CITY OF PACIFICA
PLANNING DEPARTMENT

505 San Pedro Avenue Project

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

April 2018

RANEY
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APPENDICES

INITIAL STUDY

April 2018

A. BACKGROUND

1. Project Title: 505 San Pedro Avenue Project

2. Lead Agency Name and Address: City of Pacifica
Planning Department
1800 Francisco Blvd.
Pacifica, CA 94044

3. Contact Person and Phone Number: Robert Smith
Assistant Planner
(650) 738-7442
smithr@ci.pacifica.ca.us

4. Project Location: 505 San Pedro Avenue
Pacifica, CA 94044
Assessor Parcel Number 023-072-010

5. Project Sponsor's Name and Address: Shawn Rhodes
Norcal Surf Shop
5460 Coast Highway
Pacifica, CA, 94044

6. General Plan Designation: Commercial

7. Zoning: Community Commercial (C-2) and Coastal Zone (CZ)

8. Project Description Summary:

The 505 San Pedro Avenue Project would consist of the demolition of an existing unlawful half-pipe structure and construction of three buildings: a three-story surf shop building with retail space, office/storage space, rentals, beach storage lockers, and outdoor shower (Building #1), an unenclosed skatepark, surrounded by chain-link fencing, with roof-top solar panels, and connected with a two-story building for storage and associated retail use (Building #2), and a two-story mixed-use building with retail space on the ground floor and two residential units on the second floor (Building #3). In addition, the project includes a parking lot with 24 uncovered spaces and two covered spaces, as well as associated infrastructure, pedestrian walkways, landscaped areas and the removal of heritage trees.

B. SOURCES

It should be noted that all of the technical reports and modeling results used for the purposes of this analysis are available upon request at the City of Pacifica Planning Department. The following documents are referenced information sources utilized for the analysis within this Initial Study/Mitigated Negative Declaration:

1. Abrams Associates Traffic Engineering, Inc. *Transportation Impact Analysis, San Pedro Avenue Mixed Use Project, City of Pacifica*. April 5, 2017.
2. Alameda County Superior Court. *California Building Industry Association v. Bay Area Air Quality Management District. A135335 and A136212*. Filed August 12, 2016.
3. CAL FIRE. *Very High Fire Hazard Severity Zones in LRA, San Mateo County*. November 4, 2008.
4. Cal Recycle. *Estimated Solid Waste Generation Rates.* Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed December 28, 2016.
5. California Coastal Commission. *Definition and Delineation of Wetlands in the Coastal Zone*. October 5, 2011.
6. California Department of Conservation. *San Mateo County Important Farmland 2014.* Published February 2016.
7. California Department of Conservation. *Tsunami Inundation Map for Emergency Planning, Montara Mountain Quadrangle.* June 15, 2009.
8. California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List.* Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed March 2017.
9. California Division of Mines and Geology. *State of California, Special Studies Zones, Montara Mountain, Revised Official Map.* Effective January 1, 1982.
10. California Historical Resources Information System. *Record Search Results for the Proposed 505 San Pedro Avenue Project.* January 30, 2017.
11. California Scenic Highway Mapping System. *San Mateo County*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed January 3, 2017.
12. City of Pacifica. *Climate Action Plan*. July 14, 2014.
13. City of Pacifica. *Design Guidelines.* Revised April 1990.
14. City of Pacifica. *City of Pacifica General Plan.* 1980.
15. City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport.* November 2012.
16. City/County Association of Governments of San Mateo County. *Final San Mateo County Congestion Management Program 2015*. November 2015.
17. Coast Ridge Ecology. *Biological Resources Assessment for APN 023-72-010.* March 2015.
18. Earth Investigations Consultants, Inc. *Geotechnical Investigation, Proposed Commercial Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California.* September 17, 2009.
19. Earth Investigations Consultants, Inc. *Geotechnical Update and Plan Review, Architectural Plans, Proposed Commercial Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California. November 11, 2014*.

20. Earth Investigations Consultants, Inc. *Preliminary Plan Review, Reply to Peer Review & Geotechnical Update, Preliminary Architectural & Civil Plans, Proposed Mixed-Use Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California.* March 23, 2017.
21. Geocon Consultants, Inc. *Geotechnical Peer Review, Proposed Mixed-Use Development, 505 San Pedro Avenue, Pacifica, California.* February 28, 2017.
22. j.c. brennan and associates, Inc. *505 San Pedro Avenue, City of Pacifica, California.* February 20, 2017.
23. Live Oak Associates, Inc. *Biological Resources Assessment Peer Review for the Shawn Rhodes/Norcal Surf Shop Project.* January 19, 2017.
24. Mike O'Connell, Project Engineer. *Drainage Analysis for Norcal Development (San Pedro Avenue)*. November 17, 2017.
25. National Weather Service. *TsunamiReady in California.* Available at: http://www.tsunamiready.noaa.gov/tr-maps/ca-tr.shtml. Accessed February 17, 2017.
26. North Coast County Water District. *20-Year Long-Term Water Master Plan.* February 2016.
27. San Mateo County. *Comprehensive Airport Land Use Compatibility Plan.* December 1996.
28. City/County Association of Governments of San Mateo County, San Mateo Countywide Water Pollution Prevention Program. *C.3 Stormwater Technical Guidance.* June 2016.
29. City/County Association of Governments of San Mateo County, San Mateo Countywide Water Pollution Prevention Program. *Construction Best Management Practices.* Available at: http://www.cityofpacifica.org/depts/planning/stormwater_compliance/default.asp. Accessed January 4, 2017.
30. City of Pacifica. *Stormwater Compliance.* Available at: http://www.cityofpacifica.org/depts/planning/stormwater_compliance/default.asp. Accessed January 4, 2017.
31. State of California. Division of Mines and Geology. *Generalized Mineral Land Classification Map of the South San Francisco Bay Production—Consumption Region*. 1996.

C. 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 Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture and Forest Resources**	☐ **Air Quality**
✖ **Biological Resources**	✖ **Cultural Resources**	✖ **Geology and Soils**
☐ **Greenhouse Gas Emissions**	☐ **Hazards and Hazardous Materials**	✖ **Hydrology and Water Quality**
☐ **Land Use and Planning**	☐ **Mineral Resources**	✖ **Noise**
☐ **Population and Housing**	☐ **Public Services**	☐ **Recreation**
✖ **Transportation and Circulation**	✖ **Tribal Cultural Resources**	☐ **Utilities and Service Systems**
☐ **Mandatory Findings of Significance**		

D. 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.

✖ 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 applicant. 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" 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Robert Smith, Assistant Planner	City of Pacifica
Printed Name	For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies and analyzes the potential environmental impacts of the 505 San Pedro Avenue Project (proposed project). The information and analysis presented in this document are organized in accordance with the order of the CEQA checklist in Appendix G of the CEQA Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed.

The mitigation measures prescribed for environmental effects described in this IS/MND will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring and Reporting Program for the project in conjunction with approval of the project.

In July 1980, the City of Pacifica adopted the City of Pacifica General Plan. The City is currently in the process of updating their General Plan. In March of 2014, the City of Pacifica released a Draft General Plan Update and associated Draft Environmental Impact Report (EIR). However, the Draft General Plan Update and associated Draft EIR have not yet been adopted or certified by the City. Therefore, the analysis contained within this IS/MND relies primarily on the guidelines and information contained within the adopted 1980 General Plan.

The proposed project site is located within the CZ overlay district, which is regulated through the City of Pacifica's Local Coastal Land Use Plan. Through the Local Coastal Land Use Plan, the City of Pacifica brings the City's land use planning into conformance with the California Coastal Act of 1976. The Local Coastal Land Use Plan is the basis for the Local Coastal Implementation Program, including a permit issuing procedure, zoning ordinance revisions, and other implementation programs.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current environmental setting, as well as the components of the proposed project.

Project Location and Setting

The proposed project site consists of a 37,538-square foot (sf) lot located at 505 San Pedro Avenue in the Pedro Point neighborhood of the City of Pacifica, California, San Mateo County (see Figure 1 and Figure 2). The site is located approximately 450 feet west of State Route (SR) 1, and 275 feet south of the Pacific Ocean. The site is identified by Assessor Parcel Number (APN) 023-072-010. The City's General Plan designates the site as Commercial, and the site is zoned C-2 with a CZ overlay.

Figure 1
Regional Project Location

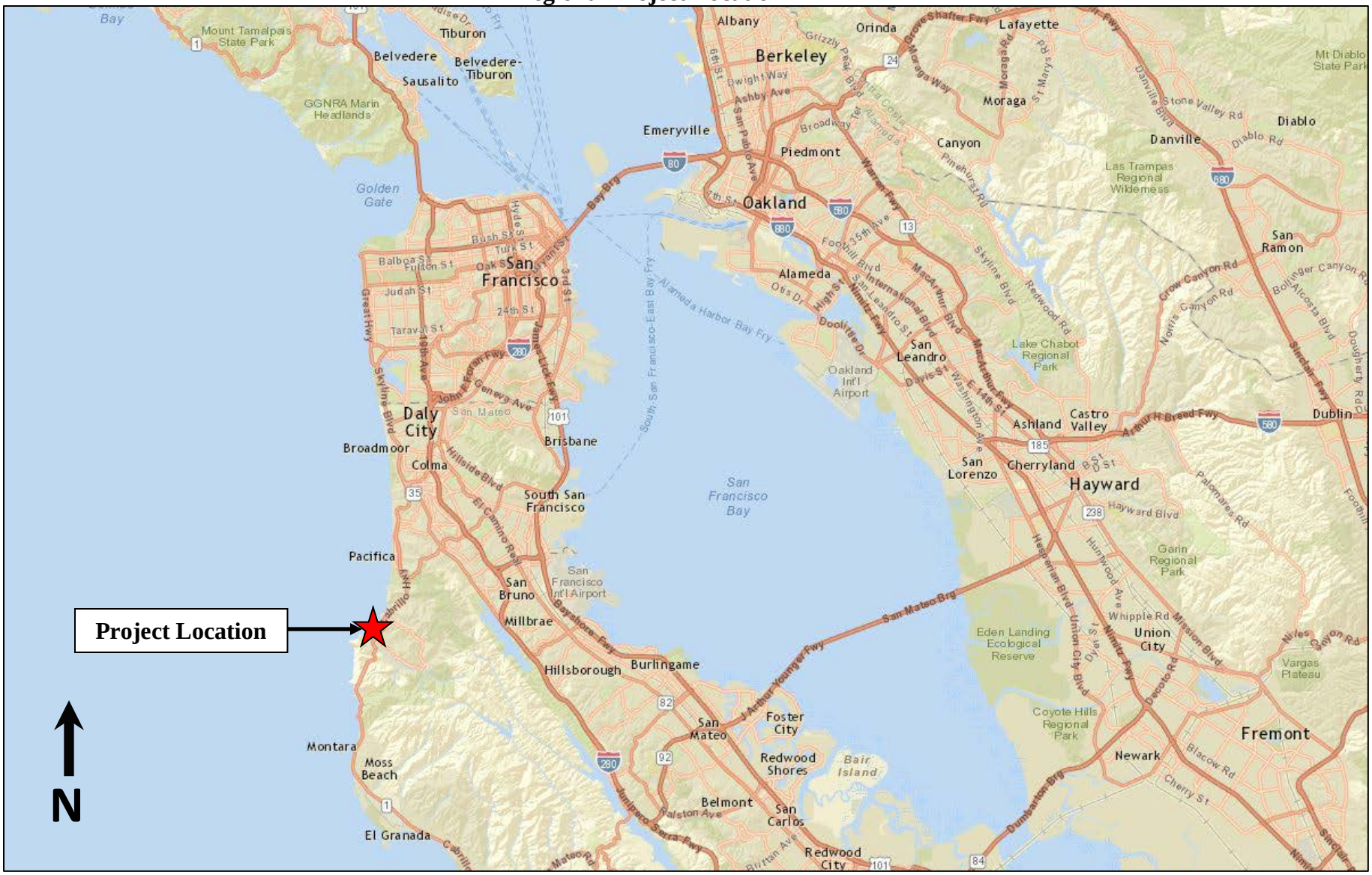


Figure 2
Project Vicinity Map

The proposed project site consists of a narrow parcel of flat, disturbed land approximately 0.86-acre in size. The current topography of the site was likely created through grading activity associated with the construction of a shopping center located east of the site (Pedro Point Shopping Center). The site is currently undeveloped and consists primarily of ruderal vegetation, with the exception of the northern portion of the site, which contains a private skateboard ramp feature ("half-pipe"). The half-pipe structure is approximately 50 feet by 30 feet. The southern portion of the site contains two eucalyptus trees, and the northern portion contains three Monterey cypress trees. The site has been used as an illegal trash dump in the past, and remnants of trash and concrete rubble are scattered throughout portions of the site and within a drainage swale located near the western boundary of the site.

The southern boundary of the site fronts San Pedro Avenue, a two-lane road that extends westward from SR 1. The site is bordered on the east by Halling Way. San Pedro Creek is situated approximately 225 feet east of the site. Surrounding land uses include commercial properties to the south across San Pedro Avenue, Pedro Point Shopping Center to the east, and single-family residences to the north, between the site and the Pacific Ocean. A large vacant lot is located to the west of the site, to the west of the drainage swale. The northern edge of the vacant lot is bordered by Shoreline Drive. All of the aforementioned areas, including the single-family residential area, share the same land use and zoning designation as the proposed project site.

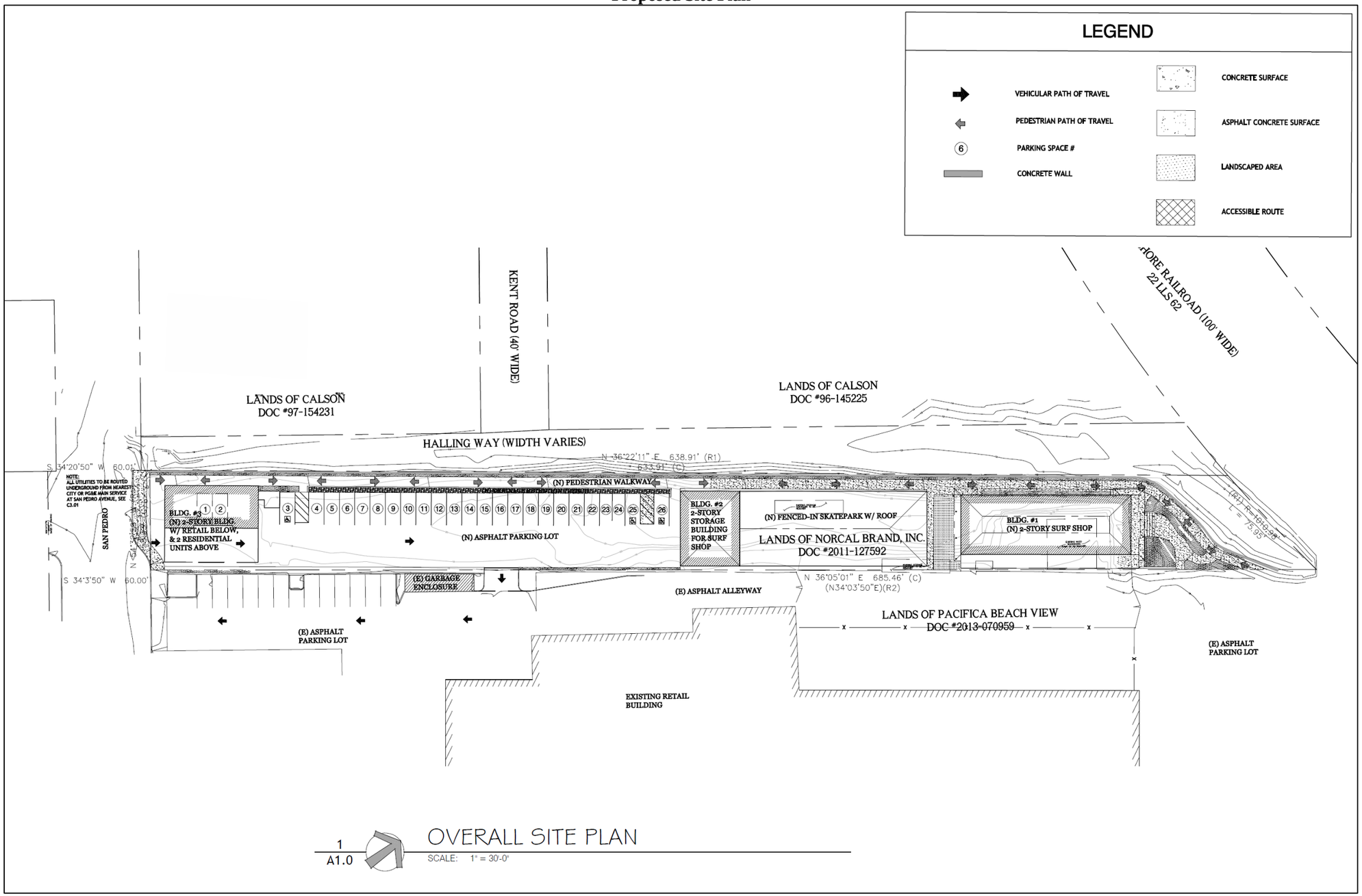
Project Components

The proposed project is for construction of a mixed-use scheme including three buildings comprised of (building #1) a 6,475 sf two-story surf shop building with retail space, office/storage space, areas designated for rentals and additional storage basement, (building #2) a storage and surf board shaping building of 3,010 sf of storage area, a 4,730 sf skatepark, enclosed by chain-link fencing, and a two-story mixed-use building with 583 sf retail space at the lower story and two residential units at the second story of 1077 sf and 900 sf per unit (Building #3) (see Figure 3, Proposed Site Plan). The parking lot would include 24 uncovered spaces and two covered spaces and associated infrastructure, pedestrian walkways, and landscaped areas. Project entitlements include Site Development Permit, Coastal Development Permit, Use Permit, Parking Exception, and Heritage Tree removal of Monterey Cypress Heritage Trees. The various project components are discussed in further detail below.

Proposed Buildings

Building #1 would include retail space, office/storage space, areas designated for rentals (surf boards, wetsuits, etc.), beach storage lockers, outdoor shower, and various attached decks. In addition, the building would include a storage basement. The building footprint would be 3,500 square feet and would include 6,475 square feet of gross leasable space. Building #2 would include 3,010 square feet of gross storage space (including surf board shaping rooms) and would have a footprint of 1,540 square feet. The proposed skatepark would total approximately 4,730 square feet and would be located on the northern portion of the site directly adjacent to the north side of Building #2 and south of Building #1. The skatepark would be surrounded on the west, north, and south sides by a chain-link fence, and would be covered by a roof. Access to the skatepark area would be provided by a 16-foot rolling chain-link double gate located on the north

Figure 3
Proposed Site Plan



side of the structure, as well as a secondary exit on the west side. Solar panels would be installed on the roof of the skatepark.

Building #3 would include 583 square feet of leasable retail space on the ground floor and two second-floor one-bedroom residential units totaling 1,077 and 900 square feet. The retail space on the ground floor would be adjacent to a proposed covered driveway/vehicular pass-through, over which the two residential units would be located. Building #3 would have a footprint of 2,516 square feet. The proposed floor plans are shown in Figure 4 through Figure 6 below.

Per Sections 9-4.1001 and 9-4.1101 of the City of Pacifica Municipal Code, one or more dwelling units are allowed within the same building as a commercial use when located entirely above the ground floor, subject to approval of a Use Permit. In order to develop a mixed-use building within an area zoned C-2, the proposed project would require approval of a Use Permit.

Parking and Access

The project would include a parking lot area consisting of 24 uncovered spaces, including three American Disabilities Act (ADA) accessible spaces. In addition, two covered, one-car garages would be provided at the first floor of Building #3 for the residents of the units on the second floor. The City requires a minimum of 51 parking spaces for the site based on the proposed site uses. Given that the proposed project would not meet the City's required number of parking spaces, the project would require the approval of a Parking Exception by the City.

Vehicles would access the site through a 16-foot-wide, covered driveway/vehicular pass-through under Building #3 connecting the primary parking area to San Pedro Avenue (see Figure 6). A pedestrian walkway would extend along the length of the western boundary of the site, providing connectivity between the proposed buildings and skatepark, as well as access to the adjacent roadways and beach located to the north.

Water, Sewer, and Stormwater Infrastructure

Sewer service for the proposed project would be provided by the City by way of two proposed connections to the existing sanitary sewer line paralleling the western site boundary. Water service would be provided by the North Coast County Water District (NCCWD) through a connection to the existing water main located in San Pedro Avenue, which would be extended northward through the site. The locations of existing and proposed utilities are shown in Figure 7 below.

The proposed project would include stormwater infrastructure to manage and treat runoff from all on-site impervious areas (see Figure 8 below). The site would be divided into six Drainage Management Areas (DMAs). Stormwater runoff from the project site would be routed to on-site bioswales/planters after which it is stored in an on-site 18-inch detention pipe during storm events. Stormwater that is treated on-site would then be pumped from the site into San Pedro Avenue via a three-inch sidewalk underdrain, which would then drain into the adjacent off-site drainage ditch.

