior Alterations to existing parking lot/outdoor patio addition and minor interior remodel to existing commercial lease space.	Submitted 7/28/2021. Complete 8/27/2021. Prelim/Final ARB 9/30/2021. Director Approval 11/30/2021. Building Permit issued. Pending final inspection corrections and revision. Final sign off 2/21/2023.	Marysol	15	
19-2008-ORD/LCPA	City of Carpinteria			Amendment(s) to the City's LCPA - (ADUs) to implement State requirements	LCPA Submittal to CCC Approved. ADU Prototypes under preparation. Concept elevations and floor plans reviewed by staff. RRM draft plan sets to be submitted Jan 2023. Second read 1/23/23. in effect 2/22/23	Steve/Rita	15	
19-1983-DP/TPM/CDP	Phari LLC	1112	Linden Avenue	Remodel and add 251 sf to an (E) SFD and detached garage with 2nd dwelling unit to create a project with four condominium units and a carport with associated parking and landscaping	Submitted 6/5/19; Incomplete 7/3/19. Resubmitted 7/3/19; complete 7/23/19. Prelim ARB was 7/11/19; no recommendation. PC Approved 8/5/19. No appeal. Final Map Recordation5.26/20. BP issued 7/23/2020. C of O issued.	Steve	15	
19-1958-DP/CDP previously 14-1733-DP/CDP/TPM	Sanctuary Beach Condominiums (Norman's Tennis Court)	4925	Carpinteria Avenue	Four residential condominiums	Planning Commission Approved 11/2/15. DP/CDP Time Extension approved 12/5/16. Project stalled. Map is still alive. New DP/CDP submitted 1/3/19 and 1/28/16. Complete 2/1/19. DP/CDP approved by PC 3/4/19. Final Map Clearance to CC 5/13/19. Map recorded, building permit approval underway with new ownership. BP issued; under construction. Wall revision to ARB 7/28/22 denied. C of O issued.	Steve; Nick	15	

17-1868-DP/CDP	Carpinteria Sanitary District	5300	Sixth Street	Demolition of existing modular offices and the construction of a new 4,118 square foot one-story office building.	Submitted 4/12/2017. IDAG 4/20/2017. Incomplete 5/12/2017. Resubmitted 8/8/2017. Incomplete 9/7/2017. Resubmitted 10/10/2017. Complete 10/31/17. Prelim ARB 1/25/18. Continued Prelim ARB 03/15/2018. Planning Commission approved 06/04/2018. FLAN sent to CCC 6/14/18. Resubmittal 10/23/2019, under review. Pending PW determination. Final ARB 2/27/2020. BP issued 12/2021. Under Construction. Minor revision. Final sign off routing in progress. Temp C of O issued. 2/2023 C of O.	Marysol	15	
09-1522-CUP/CDP/LCPA/ORD	Caltrans		Linden-Casitas Interchanges and Via Real Extension	Reconstruct overcrossings and extend Via Real across Carpinteria Creek	Submitted 2009. PC recommended approval 05/18/15. CC first reading and recommended approval of ORD and LCPA 06/22/15 and 07/27/15. Submitted to CCC 08/21/15. CCC hearing in October in Orange County. CC approved CUP/CDP 11/23/15. FLAN sent to CCC 12/1/15. No appeal. ARB Final 3/17/16. Construction underway 9/12/16.	Steve	15	
23-2210-CON	RPG Carpinteria, LLC	6380	Via Real	New mixed-use with 111 apartments, 9,981sf of office, and 2,500sf of retail/café.	Submitted 2/13/2023. Withdrawn to submit formal application.	Syndi	X	
23-2208-TUP	La Tiendita	4928	Carpinteria Avenue	Sale of produce, pre-packaged food outdoors under a tent	Submitted 2/7/2023. Approved 2/10/2023. Permit ends 2/24/203.	Marysol	x	
22-2173-SIGN	City of Carpinteria	5781	Carpinteria Avenue	Skate park temporary signage during construction	Under review. Complete 7/27/2022. Director approved 7/27/2022.	Marysol	X	
19-2009-ARB	Jesse Bustillos / The Spot	389	Linden Ave	Remodel dinning room structure, new outdoor patios, upgrades to parking and lighting	Submitted 9/24/2019. Complete 10/28/2019. Pending resubmittal for Prelim ARB. Resubmitted 01/08/2020. Prelim ARB 2/27/2020. In Progress Review 05/14/2020. Director Approval 7/7/2020. Final ARB 7/30/2020. BP Submitted 8/27/2020. In plan check. BP issued 3/31/2021. Under construction. 8/2021 on hold pending redesign. Prelim redesign submitted 1/2022, pending application submittal. Project on hold pending submittal of proposal for new structure. New proposal submitted. Under review.	Marysol	x	Yes

22-2166-SIGN	Carpinteria Smiles Dental	1166	Eugenia Place	New ground sign	Submitted 7/7/2022. Resubmittal 9/7/2022. Director approved 9/15/2022. Building Permit issued 9/23/2022. Final sign off 10/31/2022.	Marysol	X	
				Last updated	3/30/2023 18:13			