Figure 4
Building #1 Floor and Roof Plans

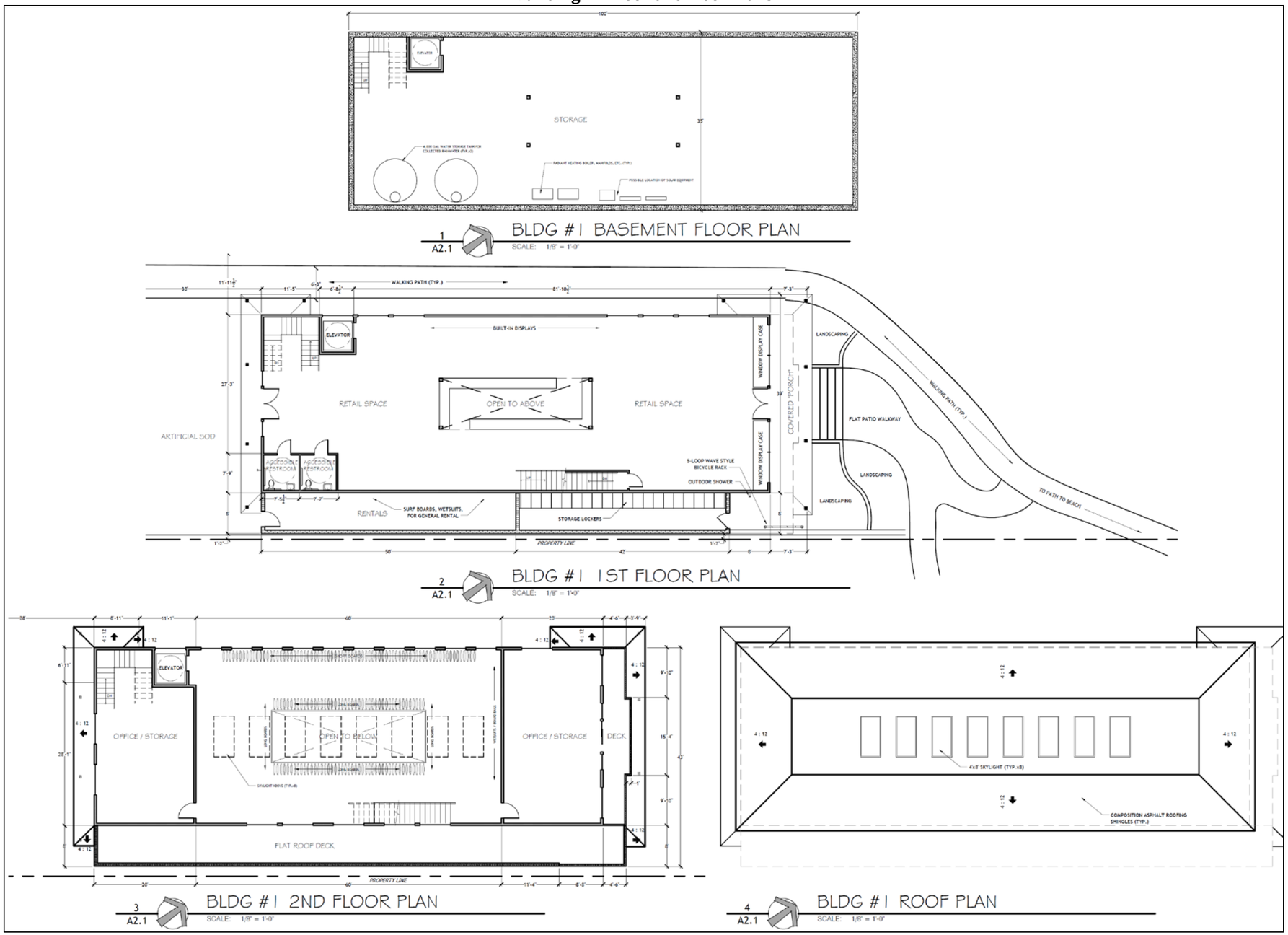


Figure 5
Skatepark and Building #2 Floor and Roof Plans

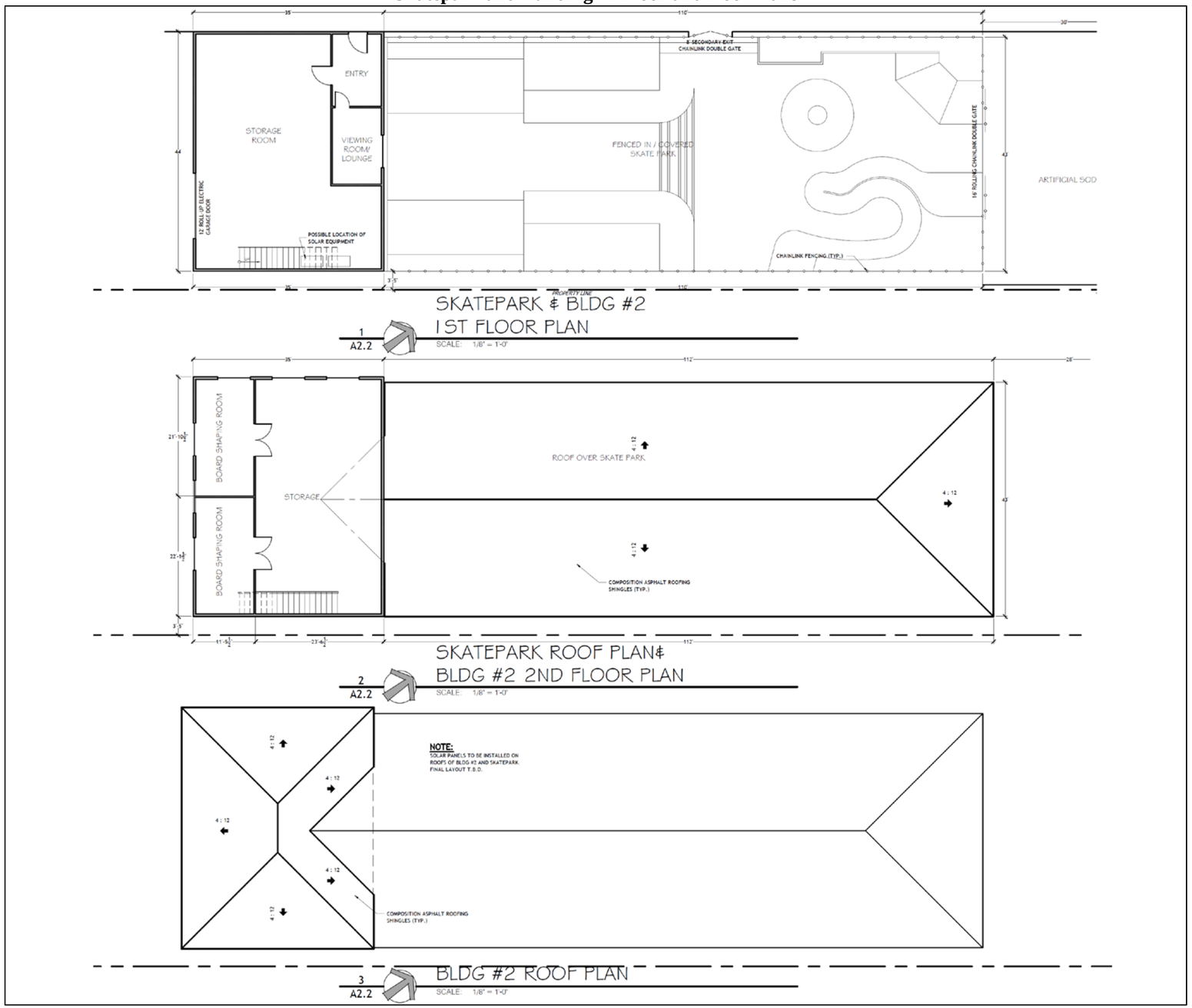
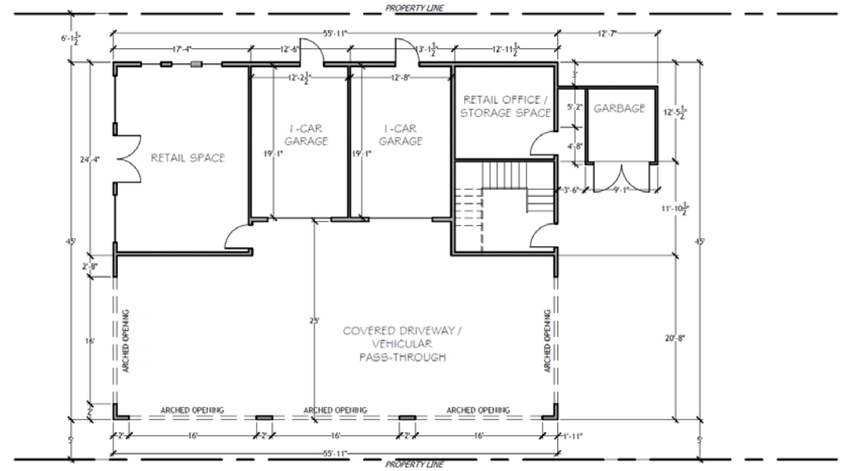
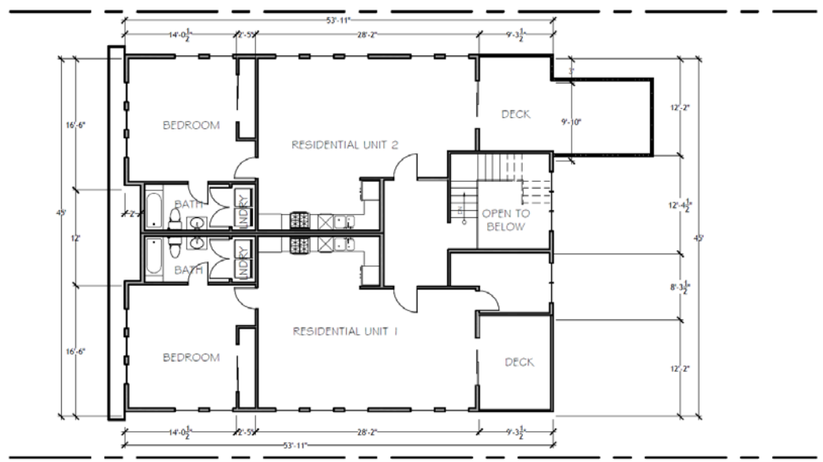


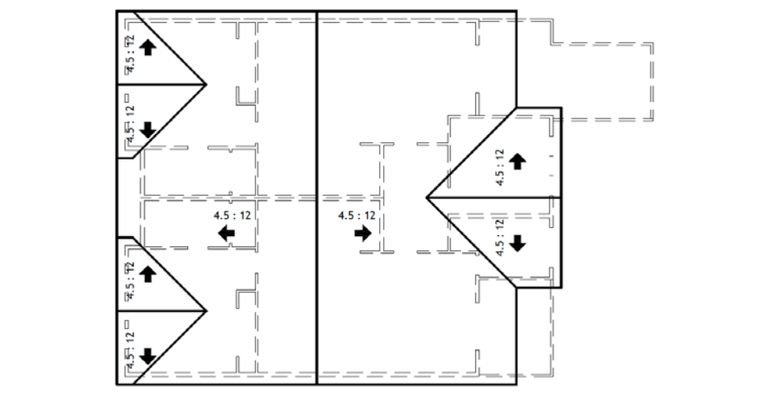
Figure 6
Building #3 Floor and Roof Plans



1 A2.3 BLDG #3 1ST FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 A2.3 BLDG #3 2ND FLOOR PLAN
SCALE: 1/8" = 1'-0"



3 A2.3 BLDG #3 ROOF PLAN
SCALE: 1/8" = 1'-0"

Figure 7
Preliminary Utility Plan

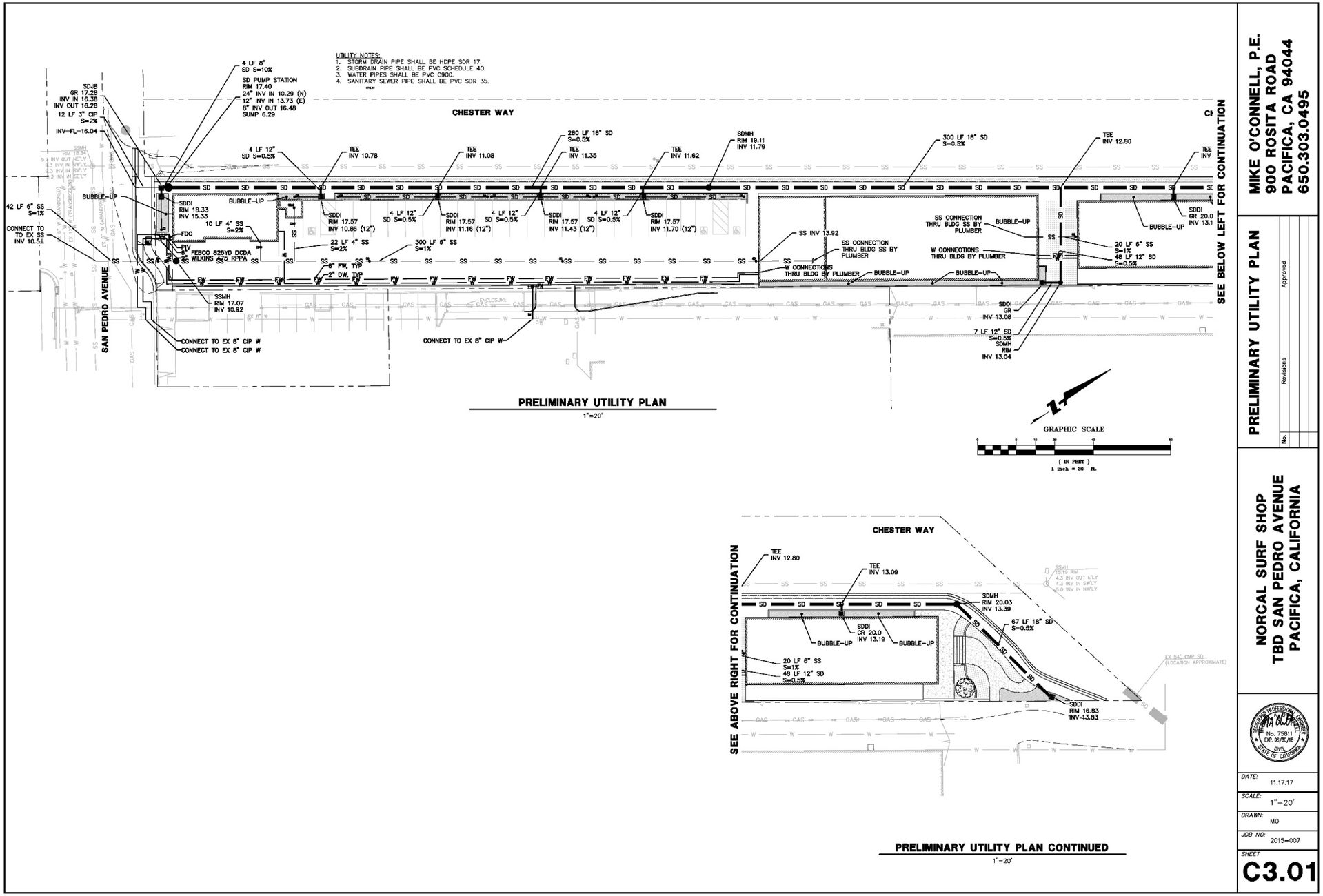
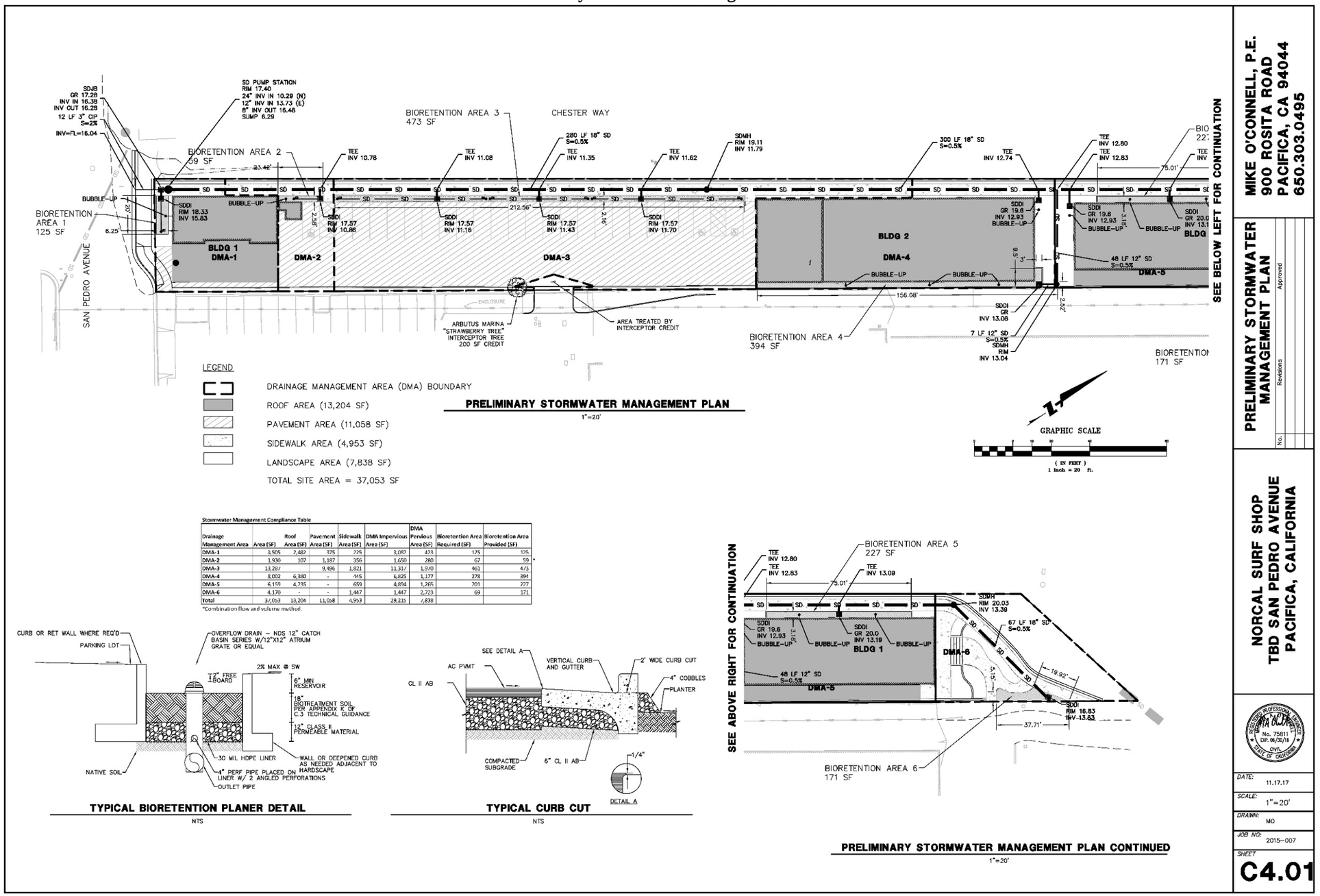


Figure 8
Preliminary Stormwater Management Plan



Stormwater Management Compliance Table

Drainage Management Area	Area (SF)	Roof Area (SF)	Pavement Area (SF)	Sidewalk Area (SF)	DMA Impervious Area (SF)	DMA Pervious Area (SF)	Bioretention Area Required (SF)	Bioretention Area Provided (SF)
DMA-1	3,505	2,487	375	725	3,087	473	125	135
DMA-2	1,930	107	1,187	356	1,650	280	67	59 *
DMA-3	13,287	-	9,486	1,821	11,317	1,970	461	473
DMA-4	8,002	6,380	-	445	6,825	1,177	278	394
DMA-5	6,159	4,735	-	659	4,894	1,265	701	277
DMA-6	4,170	-	-	1,447	1,447	2,723	69	171
Total	37,053	13,204	11,058	4,953	29,215	7,838		

*Combination flow and volume method.

TYPICAL BIORETENTION PLANER DETAIL
NTS

TYPICAL CURB CUT
NTS

PRELIMINARY STORMWATER MANAGEMENT PLAN CONTINUED
1"=20'

MIKE O'CONNELL, P.E.
900 ROSITA ROAD
PACIFICA, CA 94044
650.303.0495

PRELIMINARY STORMWATER MANAGEMENT PLAN

No.	Revisions	Approved

NORCAL SURF SHOP
TBD SAN PEDRO AVENUE
PACIFICA, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
MIKE O'CONNELL
No. 75811
EXP. 06/30/18
CIVIL
STATE OF CALIFORNIA

DATE: 11.17.17
SCALE: 1"=20'
DRAWN: MO
JOB NO: 2015-007
SHEET: C4.01

Coastal Development Permit

The project site straddles an area of permit jurisdiction of the California Coastal Commission and also falls within the Coastal Zone Combining District. A Coastal Development Permit would be required for the proposed project per Section 9-4.4303 of the City's Municipal Code. The applicant is also required to submit an Coastal Development Permit to the California Coastal Commission which conforms with the California Coastal Act. As part of the City of Pacifica Coastal Development Permit application review process, the proposed project would be evaluated to ensure conformance with all requirements of the existing zoning and consistency with applicable regulations, the Pacifica Local Coastal Land Use Plan, the California Coastal Act, and the Interpretive Guidelines of the California Coastal Commission (Section 9-4.4304).

Discretionary Actions

Implementation of the proposed project would require the following discretionary actions by the City of Pacifica:

- Site Development Permit to allow for new construction within a commercial district;
- Coastal Development Permit to develop within a CZ combining district;
- Use Permit to allow development of a mixed-use project in a commercial district; and
- Parking Exception to allow for the proposed 26 parking spaces, given that the City requires a greater number of spaces.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended as appropriate as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less-Than-Significant With Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	✖	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	✖	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	✖	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	✖	☐

Discussion

a. Examples of typical scenic vistas would include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. Policy 3 in the Community Design Element of the City's General Plan sets the goal of protecting the City's irreplaceable scenic and visual amenities, but does not define or identify specific scenic vistas.

The project site is relatively flat and is not located along a ridgeline or on a hillside, and is surrounded by existing development to the north, east, and south. The Pacific Ocean is located approximately 475 feet to the north of the site; however, due to the topography of the area and the screening provided by the existing vegetation at the northern site boundary, the ocean is not currently visible from San Pedro Avenue along the project frontage. Thus, the project would not obstruct public views of the ocean. Furthermore, the proposed project would be consistent with the General Plan land use designation for the site. Thus, the City has previously anticipated development of the site with commercial uses and has considered potential adverse effects on scenic vistas associated with such development. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista, and a ***less-than-significant*** impact regarding scenic vistas would occur.

b. The City does not contain an Officially Designated Scenic Highway.[1] SR 1, which is located approximately 450 feet east of the proposed project site, is an Eligible State Scenic Highway, but is not officially designated. While the proposed project would be visible to motorists travelling along SR 1, the proposed buildings would be partially blocked from view by the existing Pedro Point Shopping Center, which is situated between the project site and SR 1. The project would be consistent with the existing

[1] California Scenic Highway Mapping System. *San Mateo County*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed January 3, 2017.

commercial development in the vicinity. In addition, the project site does not contain any existing scenic resources that would be visible from the roadway. Therefore, even if SR 1 is officially designated at a later point in time, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. As such, a ***less-than-significant*** impact would occur.

c. The proposed project site is currently vacant and undeveloped, and, as such, development of the site would change the existing visual character of the site. However, with the exception of the vacant lot located to the west of the site, the proposed project is surrounded by existing commercial and residential development, and the proposed project would be considered compatible and consistent with such uses. In addition, the project would be consistent with the existing land use designation and zoning designation of the site. Thus, the City has previously anticipated changes to the visual character of the site associated with commercial development of the project site. Furthermore, various landscaping features would be included along the project frontage and throughout the project site, and would enhance the visual quality of the area. Nevertheless, the project represents a change in the character of the site, and further analysis is required to ensure that such a change does not have a negative impact on public views in the surrounding area.

Visual simulations were prepared for the proposed project to aid in evaluating the potential visual impacts of the proposed project to the surrounding areas. The visual simulations include before and after views of the proposed project site, including all proposed landscaping improvements, from public views in the surrounding area. The views analyzed are described and discussed in further detail below.