BUILDING PERMIT REPORT

03/01/2023 - 03/30/2023

Permit #	Issued Date	Parcel #	Site Address	Owner Name	Project Description	Valuation	Status	Application Submittal Date	Code Compliance Violation	Fire Permit Required
13937	3/30/2023	004-026-038	1405 Linhere Drive	HOPKINS REVOCABLE TRUST 5/17/12	Upgrade existing electrical panel from 100 amps to 200 amps; same location.	2,000	Pending Pickup	3/29/2023		
13936	3/29/2023	003-590-023	1455 Camellia Circle	ALMGREN, HANS	Remove existing comp shingles to install new comp shingles, similar color (Certainteed Landmark Georgetown Gray), 28 squares. Planning Dept approved minor roof color change.	16,000	Issued	3/29/2023		
13934	3/28/2023	003-142-039	1335 Vallecito Place	Faith Lutheran Church of Carpinteria	Re-roof 1/story social hall - westside. Tear-off existing 1/layer shingles and 1/layer gravel roof. Install new 30/yr Class 'A' Composition shingles to match existing. On flat roofs install New Class 'A' modified bitumen cap sheet roof, torch applied. 25 sq built up roofing. 47 sq shingles (72 sq total)	41,262	Issued	3/28/2023		
13918	3/13/2023	001-262-015	1505 Casitas Pass Road	KIRCHNER FAMILY TRUST 6/27/18	Replacing 6 windows retrofit and 1 window sill to be lowered 30 inches to allow the installation of a patio door. Same width	5,700	Issued	3/13/2023		
13909	3/7/2023	001-360-014	6027 Jacaranda Way #B	WRIGHT WILLIAM A & JANET M LIVING TRUST 8/4/00	Replace leaking hot water tank in residence. Same location.	2,000	Issued	3/7/2023		

13908	3/8/2023	003-242-033	4615 Carpinteria Avenue	EXEMPTION EQUIVALENT TRUST 12/5/2011	Tear off existing 2 layers of roofing and underlayment. Install new underlayment and install new composition shingles. 13 squares. Remove exiting flat roof area, install new PVC roof system 2 squares.	15,800		3/7/2023		
13904	3/6/2023	001-420-CA	6387-6389 Rose Lane	Rosemark Lafayette Association	Go over existing roof with PVC roof 60 mil. 260 Squares	142,210	Issued	3/6/2023		
13902	3/2/2023	001-280-011	1493 Trenora Street	SCOURAS, AMBER J	Upgrade exisitng 200 amp panel to 400 amp main meter panel in same location with underground feed (Edison SR#3416633-1493).	7,500	Issued	3/2/2023		
13882	3/8/2023	003-920-028	4527 Carpinteria Ave., Unit C	RHODEN SURVIVOR'S TRUST	Replacement windows with retro fit Milgard Lifetime Warranty Tuscany Vinyl.	17,888	Issued	2/13/2023		
13876	3/6/2023	001-262-015	1505 Casitas Pass Road	KIRCHNER FAMILY TRUST 6/27/18	Relocate and upgrade electrical service to 320 AMPs and install 200 AMP subpanel, per plans.	5,000	Issued	2/1/2023		
13873	3/7/2023	003-101-023	1300 Santa Monica Road	THOMPSON TAMMY D	Installation of flush mounted solar PV with 3.555kw, 9 panels, 1 inverter, 1 battery, 1 subpanel. Main Panel Upgrade: 225A main panel	12,897	Issued	1/27/2023		
13819	3/6/2023	004-041-008	5030-5036 Carpinteria Avenue	5030 Carpinteria Avenue, LLC	Remove some interior walls. Create retail and creative space. Update finishes and add a bathroom.	50,000	Issued	10/28/2022		Yes
13807	3/7/2023	001-400-063	1382 Camino Trillado	Doria Family Trust	Interior remodel (374sf), new family room addition (372sf), and new covered patio (316sf).	210,000	Issued	10/14/2022		Yes

13785	3/3/2023	001-271-019	1484 Haida Street	JACOBSON, THOMAS A III and Gioia A. Jacobson	10.40 kw DC roof mounted PV electrical system (26) rec 400 w PV modules (26) IQ8M Enphase Microinverters. *** REVISION 1/13/2022 - Disconnect distance from utility meter has been added to the plans (pages PV1 & PV2); Disconnect type has been changed to fused (pages PV1 & PV2).	33,130	Issued	9/26/2022		
13754	3/9/2023	001-190-086	6382 Rose Lane	Rose Platform Partners LLC c/o Rose Partners LLC	Partial interior remodel of an existing engineering design, prototyping and testing facility. Existing office areas will be remodeled into a new open office area, additional offices, team rooms and meeting rooms. Existing lab/production areas will be remodeled to a new test lab.	1,850,000	Issued	8/25/2022		

13744	3/27/2023	003-153-012	4916 Carpinteria Avenue	William & Elizabeth Wood	Demolish existing stairs and handrail. Re-build per 2019 California Building Code and match existing tiles*. Demolish existing non-historic brick footing and planters along the Carpinteria Avenue elevations. Patch up with stucco to match (E) elevation and historic plasterwork*. *Prior to purchase and installation of replacement tiles the material must be reviewed and approved by the Architectural Review Board. Contact Community Development to schedule. **Stucco work to match existing historical plasterwork in color, texture, and material. Existing historical plasterwork to be protected. *** REVISION # 1 - Shoring wall and new 2x6 replacement.	5,000	Issued	8/5/2022		
13738	3/7/2023	001-280-040	1467 Andrea Street	KOSLA JERZY/CELINA	Install PV system 11.200 KW 28 panels. ***2/9/23 - REVISION #1- Plans revised to install 28 Freedom Forever 370 W modules.	28,000	Issued	8/2/2022		

Total Records: 17

3/30/2023