<u>View of Project Site from SR 1 Looking West</u>

Figure 9 and Figure 10 present the existing and proposed views of the site looking west from SR 1, respectively. SR 1 experiences a moderate amount of traffic on a daily basis, and, thus, the roadway provides views of the proposed project site to a large number of drivers travelling on the roadway. However, as shown in the figures, the project would be partially blocked from view by the existing Pedro Point Shopping Center. Only Building #1 would be visible from the roadway. Given that the visual character of the proposed buildings would be similar to that of the existing development at the Pedro Point Shopping Center, the project would not constitute a substantial change in the visual character of the area as viewed by motorists on SR 1. In addition, the hills and ridgelines that form the backdrop of the project area for such sensitive viewers would not be obscured by the proposed project. Overall, the visual character of the area from SR 1 looking west would not be substantially degraded with implementation of the proposed project.

Figure 9
Existing View of Project Site from SR 1 Looking West

Figure 10
Proposed View of Project Site from SR 1 Looking West

View of Project Site from San Pedro Avenue Looking East

Figure 11 and Figure 12 present the existing and proposed views of the site looking east from San Pedro Avenue, respectively. Sensitive viewers travelling on San Pedro Avenue would consist of motorists, bicyclists, and pedestrians.

While portions of the proposed buildings would be visible to such viewers, the large trees located along the drainage ditch to the west of the project site would provide considerable screening for a majority of the site. In addition, the proposed project would not block existing views of any significant visual resources, such as the hillsides beyond the site to the east. Therefore, the visual character of the area from San Pedro Avenue looking east would not be substantially degraded with implementation of the proposed project.

View of Project Site from Shoreside Drive Looking Southeast

Figure 13 and Figure 14 present the existing and proposed views of the site looking southeast from Shoreside Drive, respectively. Following buildout of the site, Building #1 would be clearly visible to motorists, bicyclists, and pedestrians traveling on the roadway. In addition, Building #2 would partially obscure views of the distant hills located south of the project site. However, as shown in Figure 13, views of the project site from Shoreside Drive are primarily dominated by the existing buildings associated with the Pedro Point Shopping Center. The proposed project would be consistent with such commercial development, and, thus, would not alter the predominant visual character of the area. Therefore, the visual character of the area from Shoreside Drive looking southeast would not be substantially degraded with implementation of the proposed project.

Conclusion

As shown in the visual simulations, implementation of the proposed project would result in noticeable changes to the visual character of the area; however, modifications to the visual character of the site and surrounding area as a result of the proposed project would not constitute a substantial degradation of such character. Views of the site from public viewpoints, such as nearby roads, would be temporary, and would occur only while passing the site. In addition, the project would be required to comply with the City of Pacifica Design Guidelines, which are used by the City's Planning Commission and planning staff when reviewing and evaluating the design of all new development within the City. Compliance with the Design Guidelines would ensure that the visual quality of the area would be maintained. Therefore, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings, and a ***less-than-significant*** impact would occur.

Figure 11
Existing View of Project Site from San Pedro Avenue Looking East

Figure 12
Proposed View of Project Site from San Pedro Avenue Looking East

Figure 13
Existing View of Project Site from Shoreside Drive Looking Southeast

Figure 14
Proposed View of Project Site from Shoreside Drive Looking Southeast

d. The proposed project site is currently vacant and, with the exception of the existing half-pipe feature, does not include any permanent structures. The half-pipe feature does not have any associated lighting. Accordingly, sources of light and glare do not exist on the project site. Thus, development of the proposed project would introduce new sources of light and glare to the project site. Sources of light would include, but would not be limited to, exterior and interior lighting associated with the proposed buildings and vehicles travelling through the proposed parking lot area, as well as lighting associated with the proposed skatepark area. The proposed buildings could potentially produce daytime glare as a result of light reflecting off of windows.

However, due to the predominantly developed nature of the area, the increase in light and glare sources would not be expected to substantially increase the potential for sky glow. In addition, the project site has been planned by the City for commercial uses such as those included in the proposed project. As such, the City has previously anticipated an increase in light and glare associated with the site.

Typically, only residential uses would be considered sensitive to increased light and glare. The nearest residential building is located 175 feet to the north of the project site, and is screened from the project site by existing vegetation along the northern boundary of the site. As such, the existing residence would not be adversely affected by any light and glare created by the proposed development.

The Pacifica Design Guidelines require that exterior lighting is subdued and enhances building design.[2] In addition, the Guidelines prohibit use of lighting that creates glare for occupants or neighbors. The proposed project would be required to comply with the Design Guidelines, which would be ensured during the project approval processes. Compliance with the Pacifica Design Guidelines would ensure that the project would not introduce sources of light or glare that would pose a hazard or nuisance to neighboring development. As such, a ***less-than-significant*** impact would occur related to the creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

[2] City of Pacifica. *Design Guidelines* [pg. 3]. Revised April 1990.

II. AGRICULTURE AND FOREST RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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 Program of the California Resources Agency, to non-agricultural use?	☐	☐		✖
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	✖
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	☐	☐	☐	✖

Discussion

a,b,e. Per the California Department of Conservation Farmland Mapping and Monitoring Program, the site consists of land considered Urban and Built-Up Land.[3] Furthermore, the site is not zoned or designated in the General Plan for agriculture uses. The proposed project site is not under a Williamson Act contract, and is not currently used for agriculture. Based on the above, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, conflict with existing zoning for agricultural use or a Williamson Act contract or involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use. Therefore, the proposed project would have ***no impact***.

c,d. The proposed project site is located in an urban area and contains only a small number of trees. As such, the site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Given that the proposed project site does not contain forest land, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Thus, ***no impact*** would occur.

[3] California Department of Conservation. *San Mateo County Important Farmland 2014.* Published February 2016.

III. AIR QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	✖	☐
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	✖	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a-c. The City of Pacifica is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), who regulates air quality in the San Francisco Bay Area. The SFBAAB area is currently designated as a nonattainment area for the State and federal ozone, State and federal particulate matter 2.5 microns in diameter ($PM_{2.5}$), and State particulate matter 10 microns in diameter (PM_{10}) standards. The SFBAAB is designated attainment or unclassified for all other ambient air quality standards (AAQS). It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area has attained the 24-hour $PM_{2.5}$ federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal $PM_{2.5}$ AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the EPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2010 Clean Air Plan (CAP), adopted on September 15, 2010. The 2010 CAP was developed as a multi-

pollutant plan that provides an integrated control strategy to reduce ozone, particulate matter (PM), toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM_{10} standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2010 CAP. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. The BAAQMD's established significance thresholds associated with development projects for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM_{10}, and $PM_{2.5}$, expressed in pounds per day (lbs/day) and tons per year (tons/yr), are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for operational emissions of ROG, NO_X, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 1
BAAQMD Thresholds of Significance

	Construction	Operational	
Pollutant	**Average Daily Emissions (lbs/day)**	**Average Daily Emissions (lbs/day)**	**Maximum Annual Emissions (tons/year)**
ROG	54	54	10
NO_x	54	54	10
PM_{10} (exhaust)	82	82	15
$PM_{2.5}$ (exhaust)	54	54	10

Source: BAAQMD, CEQA Guidelines, May 2010.

It should be noted that a series of recent court cases have called into question the BAAQMD resolutions adopting and revising their 2010 significance thresholds, asserting that the adoption of such would be considered a project under CEQA, necessitating environmental review. None of the courts have indicated whether the thresholds were invalid on the merits or that the thresholds lack evidentiary support. Nonetheless, BAAQMD has withdrawn their revised quantitative significance thresholds for the time being. However, because the BAAQMD's thresholds of significance are supported by substantial evidence and remain the best available option, the City, as lead agency, has chosen to use the BAAQMD's thresholds of significance for evaluation of the proposed project.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.2.1 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. Where project-specific information is available,

such information should be applied in the model. Accordingly, the proposed project's modeling assumed the following:

- The land uses "single-family residential", "recreational racquet club", "retail strip mall", and "parking lot" were applied to the model;
- Construction would begin in April of 2018;
- Construction would occur over an approximately 1.5-year period;
- The existing half-pipe feature would be demolished;
- A total of 0.86 acre of land would be disturbed;
- A total of 20 cubic yards of material would be exported during site preparation;
- Solar panels would generate 100 percent of the energy demand of the proposed project; and
- The proposed project would comply with the 2016 California Building Energy Efficiency Standards Code.

All CalEEMod results are included in the appendix to this IS/MND.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project's construction emissions would be well below the applicable thresholds of significance for ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Table 2
Maximum Construction Emissions (lbs/day)

Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	2.01	54	**NO**
NO_X	21.8	54	**NO**
PM_{10} (exhaust)	1.05	82	**NO**
PM_{10} (fugitive)	2.20	None	**N/A**
$PM_{2.5}$ (exhaust)	0.99	54	**NO**
$PM_{2.5}$ (fugitive)	0.44	None	**N/A**

Source: CalEEMod, March 2017 (see appendix).

Although thresholds of significance for mass emissions of fugitive dust PM_{10} and $PM_{2.5}$ have not been identified by the City of Pacifica or BAAQMD, the proposed project's estimated fugitive dust emissions have been included for informational purposes. All projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's Basic Construction Mitigation Measures, which include the following:

1. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
2. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
3. All vehicle speeds on unpaved roads shall be limited to 15 mph.
4. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
5. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
6. All construction equipment shall be maintained and properly tuned in accordance with manufacturer‘s specifications. All equipment shall be checked by a certified visible emissions evaluator.
7. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

The proposed project’s required implementation of the BAAQMD’s Basic Construction Mitigation Measures listed above, to the extent that the measures are required for the proposed project’s construction activities, would help to further minimize construction-related emissions. Because the proposed project would result in construction emissions below the applicable thresholds of significance, the proposed project would be considered to result in a less-than-significant air quality impact during construction.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project’s operational emissions would be below the applicable thresholds of significance.

Table 3
Unmitigated Maximum Operational Emissions

Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	4.01	0.33	54	10	**NO**
NO_X	5.83	0.99	54	10	**NO**
PM_{10} (exhaust)	0.43	0.01	82	15	**NO**
PM_{10} (fugitive)	2.84	0.45	None	None	**N/A**
$PM_{2.5}$ (exhaust)	0.43	0.01	54	10	**NO**
$PM_{2.5}$ (fugitive)	0.76	0.12	None	None	**N/A**

Source: CalEEMod, March 2017 (see appendix).

Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would be considered to result in a less-than-significant air quality impact during operations.

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Because the proposed project would not result in emissions above the applicable thresholds of significance for ROG, NO_X, PM_{10}, or $PM_{2.5}$, the project would not be expected to result in a cumulatively considerable contribution to the region's existing air quality conditions.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2010 CAP. Because the proposed project would not result in construction related or operational emissions of criteria air pollutants in excess of BAAQMD's thresholds of significance, the proposed project would not be considered to conflict with or obstruct the implementation of any regional air quality plans. Therefore, the proposed project would not contribute to the region's nonattainment status for ozone or PM or contribute substantially to the violation of an air quality standard, and a ***less-than-significant*** impact would result.

d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the single-family

residences located approximately 175 feet northwest of the project site along Shoreside Drive.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminants (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

As discussed in the Transportation and Circulation section of this IS/MND, the proposed project would not conflict with the San Mateo County Congestion Management Plan (CMP). Additionally, traffic counts for the area completed as part of a Transportation Impact Analysis (TIA) prepared for the project showed that all of the intersections in the project area experience traffic levels far below 44,000 vehicles during AM and PM peak hour periods.[4] As such, the proposed project would not increase traffic volumes at an affected intersection to more than 44,000 vehicles per hour. Furthermore, areas where vertical and/or horizontal mixing is limited due to tunnels, underpasses, or similar features do not exist in the project area. As such, based on the BAAQMD's screening criteria for localized CO emissions, the proposed project would not be expected to result

[4] Abrams Associates Traffic Engineering, Inc. *Transportation Impact Analysis, San Pedro Avenue Mixed Use Project, City of Pacifica.* April 5, 2017.

in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

As part of the ongoing *California Building Industry Association v. Bay Area Air Quality Management District* case, the California Supreme Court granted limited review to the question: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? In the opinion published on December 17, 2015, the Supreme Court looked closely at the language and legislative intent in CEQA, and found that CEQA does not provide "enough of a basis to suggest that the term 'environmental effects' [. . .] is meant, as a general matter, to encompass these broader considerations associated with the health and safety of a project's future residents or users." Based on the Supreme Court opinion, it would be considered appropriate to evaluate a project's potentially significant *exacerbating* effects on existing environmental hazards – effects that arise because the project brings "development and people into the area affected." The Supreme Court stated that even in those specific instances where evaluation of a project's potentially significant exacerbating effects on existing environmental hazards is appropriate, the evaluation of how future residents or users could be affected by the exacerbated conditions is still compelled by the project's impact on the environment, and not the environment's impact on the project.[5]

Considering the recent court ruling, while the proposed project would be considered a sensitive receptor, consideration of impacts from existing sources on future residents of the project is outside of the scope of CEQA. Thus, the analysis within this IS/MND focuses on the potential for the proposed project to result in TAC emissions that could affect existing nearby sensitive receptors.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed project would not generate any substantial pollutant concentrations during operations. However, short-term, construction-related activities could result in the generation of TACs, specifically

[5] Alameda County Superior Court. *California Building Industry Association v. Bay Area Air Quality Management District. A135335 and A136212*. Filed August 12, 2016.

DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, construction equipment would operate intermittently throughout the course of a day and only on portions of the site at a time.

Because construction equipment on-site would not operate for any long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, sensitive receptors in the area would not be exposed to pollutants for a permanent or substantially extended period of time. Therefore, construction of the proposed project would not be expected to expose nearby sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs, including DPM from construction activity. Therefore, the proposed project would result in a ***less-than-significant*** impact related to the exposure of sensitive receptors to substantial concentrations of pollutants.

e. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses. The proposed project is mixed use, containing both commercial and residential uses, and the proposed types of commercial and residential uses are not typically associated with the creation of substantial objectionable odors. The proposed surfboard shaping activities could generate detectable odors; however, these operations would occur on a relatively small scale, and within a designated area. As a result, the proposed project operations would not create any objectionable odors that would affect a substantial number of people.

Although less common, diesel fumes associated with substantial diesel-fueled equipment and heavy-duty trucks, such as from construction activities, freeway traffic, or distribution centers, could be found to be objectionable. As such, the proposed project

activities could cause diesel fumes, which could be considered objectionable, during the temporary construction period. Although diesel fumes from construction equipment are often found to be objectionable, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 9:00 AM to 5:00 PM on Saturdays and Sundays per Section 8-7.5.07 of the City's Municipal Code. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Considering the short-term nature of construction activities and the regulated and intermittent nature of the operation of construction equipment on the site, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

It should be noted that BAAQMD regulates objectionable odors through Regulation 7, Odorous Substances, which does not become applicable until the Air Pollution Control Officer (APCO) receives odor complaints from ten or more complainants within a 90-day period. Once effective, Regulation 7 places general limitation on odorous substances and specific emission limitations on certain odorous compounds, which remain effective until such time that citizen complaints have not been received by the APCO for one year. The limits of Regulation 7 become applicable again when the APCO receives odor complaints from five or more complainants within a 90-day period. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, including complaints associated with the proposed surfboard shaping activities, the BAAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors, and a ***less-than-significant*** impact related to objectionable odors would result.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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 Wildlife or U.S. Fish and Wildlife Service?	☐	✖	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	✖	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	✖	☐
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	✖	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	✖	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	✖

Discussion

The following discussion is based on a Biological Resources Assessment (BRA) prepared for the proposed project by Coast Ridge Ecology and subsequently peer-reviewed by Live Oak Associates, Inc.[6,7]

a. The proposed project site consists of a vacant lot located behind the Pedro Point Shopping Center. The site is undeveloped and consists primarily of ruderal vegetation. Two eucalyptus trees are located on the southern portion of the site and three Monterey cypress trees are located on the northern portion. The site has been used as an illegal trash dump in the past, and remnants of trash and concrete rubble are present on-site and within

[6] Coast Ridge Ecology. *Biological Resources Assessment for APN 023-72-010.* March 2015.
[7] Live Oak Associates, Inc. *Biological Resources Assessment Peer Review for the Shawn Rhodes/Norcal Surf Shop Project.* January 19, 2017.

the existing drainage swale located west of the site. Overall, the project site has been subject to a high level of disturbance, and, consequently, the potential for rare plant species to be present on the site is relatively low.

According to the BRA and peer review, 15 special-status plant species and three special-status wildlife species were identified as having a high probability for occurrence on-site, based on habitat types and/or recorded observations within three miles of the project site. The special-status species determined to require further analysis are discussed in greater detail below. Special-status species found exclusively within habitats not present on the property (i.e. sand dune, serpentine grassland, salt marsh, freshwater marsh and/or marine habitats, etc.) were excluded from analysis due to the absence of such habitats on or adjacent to the project site.

Special-status Plant Species

Special-status plant species were not observed on the project site during the site survey conducted as part of the BRA. In addition, the project site appears to have been heavily disturbed by previous grading activities; such activities have eliminated the potential for rare plant species to exist on the site. Due to the disturbed conditions of the site and the abundance of invasive plant species observed during the site visit, special-status plant species are not expected to occur on-site.

Special-status Wildlife Species

Three federally- and/or State-listed species that are a high priority for conservation were determined to potentially occur on the proposed project site: California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), and Monarch butterfly (*Danaus plexippus*). Such species, as well as protected raptors, nesting birds, and bat species that could potentially occur on-site, are discussed in further detail below.

California Red-legged Frog

The California red-legged frog (CRF) is a federally-listed threatened species and a California Species of Special Concern. The species is known to occur in slow-flowing streams, and marshes with heavily-vegetated shores for breeding, as well as grasslands, riparian woodland, oak woodland, and coniferous forests. Seasonal bodies of water are frequently occupied by CRF, and in some areas, such aquatic features may be critical for persistence. CRF disperse through many types of upland vegetation and use a broader range of habitats outside of the breeding season.

The proposed project site is located near San Pedro Creek, which has occurrence records of CRF. However, the site does not provide suitable habitat for CRF. CRF individuals have not been documented to occur on the property or within the swale, and signs of CRF egg masses were not observed in the drainage during site visits, which were conducted during the CRF breeding season. In addition, the project site is not located within the critical habitat designated for the CRF.

One small pool (approximately 60 square feet) located within the swale and adjacent to San Pedro Avenue was observed to have six to ten inches of standing water on January 13, 2015. The pool primarily holds water after rain events and does not include emergent vegetation capable of providing quality cover for CRF. Based on the hydrology of the site, and the ephemeral nature of the swale, the drainage would not be expected to provide suitable breeding habitat for CRF, even in high rainfall years. However, CRF could disperse into the swale or onto the project site due to the short distance between San Pedro Creek and the site (250 feet). Because CRF has some potential for dispersing onto the project site, measures such as preconstruction surveys and exclusion fencing would be required in order to avoid any potential impacts to CRF during project construction.

San Francisco Garter Snake

The San Francisco garter snake (SFGS) is federally- and State-listed as endangered and is a fully-protected species under §5050 of the California Fish and Game Code. A highly aquatic subspecies of the common garter snake endemic to the San Francisco Bay Area, SFGSs are distributed along the western San Francisco Peninsula from the southern San Francisco County border south to Waddell Lagoon, south of Año Nuevo, and as far east as Crystal Springs Reservoir.

SFGS is usually found around ponds and marshes that support large populations of Pacific tree frog (*Pseudacris sierra*), CRF, and/or bullfrog (*Lithobates catesbeianus*). The nearest recorded observation of SFGS is located at Calera Creek, 1.5 miles north of the project site. In addition, records exist from Sharp Park/Laguna Salada, located approximately two miles north of the project site. Sharp Park/Laguna Salada is a well-known site for the species, with 44 individuals collected between 1946 and 1947, and near annual detections. Further SFGS records exist from the upper part of Sharp Park about 2.75 miles northeast of the project site.

Though several observations of SFGS have been recorded within three miles of the project site, the sightings are all associated with ponds containing emergent vegetation that support CRF. Due to significant barriers, such as large roadways and urban development, between known SFGS habitat locations and the site, the potential for occurrence of SFGS at the site is relatively low. However, preconstruction surveys would be required to ensure that impacts to the species do not occur.

Monarch Butterfly

Monarch butterflies migrate in the fall and roost along the California coast in the winter (October through February). The nearest recorded occurrence of monarch butterflies relative to the site is approximately 2.8 miles south along Martini Creek. The species primarily inhabits closed-cone coniferous forests, but have been found roosting in various other tree species in California. The host plant for the monarch butterfly is the milkweed (*Asclepius* spp.) and locations with adequate amounts of milkweed serve as breeding locations. Critical habitat for the species in California is described as roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. As the project site has several large eucalyptus and cypress trees, as well

as a nearby water source, monarch butterflies could potentially use the site as a winter roost location.

Raptors and Nesting Birds

Nesting birds, including raptors, are protected by California Fish and Game Code Section 3503. Raptors, passerines, non-passerine landbirds, and waterfowl are further protected under the Federal Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits the take, possession, purchase, sale, or bartering of any migratory bird, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. All migratory bird species are protected by the MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law. Raptors, including white-tailed kite, Cooper's hawk, and sharp-shinned hawk, in addition to other nesting birds, could potentially occur on the project site. Such species are discussed in greater detail below.

White-tailed Kite

White-tailed kite is a State-protected species covered under the California Endangered Species Act (CESA). The species is a year-round resident of Central and Coastal California. While white-tailed kites were not observed during surveys of the site, the species could nest within on-site trees as well as trees immediately adjacent to the west boundary of the site. As such, impacts to white-tailed kite could occur during construction activities.

Cooper's Hawk

Cooper's hawk inhabits dense stands of oak woodlands, riparian deciduous forests, or other forest habitats, often near water and suburban areas. Typical nest site selection is characterized by mature trees with significant canopy cover; although, the species will nest in suburban areas in a variety of trees. Cooper's hawks were not observed during surveys of the site; however, due to the presence of on-site trees which could provide suitable nesting habitat for the species, impacts to Cooper's hawk could occur as a result of the proposed project.

Sharp-shinned Hawk

Sharp-shinned hawks prefer north-facing slopes in dense stands of deciduous, conifer, and mixed hardwood trees, including ponderosa pine, black oak, and Jeffrey pines, preferably in riparian areas. However, the species is known to nest in suburban areas. The species is attracted to rural and suburban areas, especially near bird feeders, often during winter months. The species was not observed during surveys of the site. However, while the on-site trees are smaller than trees typically preferred by the species, sharp-shinned hawks could potentially nest in such trees, as well as other trees in the surrounding area. As such, impacts to sharp-shinned hawk could occur as a result of the proposed project.

Other Nesting Birds

The project site has a low potential for nesting birds due to the lack of woody vegetation. However, the brushy area on the north end of the property and the eucalyptus and cypress trees could potentially serve as nesting habitat for a few bird species. In addition, the greater vegetative cover present in the drainage swale adjacent to the site could provide habitat for nesting songbirds. Therefore, the proposed project could result in impacts to nesting birds.

Western Red Bat

The western red bat is a California Species of Special Concern. The western red bat is found throughout California, except the Great Basin Region. Western red bats are typically found roosting alone in dense clumps of foliage near riparian areas. The species prefers roosting in willows, cottonwoods, or sycamores, but will roost in other trees and shrubs with adequate cover. Roosts are often hidden and only accessible from below. Breeding colonies have not been documented in the region; however, the on-site foliage could provide marginal habitat for the species. Thus, while unlikely, western red bat could occupy the site.

Conclusion

Due to the disturbed soils and dominance of invasive plant species on the property, special-status plant species are not expected to occur on-site, and, thus, would not be impacted by the proposed project. However, a number of special-status wildlife species, including CRF, SFGS, monarch butterfly, various raptors and nesting birds, and western red bat, have the potential to occupy the proposed project site. Therefore, a ***potentially significant*** impact regarding a substantial adverse effect on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS could occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impacts to a *less-than-significant* level.

California Red-legged Frog and San Francisco Garter Snake

IV-1. The following measures shall be implemented prior to and during construction activities:

- *Staging areas and access routes to any work areas shall be delineated and inspected by a qualified biologist prior to establishment to avoid unnecessary impacts to California red-legged frog (CRF) and San Francisco Garter Snake (SFGS);*
- *Frog- and snake-proof exclusion fencing shall be erected around the project boundary prior to the onset of project activities. Fencing shall be a minimum of three feet in height and buried in the soil to inhibit CRF and SFGS from entering the project area;*

- *Once the exclusion fence is installed, a pre-construction survey shall be conducted to ensure that CRF and/or SFGS individuals are not present within the fenced area. The results of the pre-construction survey shall be submitted to the City of Pacifica Planning Department;*
- *Prior to the initiation of construction activities, worker education and awareness training shall be conducted for all construction crews and contractors that access the site for any period of time. The education training shall be conducted prior to starting work on the project and upon the arrival of any new worker. The training shall include a brief review of the CRF and SFGS life history, field identification, habitat requirements, location of sensitive areas, possible fines for violations, avoidance measures, and correction actions if either species is encountered. The program shall cover the mitigation measures, environmental permits, and regulatory compliance requirements as applicable. In addition, a record of all personnel trained during the project shall be maintained for compliance verification by the City of Pacifica Planning Department;*
- *During project activities, all on-site trash that has the potential to attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following completion of construction activities, all trash and construction debris shall be removed from work areas;*
- *Tightly woven fiber netting or similar material shall be used for erosion control or other purposes at the project to ensure that CRF and/or SFGS are not incidentally trapped. Plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material, shall not be used at the project site.*

Monarch Butterfly

IV-2. *If any eucalyptus trees must be removed during the monarch butterfly winter roosting season, (October through February) a qualified biologist shall survey the project site to ensure that a roosting colony is not present. Because timing of monarch migration on the coast side varies from year to year, the survey shall be conducted at a time to coincide with monarch roosting activity on the coast side for that particular year. Information on monarch roosting activity must be verified with local experts prior to conducting the survey. If a roosting colony is not detected, tree removal may commence, and further surveys shall not be required. However, if a roosting colony is detected, trees shall not be removed until the winter roosting season has concluded (i.e. monarchs have not been observed in the general area or using the trees). Results of any butterfly surveys shall be submitted to the City of Pacifica Planning Department. If trees have already been removed prior to the onset of the winter roosting season, surveys are not warranted.*

Raptors and Nesting Birds

IV-3. *If demolition, renovation, construction, tree removal, and/or tree trimming activities are proposed during the bird nesting season (February 15 through August 31), preconstruction surveys for nesting birds, including raptors, shall be conducted by a qualified biologist within 300 feet of the construction area, prior to, and within one week of initiation of construction activities. If active bird nests are found, and project activities could potentially impact nesting success as determined by a qualified biologist, all necessary permits shall be obtained from the USFWS Migratory Bird Treaty Office and the California Department of Fish and Wildlife (CDFW). Results of the preconstruction surveys shall be submitted to the City of Pacifica Planning Department.*

Roosting Bats

IV-4(a). *Prior to removal of any on-site trees, a qualified biologist shall conduct a pre-construction bat emergence survey. If active roosts are not found, then further action shall not be warranted. If either a maternity roost or hibernacula (structures used by bats for hibernation) is present, Mitigation Measures IV-4(b) and IV-4(c) shall be implemented. The pre-construction survey shall be submitted to the City of Pacifica Planning Department and the CDFW.*

IV-4(b). *If active bat maternity roosts or hibernacula are found in trees which will be removed as part of project construction, the project shall be redesigned to avoid the loss of the tree occupied by the roost to the extent feasible as determined by the CDFW. If an active maternity roost is located and the project cannot be redesigned to avoid removal of the occupied tree, demolition shall commence before maternity colonies form (i.e., prior to March 1) or after young are volant (flying) (i.e., after July 31). Disturbance-free buffer zones, as determined by a qualified biologist, shall be observed during the maternity roost season (March 1 through July 31).*

IV-4(c). *If a non-breeding bat hibernacula is found in a tree scheduled for removal, the individuals shall be safely evicted, under the direction of a qualified biologist (i.e., a biologist holding a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle bats), by opening the roosting area to allow airflow through the cavity. Demolition shall then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.*

b,c. The California Coastal Commission (CCC) exercises jurisdiction over development activities within the coastal zone. In the City of Pacifica, construction projects within the CZ overlay district are regulated through the City of Pacifica's Local Coastal Land Use Plan. Through the Local Coastal Land Use Plan, the City of Pacifica brings the City's land use planning into conformance with the California Coastal Act of 1976. The Local Coastal Land Use Plan is the basis for the Local Coastal Implementation Program, including a permit issuing procedure, zoning ordinance revisions, and other implementation programs.

According to the BRA, the project site is outside of any designated Special Areas delineated in the Local Coastal Land Use Plan, and outside of any recommended buffer zones from sensitive resources. The Development Near Wetlands and Creeks section of the Local Coastal Land Use Plan requires the protection, enhancement, and restoration, where feasible, of riparian vegetation along all intermittent and year-round creeks within the planning area. Buffer zones shall be identified by environmental study for protection of identified habitat areas from impacts of development. A general rule sets a buffer of at least 100 feet, measured from the outward edge of riparian vegetation. Where environmental study is not conducted, this is generally accepted as adequate for protecting the resources of the riparian area. The project site is located approximately 250 feet from San Pedro Creek and is outside the recommended 100-foot buffer zone for riparian vegetation associated with San Pedro Creek. An intermittent drainage ditch on the west side of the project area contains some riparian vegetation (e.g., Arroyo willow). The drainage ditch is approximately five feet wide and flows northward. The entire width of the drainage ditch, from top of bank to top of bank, is approximately 30 feet. The banks are moderately steep, dropping approximately 10 feet in elevation from the top of bank to the drainage channel. The ditch runs along the western boundary of the project site before curving eastward and under a paved road via a culvert after which it daylights onto property owned by the City of Pacifica. The ditch runs another 40 feet, then through one more culvert before connecting to San Pedro Creek. The ditch is likely an artificial feature that was created to drain the small urban watershed area to the south of the project site. The ditch flows periodically, after rain events. There is a general lack of riparian vegetation along the banks of the ditch, with dominant species being invasive weeds such as Nasturtium and Cape ivy. However, Arroyo willow (*Salix lasiolepis*) is present at the north end of the ditch as well as thick brambles of California blackberry along its banks.

The ditch does not meet the definition of a perennial or intermittent creek as defined in the Local Coastal Land Use Plan, as the swale was artificially created by previous grading activities. Notwithstanding this, the drainage ditch would meet the California Coastal Commission's "one-parameter definition" that only requires evidence of a single parameter to establish wetland conditions, as follows (cf. California Code of Regulations, Title 14, Section 13577):

> *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.*[8]

In addition, based upon discussion with the City's biological peer review consultant for this project, Live Oak Associates, it is assumed that the ditch would meet the Army Corps of Engineers' three parameter definition for a wetland.[9] However, as described in the project description section of this IS/MND, the proposed project would not include any physical improvements to the intermittent drainage ditch that would result in disturbance of the ditch and any associated habitat. Therefore, the proposed project would have a ***less-than-significant*** impact with respect to having a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or United States Army Corps of Engineers (i.e., Section 404 of the Clean Water Act). The applicant is required to apply for permits from the California Coastal Commission and as such would be subject to further assessment and development regulations related to the implication of the "one-parameter definition" on the proposed project.

d. Habitat loss, fragmentation, and degradation have the potential to alter the use and viability of wildlife movement corridors (i.e. linear habitats that naturally connect and provide passage between two or more otherwise distinct larger habitats or habitat fragments). The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

The proposed project is bordered by an existing shopping center on the east and other existing development to the north and south. As discussed previously, the site has been heavily disturbed in the past. While the site provides limited habitat for some common urban adapted wildlife species, such as raccoons and striped skunks, development of the site would not remove a corridor for such species as the drainage swale and open field to the west of the site would retain connectivity between the surrounding areas. In addition, the site does not connect any wilderness areas that cannot be accessed by wildlife through the San Pedro Creek drainage. While animals could potentially visit the project site to forage, the site is not likely to serve as a significant movement corridor for any wildlife species. Connectivity to/from open lands to the west and east of the project area would remain. Therefore, the project would have a ***less-than-significant*** impact with respect to interfering substantially with the movement of any resident or migratory fish or wildlife species, or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

e. Title 4, Chapter 12 of the Pacifica Municipal Code (Preservation of Heritage Trees) stipulates regulations designed to preserve and protect heritage trees on private or City-owned property. In general, heritage trees are defined as any trees within the City, exclusive of eucalyptus, which have a trunk with a circumference of fifty inches (approximately sixteen inches in diameter) or more, measured at twenty-four inches

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8 California Coastal Commission. *Definition and Delineation of Wetlands in the Coastal Zone*. October 5, 2011.

9 Personal communication between Nick Pappani, Vice President, Raney Planning & Management, and Rick Hopkins, Principal Biologist, Live Oak Associates, July 28, 2017.

above the natural grade. Sections 4-12.02 and 4-12.03 of the Municipal Code provide a complete definition of a heritage tree. Per Sections 4-12.07 and 4-12.08 of the Municipal Code, tree protection plans are required when engaging in new construction within the drip-line of a heritage tree. The plan must be prepared by a qualified arborist, horticulturist, landscape architect or other qualified person.

Two Monterey cypress trees located on the proposed project site may meet the definition of a heritage tree. One tree is multi-trunked with diameters of 12 inches and 16 inches DBH, and the other is single-trunked with a diameter of 18 inches DBH. Both trees would be removed as part of the project. Therefore, the proposed project could conflict with the Pacifica Municipal Code, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

IV-5. *The project applicant shall obtain tree removal permits from the City of Pacifica Planning Commission for any heritage trees to be removed. In addition, the project applicant shall prepare and submit a tree protection plan prior to the issuance of a grading permit in accordance with the City Municipal Code, Sections 4-12.02 through 4-12.11.*

f. Adopted Habitat Conservation Plans or Natural Conservation Community Plans covering the proposed project site do not exist. Therefore, the proposed project would not conflict with the provisions of such a plan, and ***no impact*** would occur.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	✖	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c. Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?	☐	✖	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries.	☐	✖	☐	☐

Discussion

a. Historical resources are typically features that are associated with the lives of historically important persons and/or historically significant events, or that embody the distinctive characteristics of a type, period, region or method of construction. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. With the exception of the half-pipe feature, the proposed project site does not contain any existing permanent structures or any other resources that could be considered historic resources. The State Office of Historic Preservation Historic Property Directory (OHP HPD) does not list recorded buildings or structures adjacent to the proposed project site. In addition, a review of historical literature and maps did not indicate the possibility of historic-period activity within the project area. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource, and a ***less-than-significant*** impact would occur.

b-d. A records search was conducted by the North Central Information Center of the California Historical Resources Information System (CHRIS) for the proposed project.[10] Based on the results of the records search, the project site does not contain any recorded archaeological resources. As such, the potential for locating prehistoric-period cultural resources in the vicinity of the proposed project area is relatively low. However, the possibility exists that previously undiscovered archaeological or paleontological resources could be uncovered during ground-disturbing activities associated with construction of the proposed project. Therefore, the project could result in a ***potentially significant*** impact with respect to causing a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5 and/or disturbing human remains.

Mitigation Measure(s)

[10] California Historical Resources Information System. *Record Search Results for the Proposed 505 San Pedro Avenue Project.* January 30, 2017.

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

V-1. *In the event of the accidental discovery or recognition of any human remains, further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall occur until the County Coroner has been notified to determine if an investigation into the cause of death is required. If the Coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. If the Native American Heritage Commission is unable to identify a most likely descendant or most likely descendant fails to make a recommendation within 24 hours after notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner, then the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the City of Pacifica Planning Department.*

V-2. *If any prehistoric or historic artifacts, or other indications of cultural deposits, such as historic privy pits or trash deposits, are found once ground disturbing activities are underway, all work within the vicinity of the find(s) shall cease and the find(s) shall be immediately evaluated by a qualified archaeologist. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment to allow for implementation of avoidance measures or appropriate mitigation shall be made available (CEQA Guidelines Section 15064.5). Work may continue on other parts of the project site while historical or unique archaeological resource mitigation takes place (Public Resources Code Sections 21083 and 21087).*

VI. GEOLOGY AND SOILS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Expose people or structures to 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 based on other substantial evidence of a known fault?	☐	☐	✖	☐
ii. Strong seismic ground shaking?	☐	☐	✖	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	✖	☐
iv. Landslides?	☐	☐	✖	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	✖	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	✖	☐	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?	☐	✖	☐	☐
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?	☐	☐	☐	✖

Discussion

A Geotechnical Investigation was prepared for the proposed project by Earth Investigations Consultants, Inc.[11] (Earth Investigations) and subsequently peer-reviewed by Geocon Consultants, Inc.[12] Based on the recommendations included in the peer review, Earth Investigations prepared an update to the original Geotechnical Investigation.[13] The following discussion is based on the final conclusions and recommendations of the updated Geotechnical Investigation, as well as all relevant information from the original Geotechnical Investigation.

[11] Earth Investigations Consultants, Inc. *Geotechnical Investigation, Proposed Commercial Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California.* September 17, 2009.
Earth Investigations Consultants, Inc. *Geotechnical Update and Plan Review, Architectural Plans, Proposed Commercial Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California. November 11, 2014*.

[12] Geocon Consultants, Inc. *Geotechnical Peer Review, Proposed Mixed-Use Development, 505 San Pedro Avenue, Pacifica, California.* February 28, 2017.

[13] Earth Investigations Consultants, Inc. *Preliminary Plan Review, Reply to Peer Review & Geotechnical Update, Preliminary Architectural & Civil Plans, Proposed Mixed-Use Development, 505 San Pedro Road (APN 023-072-101), Pacifica, California.* March 23, 2017.

a.i-ii. According to Earth Investigations, the proposed project is located in a seismically active region between active strike-slip faults, including the southern segment of the San Andreas fault, which is mapped approximately four miles northeast of the project site. The projected offshore trace of the Seal Cove fault is located approximately two miles to the southwest. The active Hayward and Calaveras faults are mapped approximately 22 and 24 miles northeast of the project site, respectively. Based on the proximity of the aforementioned faults, the proposed project site would be expected to be subject to strong to violent ground shaking in the event of a major earthquake. However, according to the California Division of Mines and Geology, the project site is not located within the immediate vicinity of any potentially active faults or Special Studies Zone boundaries delineated on the Alquist-Priolo Earthquake Fault Zoning Map for the area.[14] As such, the site would not be at risk for rupture of a known earthquake fault.

All structures proposed for the project would be designed in accordance with the adopted edition of the California Building Code (CBC) requirements in place at the time of construction. Structures built according to the seismic design provisions of current building codes should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural damage. Given the project's adherence to the CBC requirements, the proposed project would not expose people or structures to substantial adverse effects including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map, or strong seismic ground shaking. Therefore, the proposed project would have a ***less-than-significant*** impact.

aiii. Soil liquefaction is a phenomenon primarily associated with saturated, cohesionless, soil layers located close to the ground surface. The soils lose strength during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

According to Earth Investigations, the site is characterized as having "Moderate Liquefaction Susceptibility" based on mapping conducted by the U.S. Geological Survey (USGS). The extreme northeasterly corner of the site is near an area of "High Liquefaction Susceptibility." However, based on empirical data associated with historic extreme ground shaking in the area, Earth Investigations concluded that the earth materials underlying the proposed project site are relatively resistant to permanent ground deformation from intense ground shaking in the event of the industry-standard design movement magnitude 7.8 earthquake. Furthermore, the proposed project would be required to comply with site-specific recommendations in the Geotechnical Investigation related to seismic design. Therefore, the proposed project would not be expected to be

[14] California Division of Mines and Geology. *State of California, Special Studies Zones, Montara Mountain, Revised Official Map.* Effective January 1, 1982.

affected by seismic-related ground failure, including liquefaction, and a ***less-than-significant*** impact would occur.

aiv. According to the Geotechnical Investigation, landslide hazards do not exist on the proposed project site due to the level nature of the site's topography. As such, the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides, and a ***less-than-significant*** impact would occur.

b. As discussed in Section IX, Hydrology and Water Quality, of this IS/MND, short-term construction activities associated with the proposed project could result in soil erosion or the loss of topsoil. Therefore, a ***potentially significant*** impact related to substantial soil erosion or the loss of topsoil could occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

VI-1. Implement Mitigation Measure IX-1.

c As noted above, the proposed project would not be at risk for hazards associated with landslides or liquefaction. Issues associated with lateral spreading and subsidence are discussed below.

Lateral Spreading

Lateral spreading is associated with terrain near free faces such as excavations, channels, or open bodies of water. The proposed project site is located directly adjacent to a drainage swale. According to the Geotechnical Investigation, specific design measures, including, but not limited to, remedial grading and retaining wall construction, would be required to improve soil stability near the drainage swale located immediately west of the proposed project site's western boundary. Without implementation of recommendations contained in the Geotechnical Investigation, lateral spreading could potentially occur on-site related to the adjacent drainage swale.

Subsidence

Subsidence, or settlement, occurs when loose, sandy soils settle during earthquake shaking. In order to quantify the settlement potential of the soils on the proposed project site, five borings were conducted on the site by Earth Investigations and analyzed for seismic settlement. Based on the results of the seismic settlement analysis, the potential exists for approximately two inches of total settlement and a differential settlement of one inch to occur on the site. However, according to Earth Investigations, the settlement potential could be mitigated by reworking the upper two feet of surface fill and supporting the proposed buildings on a mat or footing grid.

Conclusion

Based on the above, the proposed project could potentially be subject to risks associated with lateral spreading and subsidence/settlement. As discussed above, the Geotechnical Investigation includes site-specific recommendations for seismic design, site preparation and grading, and foundation design sufficient to reduce such risks. Without implementation of the recommendations contained in the Geotechnical Investigation, a ***potentially significant*** impact could occur related to being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

VI-2. *All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the City of Pacifica Building Division prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the Geotechnical Investigation prepared for the proposed project are properly incorporated and utilized in the project design.*

d. Expansive soils shrink/swell when subjected to moisture fluctuations, which can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. The proposed project would be subject to the requirements of the CBC, which includes provisions related to expansive soils. In addition, the Geotechnical Investigation includes site-specific recommendations for construction adequate to reduce hazards associated with expansive soils. However, without implementation of the recommendations contained in the Geotechnical Investigation, a ***potentially significant*** impact could occur related to expansive soils, potentially resulting in heaving or cracking of structural components of the proposed buildings.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

VI-3. *Implement Mitigation Measure VI-2.*

e. Sewer service for the proposed project would be provided by the City of Pacifica by way of two proposed connections to the existing sanitary sewer line paralleling the western site boundary. Thus, septic tanks or alternative wastewater disposal systems would not be required for the proposed project, and ***no impact*** would occur relating to soils incapable of adequately supporting the use of septic tanks.

VII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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?	☐	☐	✖	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✖	☐

Discussion

a, b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e$/yr).

A discussion of the City's Climate Action Plan (CAP), as well as applicable BAAQMD thresholds related to GHG emissions, is provided below.

Climate Action Plan

The City of Pacifica has adopted a CAP that is intended to guide reduction of GHG emissions associated with existing operations and future development in the City.[15] The CAP provides reduction measures, and identifies the emission reduction associated with each measure.[16] Table 4 below presents the GHG reduction measures prescribed by the CAP and describes the proposed project's consistency with each measure.

[15] City of Pacifica. *Climate Action Plan*. July 14, 2014.
[16] City of Pacifica. *Climate Action Plan* [pg. 58 to 59]. July 14, 2014.

Table 4
Project Consistency with City CAP GHG Reduction Measures

Section	Reduction Measure	Project Consistency
4.1 - Energy		
4.1.2	Participate in Energy Upgrade California program and promote existing rebates (PG&E, State, federal).	This is an overall City-wide measure, and does not address individual development projects.
4.1.2	Encourage solar energy installation.	The proposed project would include rooftop solar panels that would generate 100 percent of the energy required to meet the project's energy demand.
4.1.3	Energy efficient street lighting.	The proposed project would not include street lighting. Therefore, the reduction measure is not applicable.
4.1.3	Energy efficiency in municipal buildings.	This is an overall City-wide measure, and does not address individual development projects.
4.2 - Transportation and Land Use		
4.2.1	Smart growth development.	The proposed project consists of a mixed-use development in a developed, urban area. In addition, the project would be located approximately 0.35-mile from the nearest bus station. Thus, the proposed project would be consistent with the smart growth development measure identified in the CAP, which calls for establishment of a smart growth policy that prioritizes high density, transportation-oriented and mixed-use development.
4.2.1	Walk-able/bike-able street landscape.	The proposed project would include a pedestrian walkway that would improve connectivity between San Pedro Avenue, the project site, and the beach located to the north of the project site. Thus, the project would improve pedestrian and bike access in the project area.
4.2.2	Improve public transit service.	This is an overall City-wide measure, and does not address individual development projects. Regardless, the proposed project is located 0.35-mile from the nearest transit stop. As such, transit services would be readily accessible from the project site.
4.2.2	Safe routes to schools.	As noted above, the proposed project would include a pedestrian walkway that would improve walkability in the area and provide greater pedestrian connectivity.
4.2.3	Preferred parking policy.	The City has not yet adopted a preferred parking policy. Therefore, the reduction measure does not apply to the proposed project.
4.2.3	Efficient fleet policy.	The measure specifically applies to vehicles owned and maintained by the City, and does not pertain to individual development projects.

Table 4
Project Consistency with City CAP GHG Reduction Measures

Section	Reduction Measure	Project Consistency
4.3 - Solid Waste		
4.3.1	Set higher diversion rate.	The measure requires that the City achieve a 75 percent community-wide diversion rate by 2020. In order to achieve the higher rate, the City has approved a solid waste management contract to establish comprehensive commercial and residential recycling, compost, and solid waste management programs. The City's partner agency, Recology of the Coast, recorded a diversion rate of 75 percent in 2014 in Pacifica. The proposed project would be receive solid waste service from Recology of the Coast, and, thus, the project would not conflict with the measure.
4.3.1	Establish a zero-waste policy for municipal operations.	The proposed project does not include municipal operations.
4.3.2	Commercial recycling ordinance.	Commercial recycling is currently mandatory in California. Therefore, the proposed project would be required to participate in a recycling program.
4.4 - Water		
4.4.1	Water conservation incentives.	This is an overall City-wide measure, and does not address individual development projects. However, the City's partner agency promotes various water conservation incentive programs, including various rebate programs that support conservation, in which the proposed project could voluntarily participate.
4.4.1	Water conservation ordinance.	The City has not yet adopted a water conservation ordinance. Therefore, the reduction measure does not apply to the proposed project. Regardless, the proposed project would be required to comply with the mandatory water conservation standards established by the effective CALGreen Code.

Source: City of Pacifica, 2014.

As shown in the table above, the proposed project would not conflict with the reduction measures outlined in the City's CAP.

BAAQMD Thresholds

The proposed project is located within the jurisdictional boundaries of the BAAQMD. The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 $MTCO_2e$/yr or 4.6 $MTCO_2e$/yr per service population (population + employees). BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions

needed to move towards climate stabilization. If a project would generate GHG emissions above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations. The City of Pacifica, as lead agency, has chosen to use the BAAQMD thresholds of significance for the analysis within this document, as the thresholds are supported by substantial evidence.

The proposed project's GHG emissions were quantified using CalEEMod under the same assumptions as presented in the Air Quality section of this document. As discussed in the Air Quality section of this IS/MND, the proposed project's required compliance with the 2016 California Building Energy Efficiency Standards Code was assumed in the modeling. In addition, the CO_2 intensity factor within the model was adjusted to reflect PG&E's anticipated progress towards statewide renewable portfolio standards goals. All CalEEMod results are included in the appendix to this IS/MND.

According to the CalEEMod results, the proposed project would result in operational GHG emissions as shown in Table 4.

Table 5
Unmitigated Project Operational GHG Emissions

Emission Source	Annual GHG Emissions ($MTCO_2e$/yr)
Area	0.36
Energy	14.08
Mobile	537.29
Solid Waste	20.59
Water	3.38
TOTAL ANNUAL GHG EMISSIONS	**575.70**

Source: CalEEMod, March 2017 (see appendix).

As shown in the table, the proposed project would result in operational GHG emissions below the 1,100 MT CO_2e/yr threshold. Therefore, the proposed project would not result in operational impacts related to GHG emissions.

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD have adopted a threshold of significance for construction-related GHG emissions. However, the proposed project's estimated total construction emissions 575.70 $MTCO_2e$ would be well below BAAQMD's adopted operational threshold of 1,100 $MTCO_2e$/yr. Nevertheless, because BAAQMD has not adopted a construction threshold for GHG emissions, the proposed project's construction GHG emissions have been amortized over the anticipated operational lifetime of the project. The BAAQMD does not recommend any specific operational lifetimes for use in amortizing construction-related GHG emissions; however, the Sustainable Building Task Force's 2003 report on *The Costs and Financial Benefits of Green Buildings* as well as Executive Order D-16-00, suggest an operational lifetime of 25 years for typical buildings.[17] While the maximum annual construction emissions from the proposed project would be 158.79

[17] Sustainable Building Task Force. *The Costs and Financial Benefits of Green Buildings* [pg. 10]. October 2003.

$MTCO_2e$, construction would occur over two years and result in total GHG emissions of 301.93 $MTCO_2e$. Thus, the total construction emissions amortized over 25 years would be 12.08 $MTCO_2e$/yr. Adding the amortized construction emissions to the estimated annual operational GHG emissions provides an annual emissions estimate of 587.78 $MTCO_2e$/yr, which is still below BAAQMD's 1,100 $MTCO_2e$/yr threshold of significance. Because both the maximum annual and amortized emissions would be below BAAQMD thresholds, the proposed project would not result in construction impacts related to GHG emissions.

Conclusion

Based on the above, the proposed project would be consistent with the City's adopted CAP. In addition, the estimated annual operational and construction GHG emissions would be below the applicable BAAQMD thresholds of significance. Therefore, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Accordingly, the proposed project would have a ***less-than-significant*** impact related to GHG emissions and global climate change.

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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?	☐	☐	✖	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☐	✖	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	✖	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	✖	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	✖	☐
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	✖	☐
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	✖	☐	☐
h. Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	✖	☐

Discussion

a. Retail and residential land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents and employees may use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount that would be expected to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would not create a significant

hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a ***less-than-significant*** impact would occur.

b,d. With the exception of the half-pipe skateboard ramp feature located on the northern portion of the site, the proposed project site is currently vacant and undeveloped. The project site does not contain existing habitable structures, and, thus, asbestos containing materials (ACMs) or lead-based paints do not occur on-site. While the site has been used as an illegal trash dump in the past, the refuse currently present on the site does not include materials that would be considered hazardous to human health. Features such as septic systems, wells, above-ground storage tanks (ASTs), underground storage tanks (USTs), or other features related to uses of environmental concern have not been identified on the site. In addition, given that the site has not been subject to previous development, the presence of such features on the site is unlikely. In addition, the project site is not included in the California Department of Toxic Substances Control EnviroStor Database.[18] The Envirostor Database includes information provided by the Department of Toxic Substances Control (DTSC) and included in the State's Hazardous Waste and Substances Sites (Cortese) List, which is compiled pursuant to Government Code section 65962.5.

Construction activities associated with the proposed project would involve the use of heavy-duty equipment, which would contain fuels, oils, and hydraulic fluid. In addition, various other products commonly associated with construction such as concrete, paints, and adhesives would be used on-site. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Significant risks to the public or workers are not expected with the assumption that such products would be used, transported, and disposed of properly in accordance with the handling instructions on their labels and in accordance with all applicable regulations.

The existing surrounding development consists of residential and retail land uses, which are not typically associated with the use of significant quantities of hazardous materials. Thus, the project would not be subjected to any upset or accident conditions involving release of hazardous materials associated with nearby uses.

Overall, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Thus, a ***less-than-significant*** impact would occur.

[18] California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed March 2017.

c. The proposed project site is not located within one-quarter mile of a school. The nearest school, Cabrillo Elementary School, is located approximately 0.6-mile from the project site. Furthermore, as discussed above, hazardous materials would not be emitted during construction or operation of the proposed project. Therefore, the project would have a ***less-than-significant*** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

e,f. The nearest airport relative to the proposed project site, Half Moon Bay Airport, is located approximately five miles south of the site. In addition, the project site is located approximately six miles west of San Francisco International Airport. According to the San Mateo County Comprehensive Airport Land Use Compatibility Plan (ALUCP), the site is not located within an Airport Safety Zone for Half Moon Bay Airport, and, thus, would not be significantly affected by the airport.[19] Per the Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport (SFO Plan), the proposed project site does not lie within designated Safety Compatibility Zones or forecasted noise contours for the airport.[20] Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area, and a ***less-than-significant*** impact would occur.

g. Implementation of the proposed project site would not result in any modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. Emergency vehicle access to the site would be provided by the proposed gated access point through the Pedro Point Shopping Center, along the eastern boundary of the project site which would be outfitted with a Knox Box to allow access for the North County Fire Authority (NCFA), which would provide fire protection services to the proposed project. The building underpass clearance of the building fronting San Pedro Avenue is required to be increased to meet *California Fire Code Section 503.2.1*. The hammer head dimensions for the site access must also be shown to comply with Section 503.2.1. Drawing amendments are included as part of Mitigation Measure VIII-1. Access would be established through an updated access/egress agreement with the neighboring site owner. Without this agreement, the limited emergency access to the site may create an impact, where a ***potentially significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

VIII-1. Prior to the issuance of a building permit, the applicant shall prepare and record, or provide sufficient evidence of an existing recorded agreement with the San Mateo County Recorder's Office which provides perpetual ingress and egress access between the subject property and the adjacent

[19] San Mateo County. *Comprehensive Airport Land Use Compatibility Plan.* December 1996.

[20] City/County Association of Governments of San Mateo County, California. *Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport.* July 2012.

privately-owned property known as "Pedro Point Shopping Center." The agreement shall run with the land and be binding on all future owners and occupants of the servient estate(s) and their successors, heirs and assigns. The agreement shall be approved as to form and content by the City Attorney and Planning Director. The design and configuration of the easement shall be such that any future parking lot, property connection, or driveway, serving development on the subject site may be constructed to conform with all applicable City of Pacifica regulations, including without limitation the Zoning Regulations, California Residential Code, and California Fire Code.

Access to the site from San Pedro Avenue via the underpass at building #3 shall be increased to provide a clearance in accordance with the California Fire Code. The applicant must demonstrate sufficient turning radius in accordance with California Fire Code to comply with the hammer head dimensions for fire truck turn around.

During project development, all construction equipment would be staged on-site so as to prevent obstruction of San Pedro Avenue. In addition, the project would not conflict with policies outlined in the adopted General Plan for managing emergency situations. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a ***less than significant*** impact would occur.

h. The proposed project site is located in an urban area and is not adjacent to wildlands. As such, existing surrounding development in the area would preclude the spread of fire to the project site. Per the CAL FIRE Fire and Resources Assessment Program, the proposed project is not located in a Very High Fire Hazard Severity Zone (VHFHSZ).[21] Therefore, the project would result in a ***less-than-significant*** impact related to exposure of people or structures to the risk of loss, injury or death involving wildland fires.

[21] CAL FIRE. *Very High Fire Hazard Severity Zones in LRA, San Mateo County*. November 4, 2008.

IX. HYDROLOGY AND WATER QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	✖	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	✖	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	✖	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	✖	☐	☐
e. 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?	☐	✖	☐	☐
f. Otherwise substantially degrade water quality?	☐	✖	☐	☐
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	✖	☐
h. Place within a 100-year floodplain structures which would impede or redirect flood flows?	☐	☐	✖	☐
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	☐	☐	✖	☐
j. Inundation by seiche, tsunami, or mudflow?	☐	✖		☐

Discussion

a,c-f. All municipalities within San Mateo County (and the County itself) are required to develop more restrictive surface water control standards for new development projects to comply with Provision C.3 of the Regional Water Quality Control Board (RWQCB) Municipal Regional Stormwater NPDES Permit order No. R2-2015-0049. The San Mateo Countywide Water Pollution Prevention Program developed a C.3 Stormwater Technical

Guidance document for implementing the RWQCB Municipal Regional Stormwater NPDES Permit C.3 requirements, known as the C.3 Standards.[22] The City of Pacifica has adopted the County C.3 Standards as part of the City's NPDES General Permit requirements, which require new development and redevelopment projects that create or alter 10,000 or more square feet of impervious area to contain and treat all stormwater runoff from the project site. Given that the proposed project would create approximately 28,151 square feet of impervious area, the project would be considered a C.3-regulated project and would be subject to the requirements of the RWQCB's C.3 Standards.

Consistent with C.3 requirements, the proposed project would include a series of coordinated Low Impact Development (LID) Site Design Measures to remove pollutants, slow runoff, and release runoff from the site at a level comparable to the pre-development flow volume. The proposed project would include six C.3 areas, or DMAs. The six DMAs would be sized for treatment and flow control of runoff. As discussed previously, all six DMAs would each include a bio-retention basin to treat runoff. Each bio-retention area would be composed of approximately 18 inches of sand underlain with 12 inches of open graded gravel. The basins would each include a plastic liner that would separate the soil and gravel from the surrounding native soils. Runoff from the impervious areas (building roofs, pavement, etc.) would be routed to the basins and would infiltrate through the soil/gravel layers. The soil/gravel layers would act as a filter, removing pollutants and debris from the stormwater throughout the infiltration process. The proposed bio-retention basins would be designed to the standards for bio-retention treatment systems detailed in Section 6.1, Bioretention Areas, of the C.3 Stormwater Technical Guidance.

The existing flow rate during the 10-year storm would be 0.62 cubic feet per second (CFS). The proposed flow rate during the 10-year storm would be 1.69 CFS. The net increase from implementation of the proposed project is 1.07 CFS. In order to limit the post-development flow to less than or equal to pre-development flow detention must be provided. 956 cubic feet of detention would be required over a 30-minute period. Detention would be by 647 linear feet of 18-inch detention pipe upstream of the lift station. The lift station would be equipped with a duplex pump system. The lead pump would turn on first and would be sized to lift the treatment flow only, allowing larger flows to back up in the wet well and upstream detention pipe. The lag pump would turn on as water levels rise higher than the lead pump can manage. The lead and lag pumps would be sized to lift the 100-year flow of 2.49 CFS. Incidental detention is also provided by the bioretention areas which provide treatment measures and collection to direct stormwater to the street front of the property and will ultimately discharge to the existing drainage ditch. The flowrate during the 100-year storm is 2.49 CFS. An 8-inch pipe with a 10 percent slope has a capacity of 3.9 CFS when flowing full; therefore, the smallest pipe on-site would be able to contain the total flow.[23]

A C.3 Development Review Checklist has been prepared for the proposed project. Per the Checklist, the proposed bio-treatment facilities would be sufficient to meet water quality

[22] City/County Association of Governments of San Mateo County, San Mateo Countywide Water Pollution Prevention Program. *C.3 Stormwater Technical Guidance.* June 2016.

[23] Mike O'Connell, Project Engineer. *Drainage Analysis for Norcal Development (San Pedro Avenue)*. November 17, 2017.

and flow control requirements of the C.3 Standards. As such, post-development runoff flows would not exceed existing flows associated with the site.

In order to ensure that the proposed project's bio-retention basins continue to adequately treat runoff following project implementation, long-term maintenance of the basins would be necessary. Consequently, the San Mateo Countywide Pollution Prevention Program would require the project applicant to prepare a maintenance plan and enter into a maintenance agreement with the applicable municipality to assure long-term maintenance of the proposed treatment measures.[24]

Additionally, during the early stages of construction activities, topsoil would be exposed due to grading of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality. The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres per the General Construction Permit. The project site is 37,538 square feet, or 0.86 acres, and, thus, construction activities would not be subject to the State's General Construction Permit requirements. However, the San Mateo Countywide Pollution Prevention Program provides a list of construction BMPs with which all projects involving construction within the County are required to comply.[25] Should the project applicant fail to implement BMPs, pollutants from construction activities could runoff into local waterways and degrade downstream water quality.

Because the proposed project would comply with C.3 standards, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would result in flooding on- or off-site, 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. However, should the project fail to implement appropriate construction BMPs or develop a maintenance plan for the proposed LID Site Design Measures, the proposed project could result in erosion or siltation, violate water quality standards or waste discharge requirements, and substantially degrade water quality. As such, a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

IX-1. *During construction, the contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable, which may include but are not necessarily limited to the following*

[24] City/County Association of Governments of San Mateo County, San Mateo Countywide Water Pollution Prevention Program. *C.3 Stormwater Technical Guidance* [pg. 8-1 to 8-12]. June 2016.

[25] City/County Association of Governments of San Mateo County, San Mateo Countywide Water Pollution Prevention Program. *Construction Best Management Practices.* Available at: http://www.cityofpacifica.org/depts/planning/stormwater_compliance/default.asp. Accessed January 4, 2017.

practices, or other BMPs identified in the California Stormwater Quality Association (CASQA) Construction BMP Handbook.

- *Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed to control erosion from disturbed areas;*
- *Inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways shall be covered or treated with nontoxic soil stabilizers;*
- *Exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways shall be enclosed or covered;*
- *The contractor shall ensure that no earth or organic material will be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water;*
- *The following types of materials shall not be rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water; and*
- *Grass or other vegetative cover shall be established on the construction site as soon as possible after disturbance.*

The applicable BMPs shall be included via notation on the project Improvement Plans prior to review and approval by the City of Pacifica Planning Department.

IX-2. *The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the City of Pacifica Planning Department. Typical routine maintenance consists of the following:*

- *Inlets and outlets shall be inspected for erosion or plugging.*
- *Clear any obstructions and remove accumulation of sediment. Examine rock or other materials used as a splash pad and replenish as necessary.*
- *Inspect slopes for evidence of erosion and correct as necessary.*
- *Examine vegetation to verify health and suitability for use as erosion control.*
- *Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees, and mow turf areas.*
- *Abate any potential vectors by filling holes in the ground, in and around the swale, and by ensuring that water does not pool for longer than 48 hours following a storm.*
- *Mosquito larvicides shall be applied only when absolutely necessary and then only by a licensed contractor.*

- *Observe soil at the bottom of the filter for percolation throughout the system. If portions of the swale or filter do not drain within 48 hours after the end of the storm, the soil should be tilled and replanted.*
- *Examine the vegetation to ensure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replace dead plants and remove invasive vegetation.*

b. The proposed project would receive water service from the NCCWD. The NCCWD does not currently rely on groundwater wells for water supply.[26] As such, groundwater supplies would not be used to serve the proposed project. Given that the proposed project site is approximately 0.86-acre in size, any impervious surfaces created by the project would not substantially interfere with infiltration of stormwater into local groundwater. Furthermore, runoff from the bio-retention basins would flow to the drainage swale to the west of the site through a series of new outfalls along the bank of the swale. Upon entering the swale, the treated stormwater would infiltrate underlying native soils. Therefore, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and impacts would be ***less than significant***.

g-i. According to the October 16, 2012 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06081C0107E, the proposed project site is located within Flood Hazard Zone X, which is described by FEMA as an area of minimal flood hazard, usually above the 500-year flood level. Thus, development of the proposed project would not place housing or structures within a 100-year floodplain or impede or redirect flood flows, and restrictions on development or special requirements associated with flooding are not required for the project. Furthermore, the site is not located near a dam or levee and would not be inundated in the event of failure of such structures. Overall, the proposed project would not expose people or structures to a risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam, and impacts would be ***less than significant***.

j. A tsunami is a series of sea waves most commonly caused by an earthquake beneath the sea floor. As the waves enter shallow water, they may rise rapidly, causing property damage, injury, and potentially loss of life. The California Department of Conservation maintains Tsunami Inundation Maps for most populated areas along the California coastline. The maps are created by combining inundation results for a variety of different seismic source events. As such, the maps represent a worse-case scenario. According to the Tsunami Inundation Map for the Montara Mountain Quadrangle, the proposed project site is located in a Tsunami Inundation Area.[27]

The City of Pacifica participates in a Community Alert Network (CAN) that, in the event of an emergency, alerts all citizens of the City who have enrolled in the program. In,

[26] North Coast County Water District. *20-Year Long-Term Water Master Plan.* February 2016.
[27] California Department of Conservation. *Tsunami Inundation Map for Emergency Planning, Montara Mountain Quadrangle.* June 15, 2009.

addition, a City-specific tsunami warning and informational brochure is distributed throughout the City. Furthermore, the City is listed as a TsunamiReady City by the National Weather Service.[28] TsunamiReady is a voluntary community recognition program that promotes tsunami hazard preparedness as an active collaboration among federal, State/territorial and local emergency management agencies, community leaders and the public. The main goal of the program is to improve public safety before, during and after tsunami emergencies. Given that the City has extensively prepared for tsunami events, the proposed project would be considered reasonably safe from tsunami hazards. Further consideration of the risk shall be provided through the services of a qualified coastal engineer, making structural recommendations on the proposed structure as part of the building permit approval process.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. The project site is located over three miles west of the nearest closed body of water, San Andreas Lake, and, as such, would not be expected to be at risk of inundation from seiche.

Mudflow events are caused by a combination of factors, including soil type, soil profile, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. Mudflows typically occur in mountainous or hilly terrain. The project site is relatively flat and is not located along a ridgeline or on a hillside. In addition, the site is located in a developed area, with existing development located to the north, east, and south. Therefore, the project site would not be expected to be at risk of inundation from mudflow.

Based on the above, and without further risk analysis by a qualified coastal engineer, the building design could be subject to damage during tsunami inundation, which could cause a ***potentially significant*** impact to occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

XI-3 *The applicant shall submit, with the application of building permits, the results of a qualified coastal engineer assessment of the proposed design. Due to the tsunami inundation hazard at the site, the Applicant shall retain the services of a qualified engineer with knowledge of tsunami hazards to make structural recommendations for the proposed structure which will reduce the hazard from tsunami inundation to less than significant levels, to the satisfaction of the Building Official. The applicable recommendations shall be included via notation on the project Improvement Plans prior to review and approval by the City of Pacifica Planning Department.*

[28] National Weather Service. *TsunamiReady in California.* Available at: http://www.tsunamiready.noaa.gov/tr-maps/ca-tr.shtml. Accessed February 17, 2017.

X. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	✖	☐
b. Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	✖	☐
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?	☐	☐	☐	✖

Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community or isolate an existing land use. The proposed project site is bordered on the east and south sides by existing commercial development and on the west by an undeveloped vacant lot. The small number of single-family residences located north of the project site is not considered an established community, and would not be isolated from other surrounding land uses as a result of the proposed project. In addition, the proposed project would be consistent with both the adopted General Plan and the General Plan Update. Therefore, the proposed project would not physically divide an established community, and a ***less than significant*** impact would occur.

b. The proposed project site is designated by the adopted General Plan as Commercial and zoned C-2 with a CZ combining district overlay. The proposed project includes development of two mixed-use residential units totaling 1,977 square feet, in addition to a skate park and 7,058 square feet of retail space, on the 37,538 square-foot lot. The two residential units would be located on the second floor of a mixed-use building (Building #3). Per Sections 9-4.1001 and 9-4.1101 of the City of Pacifica Municipal Code, one or more dwelling units are allowed within the same building as a commercial use when located entirely above the ground floor, subject to approval of a Use Permit. In order to develop a mixed-use building within an area zoned C-2, the proposed project would require approval of a Use Permit by the Planning Commission. The Use Permit would also be required in order to allow for the proposed residential use, outdoor skatepark, and a proposed outdoor shower.

Title 9, Chapter 4, Article 43 of the Pacifica Municipal Code establishes a CZ combining district overlay for the entire Pacifica CZ. The CZ combining district overlay is superimposed over the underlying basic zones and supplements the regulations and requirements of such zones. Consistent with the California Coastal Act, the intent of the regulations is as follows:

- Protect, maintain and, where feasible, enhance and restore the overall quality of the coastal zone and its natural and built resources;
- Assure orderly, balanced use and conservation of resources within the coastal zone, taking into account the social and economic needs of the people of the state;
- Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners;
- Assure priority for coastal-dependent and coastal-related development over other types of development in the coastal zone; and
- Encourage state and local initiatives and cooperation in procedures used to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

In order to develop the proposed project within the CZ combining district overlay, the proposed project would require approval of a Coastal Development Permit by the City of Pacifica.

Overall, with Planning Commission approval of the requested entitlements, the project would not conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the General Plan, Local Coastal Land Use Plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. As a result, a ***less-than-significant*** impact would occur.

c. The City is not located within the boundaries of any HCP or NCP; therefore, the proposed project would have ***no impact*** related to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

XI. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a,b. The State Division of Mines and Geology, indicates that the proposed project site does not contain any identified mineral resources of regional or Statewide significance (Mineral Resource Zone [MRZ] 2).[29] The adopted General Plan recognizes the existence of mineral resources at the Pacifica Quarry, but does not address mineral resources elsewhere in the City. Furthermore, the proposed project would be consistent with the adopted General Plan land use and zoning designations for the site. Therefore, construction of the proposed project would not result in the loss of any known mineral resources or 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, and a ***less-than-significant*** impact would occur.

[29] State of California. Division of Mines and Geology. *Generalized Mineral Land Classification Map of the South San Francisco Bay Production—Consumption Region*. Published 1996.

XII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	✖	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	✖	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	✖	☐	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	✖	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	✖	☐
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	✖	☐

Discussion

a,c. The following discussion is based on a noise analysis prepared by j.c. brennan and associates, Inc. for the proposed project.[30] The following terms are referenced in the noise analysis:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to decibels (dB) in this report will be A-weighted unless noted otherwise.
- Day-Night Average Level (L_{dn}): The average sound level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours.
- Community Noise Equivalent Level (CNEL): The average sound level over a 24 hour period, with a penalty of 5 dB applied to noise occurring during daytime hours (7:00 AM to 10:00 PM) and a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).

[30] j.c. brennan and associates, Inc. *505 San Pedro Avenue, City of Pacifica, California.* February 20, 2017.

- Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
- Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
- Median Sound Level (L_{50}): The sound level exceeded 50 percent of the time a given time-period.

The following discussion describes the existing noise environment, significance thresholds, and the predicted future noise environment associated with the proposed project.

Existing Noise Environment

Sensitive noise receptors in the project vicinity, as well as the existing noise environment of the project area, are discussed below.

Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the project site, the nearest sensitive noise receptors consist of single-family residences located to the north and southwest of the site. The nearest residence is located approximately 175 feet north of the project site.

Existing Ambient Noise Levels

In order to quantify existing ambient noise levels in the vicinity of the project site, short-term noise level measurements and continuous 24-hour noise level measurements were conducted on the project site as part of the noise analysis (see Figure 15 for noise measurement locations). The noise level measurements were conducted between January 5th and 6th, 2017. Larson Davis Laboratories (LDL) Model 820 and 824 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. Table 5 and Table 6 below provide a summary of the noise measurement results. As shown in the tables, the L_{dn} at Site A was recorded as 60 dB for the continuous 24-hour noise level measurements.

Table 6
Summary of Ambient Noise Level Measurements from the Continuous 24-hour Noise Measurement Site

Site	Date	L_{dn}	Average Measured Hourly Noise Levels (dB)					
			Daytime (7 AM to 10 PM)			Nightime (10 PM to 7 AM)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
A	January 5-6, 2017	60	57	56	74	53	47	70

Source: j.c. brennan and associates, Inc., 2017.

Figure 15
Noise Measurement Locations

Table 7
Summary of Ambient Noise Level Measurements from the Short-term Noise Measurement Sites

Site	Date	Average Measured Hourly Noise Levels (dB)			
		L_{eq}	L_{50}	L_{max}	Time
1	January 5, 2017	53	51	64	10:30 AM
	January 6, 2017	57	54	73	9:40 AM
2	January 5, 2017	53	52	57	11:00 AM
	January 6, 2017	54	53	61	10:25 AM

Source: j.c. brennan and associates, Inc., 2017.

Existing Roadway Noise Levels

To determine noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Traffic volumes for existing conditions were obtained from the project traffic consultant, Abrams Associates Traffic Engineering, Inc., in the form of peak hour intersection movements. The PM peak hour traffic volumes were compiled into segment volumes and converted into daily traffic volumes. Truck usage and vehicle speeds on the local area roadways were estimated from field observations. Table 7 below presents the existing traffic noise levels associated with each roadway segment in the project area.

Table 8
Existing Traffic Noise Levels

Roadway	Segment	Noise Levels (L_{dn} dB)	Distance from Centerline (feet)	Distance to Contours (feet)		
				70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB
Linda Mar Boulevard	Southeast of Cabrillo Way	64.5	75	32	69	149
Cabrillo Hwy	South of Linda Mar	64.8	75	43	92	198
Cabrillo Hwy	North of Linda Mar	69	75	64	138	298
San Pedro Ave	West of Cabrillo Hwy	57.9	75	12	25	55

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: j.c. brennan and associates, Inc., 2017.

Significance Thresholds

The City's adopted General Plan does not establish specific noise limits for noise-generating uses. The City is currently in the process of preparing a General Plan Update and associated EIR; however, neither have been adopted. The noise level standards and guiding policies in the proposed City of Pacifica Draft General Plan Update are consistent with the State guidelines for determining land use compatibility. Therefore, the goals, policies, and implementation measures contained within the Noise Element of the Draft General Plan Update are used for the purposes of this analysis.

Based on the applicable State and local regulations regarding noise, including the CBC, the City's Draft General Plan Update, and the City's Noise Ordinance, the proposed project would be considered to result in a potentially significant impact related to noise if any of the following would occur:

- Exceedance of 60 L_{dn} dB for residential single-family or multi-family land uses at the exterior of the proposed residential units or the backyards of the nearby single-family residences;
- Interior noise levels in excess of 45 dB CNEL/L_{dn} in any habitable room; or
- Exceedance of the noise level performance standards for stationary noise sources presented in Table 8 below.

Table 9
Noise Level Performance Standards for Stationary Noise Sources

Time	L_{eq} dB	L_{max} dB
7:00 AM to 10:00 PM	50	70
10:00 PM to 7:00 AM	45	65

Source: j.c. brennan and associates, Inc., 2017.

Future Noise Environment and Impacts Discussion

The primary sources of noise associated with the proposed project would be the proposed skatepark area and traffic related to the trips generated by the project. The future noise sources are described and analyzed in comparison to the applicable significance thresholds in further detail below.

Skatepark Activities

The proposed project would include an approximately 4,730-square-foot covered skatepark located on the northern portion of the site, directly adjacent to the north side of Building #2. In order to conservatively estimate the noise levels resulting from use of the proposed skatepark, j.c. brennan and associates, Inc. analyzed noise level measurements previously conducted at the Lathrop Skate Park at 15685 7th Street in Lathrop, California. At 7,500 square feet, the Lathrop Skate Park is substantially larger than the proposed skatepark. Therefore, the measurements conducted at the Lathrop Skate Park are considered to represent a conservative estimate of potential noise level increases associated with the proposed project.

Per the noise analysis, noise measurements conducted at the Lathrop Skate Park yielded average noise levels of 56 dB and maximum noise levels of 69 dB at a distance of 100 feet. The center of the proposed skate park would be located approximately 270 feet from the nearest residential uses to the north. At such distances, noise levels associated with the proposed skatepark are anticipated to be 48 dB L_{eq} / 61 dB L_{max} at the backyard of the nearby residences. Therefore, the skatepark would comply with the daytime exterior noise level performance standards for stationary noise sources of 50 dB L_{eq} and 70 dB L_{max} shown in Table 8. However, the skatepark could exceed the City's nighttime

exterior noise level standard of 45 dB L_{eq} for stationary noise sources if the hours of use are not restricted to occur between the hours of 7:00 AM to 10:00 PM. It should be noted that while the project would include two residential units, such receptors would be approximately the same distance from the proposed skatepark as the existing residences to the north and would be substantially shielded from the skatepark by Building #2. As such, noise levels associated with the skatepark would be greater at the existing single-family residences than at the proposed on-site residential units.

To determine compliance with the interior 45 dBA DNL standard, the noise calculation needs to account for the number of hours during which the proposed skatepark would be operating, and the predicted hourly L_{eq} at the nearest residences. The project noise analysis indicated that the project hourly L_{eq} at the residences to the north is 48 dBA. The project hourly L_{eq} at the residences to the southwest is 44 dBA. Assuming that the proposed skate park could operate continuously during the hours of 7:00 AM to 10:00 PM (15 hours), the project DNL levels at the residences are as follows:

- Residences to the north: 46 dBA DNL;
- Residences to the southwest: 42 dBA DNL.

Therefore, the exterior to interior noise level reduction from the building facade would only need to be 1 dBA for the residences to the north, which would be easily achievable by the structures' walls and windows. Residences to the southwest would be in compliance with the interior standard.

Traffic

Table 9 shows the traffic noise levels associated with the local roadway network under Existing and Existing Plus Project conditions. Table 10 shows the traffic noise levels associated with the local roadway network under Baseline (Existing Plus Approved Projects) and Baseline Plus Project conditions. Table 11 shows the traffic noise levels associated with the local roadway network under Cumulative No Project and Cumulative Plus Project conditions. The actual distances to noise level contours may vary from the distances presented in the tables due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in the tables are generally considered to be conservative estimates of noise exposure associated with the project-area roadways.

As shown in the tables, the project would result in increases in traffic noise levels at nearby roadway segments between 0.0 and 0.5 L_{dn} dB under all scenarios evaluated. As shown in Table 5, the existing ambient noise level at the project site was determined to be 60 L_{dn} dB. Therefore, the noise level at the exterior of the proposed residential units would not exceed the 60 L_{dn} dB threshold. Given that the proposed buildings would be expected to provide a 25-dB exterior-to-interior noise level reduction, typical interior noise levels at the proposed buildings would be less than the 45 dB CNEL/L_{dn} interior noise level standard.

Table 10
Existing and Existing Plus Project Traffic Noise Levels

Roadway	Segment	Distance from Centerline (feet)	Traffic Noise Levels (L_{dn}, dB)			Existing Distance to Contours (feet)			Existing Plus Project Distance to Contours (feet)		
			Existing	Existing Plus Project	Change	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB
Linda Mar Boulevard	Southeast of Cabrillo Way	75	64.5	64.5	0	32	69	149	32	70	150
Cabrillo Hwy	South of Linda Mar	75	66.3	66.4	+0.1	43	92	198	436	92	199
Cabrillo Hwy	North of Linda Mar	75	69.0	69.0	0	64	138	298	65	140	301
San Pedro Ave	West of Cabrillo Hwy	75	57.9	58.4	+0.5	12	25	55	13	27	59
San Pedro Ave	Southeast of Project Entrance	75	N/A	58.4	N/A	N/A	N/A	N/A	13	27	59
San Pedro Ave	Northwest of Project Entrance	75	N/A	57.9	N/A	N/A	N/A	N/A	12	25	55

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: j.c. brennan and associates, Inc., 2017.

Table 11
Baseline and Baseline Plus Project Traffic Noise Levels

Roadway	Segment	Distance from Centerline (feet)	Traffic Noise Levels (L_{dn}, dB)			Baseline Distance to Contours (feet)			Baseline Plus Project Distance to Contours (feet)		
			Baseline	Baseline Plus Project	Change	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB
Linda Mar Boulevard	Southeast of Cabrillo Way	75	64.6	64.6	0	33	71	152	33	71	153
Cabrillo Hwy	South of Linda Mar	75	66.7	66.7	0	45	97	210	45	98	210
Cabrillo Hwy	North of Linda Mar	75	69.3	69.3	0	67	145	311	68	146	314
San Pedro Ave	West of Cabrillo Hwy	75	58.2	58.6	+0.4	12	26	57	13	28	61
San Pedro Ave	Southeast of Project Entrance	75	N/A	58.6	N/A	N/A	N/A	N/A	13	28	61
San Pedro Ave	Northwest of Project Entrance	75	N/A	58.2	N/A	N/A	N/A	N/A	12	26	57

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: j.c. brennan and associates, Inc., 2017.

Table 12
Cumulative No Project and Cumulative Plus Project Traffic Noise Levels

Roadway	Segment	Distance from Centerline (feet)	Traffic Noise Levels (L_{dn}, dB)			Cumulative No Project Distance to Contours (feet)			Cumulative Plus Project Distance to Contours (feet)		
			Cumulative No Project	Cumulative Plus Project	Change	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB	70 L_{dn} dB	65 L_{dn} dB	60 L_{dn} dB
Linda Mar Boulevard	Southeast of Cabrillo Way	75	64.9	65.0	+0.1	34	74	160	35	75	161
Cabrillo Hwy	South of Linda Mar	75	67.0	67.0	0	47	102	220	48	103	221
Cabrillo Hwy	North of Linda Mar	75	69.6	69.6	0	71	152	327	714	153	330
San Pedro Ave	West of Cabrillo Hwy	75	58.5	58.9	+0.4	13	28	59	14	29	63
San Pedro Ave	Southeast of Project Entrance	75	N/A	58.9	N/A	N/A	N/A	N/A	14	29	63
San Pedro Ave	Northwest of Project Entrance	75	N/A	58.5	N/A	N/A	N/A	N/A	13	28	60

Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Source: j.c. brennan and associates, Inc., 2017.

Conclusion

Based on the above, traffic noise associated with the proposed project would not result in the exposure of persons to or generation of noise levels in excess of the applicable standards and would not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. However, because the skatepark could result in noise levels in excess of the applicable nighttime threshold for stationary noise sources, the proposed project could conflict with standards, and a ***potentially significant*** impact would occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

XII-1. Prior to issuance of certification of occupancy, all project plans shall include a note that the hours of operation of the proposed skatepark shall be restricted to between the daytime hours of 7:00 AM to 10:00 PM, subject to review and approval by the City Planning Department. The restricted hours shall be included a as condition of project approval as part of the required Use Permit.

b. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Per the noise analysis prepared for the proposed project, the threshold for damage to architectural structures is 0.2 in/sec PPV or greater, and continuous vibrations of 0.1 in/sec PPV or greater would likely cause annoyance to sensitive receptors.

The primary vibration-generating activities associated with the proposed project would occur during grading, placement of utilities, and construction of foundations. Table 12 below presents typical vibration levels that could be expected from construction equipment at various distances. The most substantial source of ground-borne vibrations associated with project construction would be the use of vibratory compactors.

Construction activities involving vibratory compactors would occur at a distance of approximately 100 feet from the nearest residential buildings. As shown in the table, vibratory compactors typically generate vibration levels of 0.210 in/sec at a distance of 25 feet, and 0.070 in/sec at a distance of 50 feet. Therefore, at a distance of 50 feet or greater from the vibration source, groundborne vibrations would be less than 0.1 in/sec PPV, and, thus, would not cause annoyance to sensitive receptors. Because the vibration level would be below the 0.2 in/sec PPV threshold for structural damage and 0.1 in/sec PPV for human annoyance, groundborne vibrations would not be perceptible to the residents of the nearest residential buildings and would not damage existing structures. In addition, construction activities would be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 9:00 AM to 5:00 PM on Saturdays and Sundays per Section

8-7.5.07 of the City's Municipal Code. Therefore, a ***less-than-significant*** impact would occur related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

Table 13
Vibration Levels for Various Construction Equipment

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070

Source: j.c. brennan and associates, Inc., 2017.

d. During project construction, heavy equipment would be used for site preparation, grading, paving, and building construction, which would increase ambient noise levels when in use. Noise levels associated with construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise-sensitive areas. Noise levels associated with operation of typical construction equipment are shown in Table 13 below.

Table 14
Typical Construction Equipment Noise

Type of Equipment	Predicted Noise Levels, L_{max} dB				Distances to Noise Contours (feet)	
	Noise Level at 50 feet	Noise Level at 100 feet	Noise Level at 200 feet	Noise Level at 400 feet	70 dB L_{max} contour	65 dB L_{max} contour
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: j.c. brennan and associates, Inc., 2017.

As shown in the table, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet. Construction activities associated with the proposed project would occur at distances of approximately 100 feet from the single-family residences located north of the project site. At such distances, construction-related activity is predicted to generate exterior noise levels ranging from approximately 72 to 84 dB L_{max} at the nearest residences. In addition to noise related to on-site construction equipment, noise would be temporarily generated by increased project-related truck traffic on area roadways during the construction phase. As such, the noise levels at the nearest residences would be temporarily increased above levels existing without the project.

Noise associated with construction activities would occur intermittently, and would be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 9:00 AM to 5:00 PM on Saturdays and Sundays per Section 8-7.5.07 of the City's Municipal Code. Nonetheless, given the proximity of the nearby residential buildings to the proposed construction activities, noise levels at nearby noise-sensitive receptors could substantially increase above existing levels without the project, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

XII-2. The following criteria shall be included in the grading plan submitted by the project applicant for review and approval by the City of Pacifica Planning Department prior to issuance of grading permits:

- *All equipment driven by internal combustion engines shall be equipped with mufflers which are in good working condition and appropriate for the equipment;*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where the technology exists;*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practical from noise-sensitive receptors;*
- *Unnecessary idling of internal combustion engines shall be prohibited;*
- *Owners and occupants of residential and non-residential properties located with 300 feet of the construction site shall be notified of the construction schedule in writing; and*
- *The construction contractor shall designate a "noise disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures as*

warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

e,f. As noted previously, the proposed project is located approximately five miles north of Half Moon Bay Airport and approximately six miles west of San Francisco International Airport. According to the San Mateo County ALUCP, the site is not located within an Airport Safety Zone for Half Moon Bay Airport, and, thus, would not be significantly affected by noise associated with the airport.[31] In addition, the proposed project site is not covered by the forecasted noise contours specified by the SFO Plan for the San Francisco International Airport.[32] Therefore, the proposed project would not experience elevated noise levels associated with either airport, and a ***less-than-significant*** impact would occur related to exposing people residing or working in the project area to excessive noise levels associated with airports.

[31] San Mateo County. *Comprehensive Airport Land Use Compatibility Plan.* December 1996.

[32] City/County Association of Governments of San Mateo County, California. *Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport.* July 2012.

XIII. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✖	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	✖	☐
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	✖	☐

Discussion

a. The proposed project would include the construction of a private skatepark, a surf shop, retail space, and two residential units. Given the nature and scale of the development proposed, the project would not be anticipated to create a large number of jobs or result in a large influx of new residents to the project area. The project site is located in a developed area and would not include the extension of major infrastructure. In addition, the proposed project would be consistent with the land use and zoning designations for the site, and, thus, would be consistent with the buildout intensity anticipated for the site in the adopted General Plan. Therefore, the proposed project would result in a ***less-than-significant*** impact with respect to direct or indirect induction of population growth in the area.

b,c. The project site does not contain existing development, and, thus, would not result in the displacement of any people or housing. In addition, the project would introduce two additional residential units to the City's housing stock. Therefore, the proposed project would not be considered to displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere, and a ***less-than-significant*** impact would occur.

XIV. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	✖	☐
b. Police protection?	☐	☐	✖	☐
c. Schools?	☐	☐	✖	☐
d. Parks?	☐	☐	✖	☐
e. Other Public Facilities?	☐	☐	✖	☐

Discussion

a. In 2003, the cities of Daly City, Brisbane, and Pacifica collaborated to form the NCFA a Joint Powers Authority agreement. The NCFA provides fire protection and medical emergency services in the City of Pacifica as well as the other two communities. Under the NCFA, fire stations and fire companies are strategically located throughout the three communities, which provide rapid assistance for medical, fire or other hazardous situations. The nearest fire station relative to the proposed project site is Fire Station #2, located at 1100 Linda Mar Boulevard, which is located approximately one mile southeast of the project site. Due to the close proximity of the station to the proposed project site, response times at the site would be relatively quick. In addition, the project would be required to comply with all NCFA standard conditions of approval related to provision of fire flow, roadway widths, etc.

Because the NCFA would provide adequate fire protection services to proposed project, and because the proposed project would be required to include adequate fire safety design elements, the project would result in a ***less-than-significant*** impact with respect to with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

b. The Pacifica Police Department provides police protection services throughout the City, including the proposed project site, which would continue to be served by the Police Department following project implementation. The proposed project would include a relatively modest amount of development, and, thus, would not have a significant impact on existing police protection resources. Therefore, the project would result in a ***less-than-significant*** impact with respect to the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

c. The project site is located within the Pacifica School District and the Jefferson Union High School District. Because the proposed project would include two residential units, the project applicant would be required to pay the appropriate school district impact fees. Proposition 1A/Senate Bill No. 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act…involving …the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/Senate Bill No. 50 statutory requirements by a developer is deemed to be "full and complete mitigation."

Because the proposed project would comply with Proposition 1A/Senate Bill No. 50 through the payment of school impact fees, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities. Therefore, the project would result in a ***less-than-significant*** impact with respect to schools in the project area.

d. The proposed project would involve the development of two residential units on 0.86 acre of land. The project would not include dedicated park areas. Per Section 8.19.03 of the Pacifica Municipal Code, the project applicant would be required to pay a Park Facilities Impact Fee to the City. The fee would be used by the City to fund upkeep and development of parks throughout the City, and would offset any potential adverse effects to parks as a result of the proposed project. Payment of the Park Facilities Impact Fee would ensure that the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities. Therefore, the proposed project would result in a ***less-than-significant*** impact in regard to parks.

e. The City contains two public libraries: the Pacifica-Sharp Park Library and the Pacifica-Sanchez Library. The libraries constitute two branches of the San Mateo County Library (SMCL) system. Per a 1999 Joint Powers Authority (JPA) agreement, the City is responsible for funding maintenance of the two libraries. The proposed project includes a total of two residential dwelling units. Consequently, the project would not result in a substantial increase in demand for library services, and a ***less-than-significant*** impact would occur in regard to libraries or other public facilities.

XV. RECREATION. *Would the project:*	Potentially Significant Impact	Less Than Significant with 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?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a,b. The proposed project would include development of two one-bedroom residential units. With the exception of the proposed private skatepark area, recreational or park facilities are not proposed as part of the proposed project. Potential adverse physical effects associated with construction of the proposed skatepark are discussed throughout this IS/MND.

The proposed project site is located approximately 650 feet southwest of Pacifica State Beach. In addition, the site is located less than one-half mile north of Pedro Point Headlands, a 225-acre park providing multiple hiking trails. As discussed in Section XIV, Public Services, of this IS/MND, payment of a Park Facilities Impact Fee in accordance with Section 8.19.03 of the Pacifica Municipal Code would offset deterioration of existing recreational facilities. Because the proposed project would not be expected to substantially increase the use of existing parks or recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, a ***less-than-significant*** impact would occur.

XVI. TRANSPORTATION AND CIRCULATION. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	✖	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	✖	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	✖
d. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	✖	☐	☐
e. Result in inadequate emergency access?	☐	✖	☐	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	✖	☐

Discussion

a,b. The following discussion is based on the Transportation Impact Analysis (TIA) prepared for the proposed project by Abrams Associates Traffic Engineering, Inc.[33] The TIA evaluated impacts of the proposed project on study area roadway facilities by measuring the effect project traffic would have on key intersections in the vicinity of the project site during peak travel periods, defined as the highest hour of travel activity between 7:30 and 8:30 AM and 4:00 to 5:00 PM. The TIA evaluated the following study intersections in the project vicinity (see Figure 16):

1. San Pedro Avenue/Linda Mar Boulevard at SR 1; and
2. San Pedro Avenue at the proposed project entrance.

[33] Abrams Associates Traffic Engineering, Inc. *Transportation Impact Analysis, San Pedro Avenue Mixed Use Project, City of Pacifica*. April 5, 2017.

Figure 16
Study Intersections

In addition, the following local roadways were evaluated:

1. SR 1 – SR 1 is the primary regional north-south highway in the project area. SR 1 is two lanes to the south of San Pedro Avenue and four lanes to the north of San Pedro Avenue. SR 1 is the primary route for regional traffic between San Francisco and the coastal areas to the south. The proposed project is located just to the west of the SR 1 intersection with San Pedro Avenue.
2. San Pedro Avenue – Within the project vicinity, San Pedro Avenue provides the primary access to SR 1 for the neighborhood west of SR 1, as well as the Pedro Point Shopping Center. San Pedro Avenue is a two lane roadway with a speed limit of 25 mph.

The study intersections were evaluated for the following six scenarios:

1. **Existing** – Existing peak hour volumes and existing intersection configurations.
2. **Existing Plus Project** – Existing traffic volumes plus trips from the proposed project.
3. **Baseline (No Project)** – Existing traffic volumes plus growth in background traffic (for three years) plus the traffic from all reasonably foreseeable developments that could substantially affect the volumes at the project study intersections.
4. **Baseline Plus Project** – Baseline traffic volumes plus the trips from the proposed project.
5. **Cumulative (No Project)**– Includes 2035 cumulative volumes based on planned and approved projects and the most recent release of the Countywide Travel Demand Model.
6. **Cumulative Plus Project** – Includes 2035 cumulative volumes plus the trips from the proposed project.

The following section describes the analysis methodology, thresholds of significance, and each of the six scenarios evaluated for the proposed project.

Analysis Methodology

The operations of roadway facilities are described with the term Level of Service (LOS). Level of service is an expression, in the form of a scale, of the relationship between the capacity of an intersection (or roadway segment) to accommodate the volume of traffic moving through the intersection/roadway segment at any given time. The LOS scale describes traffic flow with six ratings ranging from A to F, with LOS A indicating relatively free flow of traffic and LOS F indicating stop-and-go traffic and traffic jams. Beyond LOS E, the intersection or roadway segment capacity is exceeded.

Signalized Intersections

Traffic conditions at signalized intersections were evaluated using methodologies proposed by the Transportation Research Board (TRB), as documented in the 2010 HCM for vehicles. The HCM methodology determines the capacity of each lane group approaching the intersection. The LOS is then based on average control delay (in seconds per vehicle) for the various movements within the intersection. A combined weighted average control delay and

LOS are presented for the intersection. Table 14 below summarizes the relationship between LOS, average control delay, and the volume to capacity ratio at signalized intersections.

Table 15
Signalized Intersection LOS Criteria

LOS	Description	Average Delay (seconds per vehicle)	Volume to Capacity Ratio
A	Insignificant Delays: No approach phase is fully used and no vehicle waits longer than one red indication.	< 10.0	< 0.60
B	Minimal Delays: An occasional approach phase is fully used. Drivers begin to feel restricted.	> 10 to 20	> 0.61 to 0.70
C	Acceptable Delays: Major approach phase may become fully used. Most drivers feel somewhat restricted.	> 20 to 35	> 0.71 to 0.80
D	Tolerable Delays: Drivers may wait through no more than one red indication. Queues may develop but dissipate rapidly without excessive delays.	> 35 to 55	> 0.81 to 0.90
E	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues from upstream.	> 55 to 80	> 0.91 to 1.00
F	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80	> 1.00

Source: Abrams Associates Traffic Engineering, Inc., 2017.

Unsignalized Intersections

For unsignalized (all-way stop controlled and side-street stop controlled) intersections, the average control delay and LOS operating conditions were calculated by approach (e.g., northbound) and movement (e.g., northbound left-turn) for movements that were subject to delay. In general, the operating conditions for unsignalized intersections are presented for the worst approach. Table 15 below summarizes the relationship between LOS and delay for unsignalized intersections.

Table 16
Unsignalized Intersection LOS Criteria

LOS	Description	Average Delay (seconds per vehicle)
A	No delay for stop-controlled approaches.	0 to 10
B	Operations with minor delays.	> 10 to 15
C	Operations with moderate delays.	> 15 to 25
D	Operations with some delays.	> 25 to 35
E	Operations with high delays and long queues.	> 35 to 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers.	> 50

Source: Abrams Associates Traffic Engineering, Inc., 2017.

Thresholds of Significance

The goal of the City of Pacifica is to maintain LOS standards according to the General Plan. The following analysis also includes intersections under the jurisdiction of Caltrans. However, the most stringent standards for the project study intersections are the standards currently established by the City of Pacifica, and, thus, such standards form the basis for the significance criteria used in this analysis.

Per the City of Pacifica General Plan, project-related operational impacts on the signalized study intersections in the project vicinity would be considered significant if project-related traffic causes the LOS rating at intersections on SR 1 or SR 35 to deteriorate beyond LOS E during the peak commute hours. Such LOS standards are established by the San Mateo County CMP. [34]

Proposed Project Trips

For the purposes of determining the reasonable worst-case impacts of traffic on the surrounding street network from a proposed project, the trips generated by the proposed project are estimated for the peak commute hours of 7:30 AM and 8:30 AM and 4:30 PM and 5:30 PM, which represent the peak of "adjacent street traffic." The peak commute time periods are the time during which the project traffic would generally contribute to the greatest amount of congestion. According to the TIA, the project is forecast to generate approximately 14 vehicle trips during the AM peak hour and 57 trips during the PM peak hour (see Table 16).

Table 17
Project Trip Generation Estimates

Land Use	Size	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Apartment Trip Generation	2 units	19	0	2	2	1	1	2
Skate Park Trip Generation	1 unit	71	1	1	2	12	6	18
Retail Trip Generation	9,922 sf	424	6	4	10	18	19	37
Net New Trip Generation		**514**	**7**	**7**	**14**	**31**	**26**	**57**

Source: Abrams Associates Traffic Engineering, Inc., 2017.

The proposed project trip distribution assumptions are based on proximity to freeways, the existing directional split at nearby intersections, and the overall land use patterns in the area. According to the TIA, approximately 53 percent of the project traffic would be to and from the north on SR 1, about 36 percent would be to and from the east, and 11 percent from the south on SR 1.

[34] City/County Association of Governments of San Mateo County. *Final San Mateo County Congestion Management Program 2015* [pg. 3-5]. November 2015.

Existing and Existing Plus Project Conditions

For Existing Plus Project conditions, project traffic was added to the existing volumes at the study intersections. The Existing versus Existing Plus Project conditions are shown in Table 17 below. Traffic counts at the study intersections were conducted in January 2017 at times when local schools were in session.

Table 18
Intersection LOS – Existing Plus Project Conditions

Intersection	Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
1. SR 1 and San Pedro Avenue/Linda Mar Boulevard	Signalized	AM	24.9	C	25.0	C
		PM	27.2	C	28.6	C
2. San Pedro Avenue and project entrance	Two-Way Stop	AM	N/A	N/A	10.0	B
		PM	N/A	N/A	12.8	B

Note: HCM LOS results are presented in terms of average intersection delay in seconds per vehicle. For stopped controlled intersections, the results for the worst side street approach are presented.

Source: Abrams Associates Traffic Engineering, Inc., 2017.

As shown in Table 17, both of the project study intersections would operate under acceptable conditions (LOS D or better) during the weekday AM and PM peak hours during both Existing and Existing Plus Project conditions.

Baseline (No Project) and Baseline Plus Project Conditions

The Baseline (No Project) scenario evaluates the existing conditions with the addition of traffic from reasonably foreseeable projects in the area. Such projects include an 11-lot single family residential development on Higgins Way, a motel at 500 San Pedro Avenue, and a seven-unit condominium project on Adobe Drive. In addition, the scenario includes a 2.5 percent increase per year in traffic on SR 1 and 0.5 percent per year growth in side street traffic for three years (2017 to anticipated project completion in 2020).

The Baseline Plus Project traffic forecasts were developed by adding project-related traffic to the Baseline (No Project) traffic volumes. Table 18 summarizes the LOS results for the Baseline (No Project) and Baseline Plus Project weekday AM and PM peak hour conditions. As shown in Table 18, all of the project study intersections would operate acceptably (LOS D or better) during the weekday AM and PM peak hours under both Baseline (No Project) and Baseline Plus Project Conditions.

Table 19
Intersection LOS – Baseline (No Project) and Baseline Plus Project Conditions

Intersection	Control	Peak Hour	Baseline (No Project)		Baseline Plus Project	
			Delay	LOS	Delay	LOS
1. SR 1 and San Pedro Avenue/Linda Mar Boulevard	Signalized	AM	27.4	C	27.6	C
		PM	28.9	C	30.2	C
2. San Pedro Avenue and project entrance	Two-Way Stop	AM	N/A	N/A	10.0	B
		PM	N/A	N/A	13.2	B

Note: HCM LOS results are presented in terms of average intersection delay in seconds per vehicle. For stopped controlled intersections, the results for the worst side street approach are presented.

Source: Abrams Associates Traffic Engineering, Inc., 2017.

Cumulative (No Project) and Cumulative Plus Project Conditions

For the Cumulative (No Project) scenario, the intersection traffic volumes were based on the existing turning movements with the addition of traffic from all planned and approved projects plus the addition of incremental growth in background traffic estimated by the County's traffic model for the area, which equates to one half percent per year to the year 2035.

Table 19 summarizes the LOS results for the Cumulative (No Project) and the Cumulative Plus Project (year 2035) traffic conditions at each of the project study intersections. As shown in the table, all of the study intersections would continue to operate at acceptable conditions during the weekday AM and PM peak commute hours under both Cumulative (No Project) and Cumulative Plus Project Conditions.

Table 20
Intersection LOS – Cumulative (No Project) and Cumulative Plus Project Conditions

Intersection	Control	Peak Hour	Cumulative (No Project)		Cumulative Plus Project	
			Delay	LOS	Delay	LOS
3. SR 1 and San Pedro Avenue/Linda Mar Boulevard	Signalized	AM	30.7	C	30.8	C
		PM	32.7	C	34.7	C
4. San Pedro Avenue and project entrance	Two-Way Stop	AM	N/A	N/A	10.1	B
		PM	N/A	N/A	13.7	B

Note: HCM LOS results are presented in terms of average intersection delay in seconds per vehicle. For stopped controlled intersections, the results for the worst side street approach are presented.

Source: Abrams Associates Traffic Engineering, Inc., 2017.

Conclusion

The proposed project would not cause any of the study intersections to exceed any applicable City, County, or State standards. In addition, the proposed project is consistent

with the General Plan land use designation and zoning designation for the site. As such, buildout of the site has already been assumed in cumulative buildout traffic forecasts that have been used in the design of roadway and freeway facilities in the area. Therefore, the proposed project would not conflict with an applicable plan, ordinance, policy or congestion management plan for the area related to traffic, and a ***less-than-significant*** impact would occur.

c. The nearest airport relative to the proposed project site, Half Moon Bay Airport, is located approximately five miles south of the site. In addition, the project site is located approximately six miles west of San Francisco International Airport. Given that the proposed project is not located within the vicinity of either airport, the project would not result in a change in air traffic patterns, including either an increase in air traffic levels or a change in location that results in substantial safety risks, and ***no impact*** would occur.

d. According to the TIA, the proposed project would not result in internal site circulation or access issues that could potentially cause a traffic safety problem or any unusual traffic congestion or delay. The volumes on the internal parking aisles would be light enough such that significant conflicts would not be expected to occur related to vehicles accessing parking spaces or loading areas within the project site. In addition, the TIA did not identify capacity or sight distance problems with the proposed driveway location and lane configuration. In general, the proposed project would conform with City design standards.

However, during construction of the proposed project, heavy equipment transport to and from the site could affect circulation in the vicinity of the project. In order to ensure that the proposed project would not substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) during construction activities, preparation of a Traffic Control Plan would be required. Without preparation of a Traffic Control Plan, a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

XVI-1. Prior to issuance of grading and building permits, the project applicant shall submit a Traffic Control Plan to the City of Pacifica Engineering Department for review and approval. The requirements within the Traffic Control Plan shall include, but not necessarily be limited to, the following:

- *Truck drivers shall be notified of and required to use the most direct route between the site and the freeway, as determined by the City Engineering Department;*
- *All site ingress and egress shall occur only at the main driveways to the project site, and construction activities may require*

installation of temporary (or ultimate) traffic signals as determined by the City Engineer;

- *Specifically-designated travel routes for large vehicles shall be monitored and controlled by flaggers for large construction vehicle ingress and egress;*
- *Warning signs indicating frequent truck entry and exit shall be posted on adjacent roads;*
- *Any debris and mud on nearby streets caused by trucks shall be monitored daily and may require institution of a street cleaning program;*
- *The City Engineer shall be capable of limiting the hours during which import and export of materials occurs should such activities become a traffic nuisance; and*
- *Construction employee parking shall be provided on the project site to eliminate conflicts with nearby residential areas.*

e. Sufficient emergency access is determined by factors such as number of access points, roadway width, and proximity to fire stations. The proposed project would include only one public entrance; however, emergency responders would be able to access the site from the Pedro Point Shopping Center to the east as well. All lane widths within the project should meet the minimum width that can accommodate emergency vehicles and sufficient access would be provided for emergency vehicles (subject to final approval from the Fire Department). Sufficient provision shall be made for the continued permission of the neighboring property owners for the application to use their property for access to the application site.

Additionally, the building underpass clearance of the building fronting San Pedro Avenue is required to be increased to meet *California Fire Code Section 503.2.1.* The hammer head dimensions for the site access must also be shown to comply with Section 503.2.1. Drawing amendments are included as part of Mitigation Measure VIII-1

Without sufficient legal permission for continuing emergency vehicle ingress and egress access from the Pedro Point Shopping Center, and without revisions to the height of the building underpass at the entry to the site, the limited emergency access to the site may create an impact, where a ***potentially significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

XVI-2 Implement Mitigation Measure VIII-1.

f. The proposed project could potentially increase patronage on bus lines in the area. However, according to the TIA, the project would not result in degradation of the LOS (or a significant increase in delay) on any roadway segments currently being used by bus transit in the area and, as such, decreased performance of safety of transit facilities or

services would not be anticipated to occur.

Furthermore, although the proposed project would increase vehicle and pedestrian traffic in the project vicinity, the project is not expected to significantly impact or change the design of any existing bicycle facilities or create any new safety problems for bicyclists or pedestrians in the area. The project would improve pedestrian connectivity by providing a public walkway along the western boundary of the project site. Therefore, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, and a ***less-than-significant*** impact would occur.

XVII. TRIBAL CULTURAL RESOURCES. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	✖	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	✖	☐

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, with the exception of the half-pipe feature, the proposed project site does not contain any existing permanent structures. The site does not contain any other known resources 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), and does not contain known resources that could be considered historic pursuant to the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The City of Pacifica, as a lead agency, has not identified any tribal resources on the site. Furthermore, a search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) returned negative results for the presence of known tribal resources in the project area.

According to the CHRIS records search conducted for the proposed project, Native American resources within San Mateo County have been found in areas marginal to the coast, and inland on ridges, in valleys, and near intermittent and perennial watercourses.[35] The project site is located near the Pacific Ocean and is adjacent to the mouth of San Pedro Creek. Therefore, while the project site does not contain known tribal resources, the potential for occurrence of unrecorded tribal resources within the project area is moderately high. As such, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource

[35] California Historical Resources Information System. *Records Search Results for the Proposed 505 San Pedro Avenue Project.* January 30, 2017.

if previously unknown cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a ***potentially significant*** impact would occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

XVII-1. Implement Mitigation Measure V-1.

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	✖	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	✖	☐
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	✖	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	✖	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	✖	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	✖	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	✖	☐

Discussion

a,b,e. The proposed project would receive sewer services from the City. The City's wastewater is treated at the Calera Creek Water Recycling Plant (CCWRP), located approximately two miles north of the project site. The annual average daily wastewater flow in the City is 3.1 million gallons per day (gpd).[36] The CCWRP was designed to handle an annual average daily wastewater flow of 4.0 million gpd, and is anticipated to have enough capacity to accommodate buildout of the General Plan.

The sewage generated at the project site would flow through new on-site piping to a new connection with the City's existing sanitary sewer line adjacent to the western boundary of the project site. Because the project would be consistent with the General Plan land use designation for the site, buildout of the project site has been anticipated and planned for by the City. As such, sufficient capacity exists at the CCWRP to handle wastewater from the proposed project. In addition, residents of the proposed development would be required to pay an annual sewer charge based on water consumption rates for each unit

[36] City of Pacifica. *Redevelopment of the Beach Boulevard Property Draft Environmental Impact Report.* October 2012.

per Chapter 6 of the City Code of Ordinances. Such charges would help to ensure that adequate capacity is available to serve the project's demand for services.

Therefore, the proposed project would not exceed any wastewater treatment requirements of the applicable RWQCB, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the wastewater treatment provider which serves or may serve the project that adequate capacity is not available to serve the project's projected demand. Thus, a ***less than significant*** impact would occur.

c. Development of the proposed project would result in an increase in impervious surfaces on the project site, which would increase the amount of stormwater runoff generated on the project site from existing levels. However, as discussed in Section IX, Hydrology and Water Quality, of this IS/MND, the project would be required to comply with C.3 Standards and includes appropriate site design measures, source controls, and hydraulically-sized stormwater treatment facilities to adequately manage all runoff from the proposed impervious surfaces. As stated in Section IX, such facilities would not connect to the City's existing storm drainage system, but would instead drain to the existing drainage ditch located west of the project site. Therefore, the proposed project would have a ***less-than-significant*** impact with respect to requiring or resulting in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

d. As noted in Section IX, Hydrology and Water Quality, of this IS/MND, the proposed project would receive water service from the NCCWD. The NCCWD is estimated to have sufficient water supplies to serve the City through the year 2036 to accommodate buildout of the General Plan.[37] The proposed project would be consistent with the General Plan land use designation, and, thus, would not exceed the demand previously anticipated for the site. Accordingly, the proposed project would not require or result in the construction of new water facilities or the expansion of existing facilities, as sufficient water supplies are available to adequately serve the proposed project. Therefore, a ***less than significant*** impact would occur.

f,g. Solid waste collection services for the City are provided by Recology of the Coast, a Division of Recology. Services provided to the City by Recology include curbside pick-up of garbage, recyclables, and green waste. Solid waste is disposed of at the Ox Mountain, and Mussel Rock landfills. The proposed project would generate solid waste associated with construction activities and project operations. Construction debris would be disposed of in accordance with applicable federal, State, and local regulations and standards.

The proposed project would include the development of two one-bedroom residential units and a total of 6,897 square feet of retail space. Based on a conservative solid waste generation rate of 8.6 pounds per dwelling unit per day for multi-family residential units, and 0.046 pounds per square feet per day for commercial retail space, the project would

[37] North Coast County Water District. *20-Year Long-Term Water Master Plan.* February 2016.

generate approximately 334 pounds of solid waste per day during operation.[38] At a rate of 334 lbs per day, the project would not generate a substantial amount of solid waste such that the capacity available to serve the project would be exceeded. In addition, the project would be consistent with the General Plan land use designation, and, thus, would not exceed the solid waste demand previously anticipated for the site by the City. Therefore, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with federal, state, and local statutes and regulations related to solid waste. Thus, a ***less-than-significant*** impact would occur.

[38] Cal Recycle. *Estimated Solid Waste Generation Rates.* Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed December 28, 2016.

XX. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to 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, 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 prehistory?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Discussion

a. As described throughout this IS/MND, implementation of the proposed project would have the potential to degrade the quality of the environment by potentially reducing the habitat for CRF, SFGS, monarch butterfly, raptors, nesting birds, and trees protected by the City's Municipal Code. In addition, while unlikely, the project could result in impacts related to eliminating important examples of major periods of California history or prehistory associated with undiscovered archeological and/or paleontological resources during project construction. However, the proposed project would implement and comply with applicable City of Pacifica General Plan and Municipal Code policies, as discussed throughout this IS/MND. Furthermore, this IS/MND includes mitigation measures that would reduce any potential impacts to less-than-significant levels. With implementation of the mitigation measures required by this IS/MND, as well as compliance with General Plan policies and all applicable sections of the Municipal Code, development of the proposed project would reduce any potential impacts associated with the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, a ***less-than-significant*** impact would occur.

b. The proposed project involves the development of a vacant lot in a developed area of the City of Pacifica. The proposed project would be consistent with the General Plan land use

designation and zoning designation for the project site and, as such, the proposed project was included in the cumulative analysis of City buildout per the City's General Plan. The project would not conflict with long-term environmental goals of the General Plan. Applicable policies from the General Plan would be implemented as part of the proposed project, as well as the project-specific mitigation measures included in this IS/MND, to ensure any potential impacts of the proposed project would be individually limited and not cumulatively considerable. As demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to less-than-significant levels with implementation of project-specific mitigation measures and compliance with applicable General Plan policies and the City's Municipal Code. Therefore, the proposed project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. In addition, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, the project would not result in impacts that are individually limited, but cumulatively considerable. As such, a ***less than significant*** impact would occur.

c. The proposed project could expose humans to hazards relating to seismic ground shaking and residing in structures located on an unstable geologic unit. In addition, the project could potentially expose neighboring noise-sensitive receptors to excess noise levels during construction and operation. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less-than-significant levels. Furthermore, the proposed project would be designed in accordance with all applicable building standards and codes to ensure adequate safety is provided for the future residents of the proposed project. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be ***less than significant***.

505 San Pedro Avenue Project (unmitigated)

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	9.66	1000sqft	0.22	9,665.00	0
Racquet Club	4.73	1000sqft	0.11	4,730.00	0
Single Family Housing	2.00	Dwelling Unit	0.40	3,600.00	6
Strip Mall	10.91	1000sqft	0.13	10,911.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	409.81	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Annual

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions.

Land Use - *Applicant provided

Construction Phase - *Applicant provided

Grading - *applicant provided

Vehicle Trips - *Based on trip generation rates provided by Abrams Associates

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation -

Demolition - *Applicant provided

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	392.00
tblConstructionPhase	NumDays	100.00	392.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/26/2021	11/7/2019
tblConstructionPhase	PhaseEndDate	10/17/2019	10/24/2019
tblConstructionPhase	PhaseEndDate	10/24/2019	4/24/2018
tblConstructionPhase	PhaseStartDate	10/25/2019	5/9/2018
tblConstructionPhase	PhaseStartDate	4/18/2018	4/25/2018
tblConstructionPhase	PhaseStartDate	10/18/2019	4/18/2018
tblGrading	AcresOfGrading	1.00	0.86
tblGrading	MaterialExported	0.00	20.00
tblLandUse	BuildingSpaceSquareFeet	9,660.00	9,665.00
tblLandUse	BuildingSpaceSquareFeet	10,910.00	10,911.00
tblLandUse	LandUseSquareFeet	9,660.00	9,665.00

tblLandUse	LandUseSquareFeet	10,910.00	10,911.00
tblLandUse	LotAcreage	0.65	0.40
tblLandUse	LotAcreage	0.25	0.13
tblProjectCharacteristics	CO2IntensityFactor	641.35	409.81
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	3.00	2.00
tblVehicleTrips	ST_TR	21.35	71.33
tblVehicleTrips	ST_TR	9.91	9.57
tblVehicleTrips	ST_TR	42.04	42.70
tblVehicleTrips	SU_TR	17.40	71.33
tblVehicleTrips	SU_TR	8.62	9.57
tblVehicleTrips	SU_TR	20.43	42.70
tblVehicleTrips	WD_TR	14.03	71.33
tblVehicleTrips	WD_TR	9.52	9.57
tblVehicleTrips	WD_TR	44.32	42.70

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1851	1.2933	0.9646	1.5700e-003	0.0166	0.0817	0.0983	5.3900e-003	0.0763	0.0817	0.0000	142.2827	142.2827	0.0339	0.0000	143.1311
2019	0.2003	1.3080	1.0578	1.7600e-003	0.0130	0.0793	0.0922	3.5200e-003	0.0741	0.0776	0.0000	157.8512	157.8512	0.0377	0.0000	158.7948
Maximum	**0.2003**	**1.3080**	**1.0578**	**1.7600e-003**	**0.0166**	**0.0817**	**0.0983**	**5.3900e-003**	**0.0763**	**0.0817**	**0.0000**	**157.8512**	**157.8512**	**0.0377**	**0.0000**	**158.7948**

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					
2018	0.1851	1.2933	0.9646	1.5700e-003	0.0166	0.0817	0.0983	5.3900e-003	0.0763	0.0817	0.0000	142.2825	142.2825	0.0339	0.0000	143.1309
2019	0.2003	1.3080	1.0578	1.7600e-003	0.0130	0.0793	0.0922	3.5200e-003	0.0741	0.0776	0.0000	157.8510	157.8510	0.0377	0.0000	158.7946
Maximum	**0.2003**	**1.3080**	**1.0578**	**1.7600e-003**	**0.0166**	**0.0817**	**0.0983**	**5.3900e-003**	**0.0763**	**0.0817**	**0.0000**	**157.8510**	**157.8510**	**0.0377**	**0.0000**	**158.7946**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-2-2018	7-1-2018	0.4547	0.4547
2	7-2-2018	10-1-2018	0.5129	0.5129
3	10-2-2018	1-1-2019	0.5129	0.5129
4	1-2-2019	4-1-2019	0.4514	0.4514
5	4-2-2019	7-1-2019	0.4559	0.4559
6	7-2-2019	9-30-2019	0.4559	0.4559
		Highest	0.5129	0.5129

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	0.0989	4.3000e-004	0.0323	4.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.2542	0.0871	0.3414	5.1000e-004	1.0000e-005	0.3583
Energy	1.4800e-003	0.0131	8.9900e-003	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	47.8477	47.8477	2.6300e-003	7.5000e-004	48.1384
Mobile	0.2346	1.0226	2.3322	6.4200e-003	0.4973	8.3300e-003	0.5056	0.1335	7.8500e-003	0.1414	0.0000	588.1994	588.1994	0.0269	0.0000	588.8715
Waste						0.0000	0.0000		0.0000	0.0000	8.3105	0.0000	8.3105	0.4911	0.0000	20.5888
Water						0.0000	0.0000		0.0000	0.0000	0.3865	1.7125	2.0990	0.0398	9.6000e-004	3.3812
Total	**0.3350**	**1.0361**	**2.3735**	**6.5400e-003**	**0.4973**	**0.0119**	**0.5092**	**0.1335**	**0.0114**	**0.1449**	**8.9511**	**637.8468**	**646.7979**	**0.5610**	**1.7200e-003**	**661.3382**

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	0.0989	4.3000e-004	0.0323	4.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.2542	0.0871	0.3414	5.1000e-004	1.0000e-005	0.3583
Energy	1.4100e-003	0.0126	8.6200e-003	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	13.9924	13.9924	2.7000e-004	2.6000e-004	14.0756
Mobile	0.2282	0.9724	2.1881	5.8600e-003	0.4491	7.6300e-003	0.4567	0.1206	7.1900e-003	0.1278	0.0000	536.6611	536.6611	0.0253	0.0000	537.2933
Waste						0.0000	0.0000		0.0000	0.0000	8.3105	0.0000	8.3105	0.4911	0.0000	20.5888
Water						0.0000	0.0000		0.0000	0.0000	0.3865	1.7125	2.0990	0.0398	9.6000e-004	3.3812
Total	**0.3285**	**0.9854**	**2.2290**	**5.9800e-003**	**0.4491**	**0.0112**	**0.4603**	**0.1206**	**0.0107**	**0.1313**	**8.9511**	**552.4532**	**561.4043**	**0.5570**	**1.2300e-003**	**575.6972**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.94**	**4.90**	**6.09**	**8.56**	**9.68**	**6.22**	**9.60**	**9.68**	**6.13**	**9.40**	**0.00**	**13.39**	**13.20**	**0.70**	**28.49**	**12.95**

3.0 Construction Detail

Construction Phase

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/2/2018	4/3/2018	5	2	
2	Demolition	Demolition	4/2/2018	4/2/2018	5	1	
3	Grading	Grading	4/4/2018	4/17/2018	5	10	
4	Building Construction	Building Construction	4/25/2018	10/24/2019	5	392	
5	Paving	Paving	4/18/2018	4/24/2018	5	5	
6	Architectural Coating	Architectural Coating	5/9/2018	11/7/2019	5	392	

Acres of Grading (Site Preparation Phase): 0.86

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.22

Residential Indoor: 7,290; Residential Outdoor: 2,430; Non-Residential Indoor: 23,462; Non-Residential Outdoor: 7,821; Striped Parking Area: 580 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	7.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					4.6000e-004	0.0000	4.6000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9000e-004	9.7600e-003	4.2500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.8000e-004	3.8000e-004	0.0000	0.8915	0.8915	2.8000e-004	0.0000	0.8984
Total	**7.9000e-004**	**9.7600e-003**	**4.2500e-003**	**1.0000e-005**	**4.6000e-004**	**4.2000e-004**	**8.8000e-004**	**5.0000e-005**	**3.8000e-004**	**4.3000e-004**	**0.0000**	**0.8915**	**0.8915**	**2.8000e-004**	**0.0000**	**0.8984**

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	1.0000e-005	3.3000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0784
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0368	0.0368	0.0000	0.0000	0.0369
Total	**3.0000e-005**	**3.5000e-004**	**2.1000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1151**	**0.1151**	**0.0000**	**0.0000**	**0.1152**

3.2 Site Preparation - 2018

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					4.6000e-004	0.0000	4.6000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9000e-004	9.7600e-003	4.2500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.8000e-004	3.8000e-004	0.0000	0.8915	0.8915	2.8000e-004	0.0000	0.8984
Total	**7.9000e-004**	**9.7600e-003**	**4.2500e-003**	**1.0000e-005**	**4.6000e-004**	**4.2000e-004**	**8.8000e-004**	**5.0000e-005**	**3.8000e-004**	**4.3000e-004**	**0.0000**	**0.8915**	**0.8915**	**2.8000e-004**	**0.0000**	**0.8984**

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	1.0000e-005	3.3000e-004	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0783	0.0783	0.0000	0.0000	0.0784
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0368	0.0368	0.0000	0.0000	0.0369
Total	**3.0000e-005**	**3.5000e-004**	**2.1000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1151**	**0.1151**	**0.0000**	**0.0000**	**0.1152**

3.3 Demolition - 2018

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					7.4000e-004	0.0000	7.4000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	4.7100e-003	3.8900e-003	1.0000e-005		3.1000e-004	3.1000e-004		3.0000e-004	3.0000e-004	0.0000	0.5304	0.5304	1.0000e-004	0.0000	0.5330
Total	**5.3000e-004**	**4.7100e-003**	**3.8900e-003**	**1.0000e-005**	**7.4000e-004**	**3.1000e-004**	**1.0500e-003**	**1.1000e-004**	**3.0000e-004**	**4.1000e-004**	**0.0000**	**0.5304**	**0.5304**	**1.0000e-004**	**0.0000**	**0.5330**

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	3.0000e-005	1.1500e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2739	0.2739	1.0000e-005	0.0000	0.2743
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0368	0.0368	0.0000	0.0000	0.0369
Total	**5.0000e-005**	**1.1700e-003**	**3.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.3107**	**0.3107**	**1.0000e-005**	**0.0000**	**0.3111**

3.3 Demolition - 2018

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					7.4000e-004	0.0000	7.4000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	4.7100e-003	3.8900e-003	1.0000e-005		3.1000e-004	3.1000e-004		3.0000e-004	3.0000e-004	0.0000	0.5304	0.5304	1.0000e-004	0.0000	0.5330
Total	**5.3000e-004**	**4.7100e-003**	**3.8900e-003**	**1.0000e-005**	**7.4000e-004**	**3.1000e-004**	**1.0500e-003**	**1.1000e-004**	**3.0000e-004**	**4.1000e-004**	**0.0000**	**0.5304**	**0.5304**	**1.0000e-004**	**0.0000**	**0.5330**

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	3.0000e-005	1.1500e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2739	0.2739	1.0000e-005	0.0000	0.2743
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0368	0.0368	0.0000	0.0000	0.0369
Total	**5.0000e-005**	**1.1700e-003**	**3.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.3107**	**0.3107**	**1.0000e-005**	**0.0000**	**0.3111**

3.4 Grading - 2018

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					3.7600e-003	0.0000	3.7600e-003	2.0700e-003	0.0000	2.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3297
Total	**5.3200e-003**	**0.0472**	**0.0389**	**6.0000e-005**	**3.7600e-003**	**3.1100e-003**	**6.8700e-003**	**2.0700e-003**	**2.9700e-003**	**5.0400e-003**	**0.0000**	**5.3041**	**5.3041**	**1.0200e-003**	**0.0000**	**5.3297**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3684	0.3684	1.0000e-005	0.0000	0.3687
Total	**2.0000e-004**	**1.5000e-004**	**1.5400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3684**	**0.3684**	**1.0000e-005**	**0.0000**	**0.3687**

3.4 Grading - 2018

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					3.7600e-003	0.0000	3.7600e-003	2.0700e-003	0.0000	2.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0472	0.0389	6.0000e-005		3.1100e-003	3.1100e-003		2.9700e-003	2.9700e-003	0.0000	5.3041	5.3041	1.0200e-003	0.0000	5.3296
Total	**5.3200e-003**	**0.0472**	**0.0389**	**6.0000e-005**	**3.7600e-003**	**3.1100e-003**	**6.8700e-003**	**2.0700e-003**	**2.9700e-003**	**5.0400e-003**	**0.0000**	**5.3041**	**5.3041**	**1.0200e-003**	**0.0000**	**5.3296**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.5400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3684	0.3684	1.0000e-005	0.0000	0.3687
Total	**2.0000e-004**	**1.5000e-004**	**1.5400e-003**	**0.0000**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3684**	**0.3684**	**1.0000e-005**	**0.0000**	**0.3687**

3.5 Building Construction - 2018

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	0.0971	0.9873	0.6937	1.0200e-003		0.0634	0.0634		0.0584	0.0584	0.0000	93.0904	93.0904	0.0290	0.0000	93.8149
Total	**0.0971**	**0.9873**	**0.6937**	**1.0200e-003**		**0.0634**	**0.0634**		**0.0584**	**0.0584**	**0.0000**	**93.0904**	**93.0904**	**0.0290**	**0.0000**	**93.8149**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8800e-003	0.0480	0.0127	1.0000e-004	2.3500e-003	3.7000e-004	2.7200e-003	6.8000e-004	3.5000e-004	1.0300e-003	0.0000	9.4979	9.4979	5.5000e-004	0.0000	9.5116
Worker	3.6000e-003	2.7500e-003	0.0277	7.0000e-005	7.0700e-003	5.0000e-005	7.1200e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	6.5951	6.5951	1.9000e-004	0.0000	6.5999
Total	**5.4800e-003**	**0.0507**	**0.0404**	**1.7000e-004**	**9.4200e-003**	**4.2000e-004**	**9.8400e-003**	**2.5600e-003**	**4.0000e-004**	**2.9600e-003**	**0.0000**	**16.0930**	**16.0930**	**7.4000e-004**	**0.0000**	**16.1115**

3.5 Building Construction - 2018

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	0.0971	0.9873	0.6937	1.0200e-003		0.0634	0.0634		0.0584	0.0584	0.0000	93.0903	93.0903	0.0290	0.0000	93.8148
Total	**0.0971**	**0.9873**	**0.6937**	**1.0200e-003**		**0.0634**	**0.0634**		**0.0584**	**0.0584**	**0.0000**	**93.0903**	**93.0903**	**0.0290**	**0.0000**	**93.8148**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8800e-003	0.0480	0.0127	1.0000e-004	2.3500e-003	3.7000e-004	2.7200e-003	6.8000e-004	3.5000e-004	1.0300e-003	0.0000	9.4979	9.4979	5.5000e-004	0.0000	9.5116
Worker	3.6000e-003	2.7500e-003	0.0277	7.0000e-005	7.0700e-003	5.0000e-005	7.1200e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	6.5951	6.5951	1.9000e-004	0.0000	6.5999
Total	**5.4800e-003**	**0.0507**	**0.0404**	**1.7000e-004**	**9.4200e-003**	**4.2000e-004**	**9.8400e-003**	**2.5600e-003**	**4.0000e-004**	**2.9600e-003**	**0.0000**	**16.0930**	**16.0930**	**7.4000e-004**	**0.0000**	**16.1115**

3.5 Building Construction - 2019

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	0.1020	1.0459	0.8034	1.2100e-003		0.0645	0.0645		0.0593	0.0593	0.0000	108.9500	108.9500	0.0345	0.0000	109.8118
Total	**0.1020**	**1.0459**	**0.8034**	**1.2100e-003**		**0.0645**	**0.0645**		**0.0593**	**0.0593**	**0.0000**	**108.9500**	**108.9500**	**0.0345**	**0.0000**	**109.8118**

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	2.0100e-003	0.0540	0.0138	1.2000e-004	2.7900e-003	3.7000e-004	3.1600e-003	8.1000e-004	3.5000e-004	1.1600e-003	0.0000	11.2262	11.2262	6.2000e-004	0.0000	11.2417
Worker	3.8600e-003	2.8600e-003	0.0292	8.0000e-005	8.4200e-003	6.0000e-005	8.4700e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	7.6123	7.6123	2.0000e-004	0.0000	7.6174
Total	**5.8700e-003**	**0.0568**	**0.0430**	**2.0000e-004**	**0.0112**	**4.3000e-004**	**0.0116**	**3.0500e-003**	**4.0000e-004**	**3.4500e-003**	**0.0000**	**18.8385**	**18.8385**	**8.2000e-004**	**0.0000**	**18.8591**

3.5 Building Construction - 2019

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	0.1020	1.0459	0.8034	1.2100e-003		0.0645	0.0645		0.0593	0.0593	0.0000	108.9499	108.9499	0.0345	0.0000	109.8116
Total	**0.1020**	**1.0459**	**0.8034**	**1.2100e-003**		**0.0645**	**0.0645**		**0.0593**	**0.0593**	**0.0000**	**108.9499**	**108.9499**	**0.0345**	**0.0000**	**109.8116**

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	2.0100e-003	0.0540	0.0138	1.2000e-004	2.7900e-003	3.7000e-004	3.1600e-003	8.1000e-004	3.5000e-004	1.1600e-003	0.0000	11.2262	11.2262	6.2000e-004	0.0000	11.2417
Worker	3.8600e-003	2.8600e-003	0.0292	8.0000e-005	8.4200e-003	6.0000e-005	8.4700e-003	2.2400e-003	5.0000e-005	2.2900e-003	0.0000	7.6123	7.6123	2.0000e-004	0.0000	7.6174
Total	**5.8700e-003**	**0.0568**	**0.0430**	**2.0000e-004**	**0.0112**	**4.3000e-004**	**0.0116**	**3.0500e-003**	**4.0000e-004**	**3.4500e-003**	**0.0000**	**18.8385**	**18.8385**	**8.2000e-004**	**0.0000**	**18.8591**

3.6 Paving - 2018

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	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5900e-003**	**0.0219**	**0.0181**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**2.4270**	**2.4270**	**6.8000e-004**	**0.0000**	**2.4441**

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	1.8000e-004	1.4000e-004	1.3900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3316	0.3316	1.0000e-005	0.0000	0.3318
Total	**1.8000e-004**	**1.4000e-004**	**1.3900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3316**	**0.3316**	**1.0000e-005**	**0.0000**	**0.3318**

3.6 Paving - 2018

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	2.3000e-003	0.0219	0.0181	3.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5900e-003**	**0.0219**	**0.0181**	**3.0000e-005**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**2.4270**	**2.4270**	**6.8000e-004**	**0.0000**	**2.4441**

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	1.8000e-004	1.4000e-004	1.3900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3316	0.3316	1.0000e-005	0.0000	0.3318
Total	**1.8000e-004**	**1.4000e-004**	**1.3900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3316**	**0.3316**	**1.0000e-005**	**0.0000**	**0.3318**

3.7 Architectural Coating - 2018

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	0.0470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0252	0.1695	0.1567	2.5000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	21.5750	21.5750	2.0500e-003	0.0000	21.6263
Total	**0.0722**	**0.1695**	**0.1567**	**2.5000e-004**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**21.5750**	**21.5750**	**2.0500e-003**	**0.0000**	**21.6263**

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	6.8000e-004	5.2000e-004	5.2200e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3400e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.2453	1.2453	4.0000e-005	0.0000	1.2462
Total	**6.8000e-004**	**5.2000e-004**	**5.2200e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3400e-003**	**3.6000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.2453**	**1.2453**	**4.0000e-005**	**0.0000**	**1.2462**

3.7 Architectural Coating - 2018

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	0.0470					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0252	0.1695	0.1567	2.5000e-004		0.0127	0.0127		0.0127	0.0127	0.0000	21.5750	21.5750	2.0500e-003	0.0000	21.6263
Total	**0.0722**	**0.1695**	**0.1567**	**2.5000e-004**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**21.5750**	**21.5750**	**2.0500e-003**	**0.0000**	**21.6263**

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	6.8000e-004	5.2000e-004	5.2200e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3400e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.2453	1.2453	4.0000e-005	0.0000	1.2462
Total	**6.8000e-004**	**5.2000e-004**	**5.2200e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3400e-003**	**3.6000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.2453**	**1.2453**	**4.0000e-005**	**0.0000**	**1.2462**

3.7 Architectural Coating - 2019

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	0.0620					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.2047	0.2053	3.3000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	28.4688	28.4688	2.4000e-003	0.0000	28.5289
Total	**0.0917**	**0.2047**	**0.2053**	**3.3000e-004**		**0.0144**	**0.0144**		**0.0144**	**0.0144**	**0.0000**	**28.4688**	**28.4688**	**2.4000e-003**	**0.0000**	**28.5289**

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	8.1000e-004	6.0000e-004	6.1100e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5939	1.5939	4.0000e-005	0.0000	1.5950
Total	**8.1000e-004**	**6.0000e-004**	**6.1100e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5939**	**1.5939**	**4.0000e-005**	**0.0000**	**1.5950**

3.7 Architectural Coating - 2019

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	0.0620					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.2046	0.2053	3.3000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	28.4688	28.4688	2.4000e-003	0.0000	28.5289
Total	**0.0917**	**0.2046**	**0.2053**	**3.3000e-004**		**0.0144**	**0.0144**		**0.0144**	**0.0144**	**0.0000**	**28.4688**	**28.4688**	**2.4000e-003**	**0.0000**	**28.5289**

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	8.1000e-004	6.0000e-004	6.1100e-003	2.0000e-005	1.7600e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.5939	1.5939	4.0000e-005	0.0000	1.5950
Total	**8.1000e-004**	**6.0000e-004**	**6.1100e-003**	**2.0000e-005**	**1.7600e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.5939**	**1.5939**	**4.0000e-005**	**0.0000**	**1.5950**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	0.2282	0.9724	2.1881	5.8600e-003	0.4491	7.6300e-003	0.4567	0.1206	7.1900e-003	0.1278	0.0000	536.6611	536.6611	0.0253	0.0000	537.2933
Unmitigated	0.2346	1.0226	2.3322	6.4200e-003	0.4973	8.3300e-003	0.5056	0.1335	7.8500e-003	0.1414	0.0000	588.1994	588.1994	0.0269	0.0000	588.8715

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Racquet Club	337.39	337.39	337.39	573,890	518,324
Single Family Housing	19.14	19.14	19.14	44,206	39,926
Strip Mall	465.86	465.86	465.86	717,435	647,972
Total	822.39	822.39	822.39	1,335,531	1,206,222

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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Racquet Club	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Single Family Housing	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Strip Mall	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	33.2467	33.2467	2.3500e-003	4.9000e-004	33.4506
NaturalGas Mitigated	1.4100e-003	0.0126	8.6200e-003	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	13.9924	13.9924	2.7000e-004	2.6000e-004	14.0756
NaturalGas Unmitigated	1.4800e-003	0.0131	8.9900e-003	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	14.6010	14.6010	2.8000e-004	2.7000e-004	14.6878

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					
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
Racquet Club	117446	6.3000e-004	5.7600e-003	4.8400e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	6.2674	6.2674	1.2000e-004	1.1000e-004	6.3046
Single Family Housing	105759	5.7000e-004	4.8700e-003	2.0700e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6437	5.6437	1.1000e-004	1.0000e-004	5.6772
Strip Mall	50408.8	2.7000e-004	2.4700e-003	2.0800e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.6900	2.6900	5.0000e-005	5.0000e-005	2.7060
Total		**1.4700e-003**	**0.0131**	**8.9900e-003**	**7.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.0000**	**14.6011**	**14.6011**	**2.8000e-004**	**2.6000e-004**	**14.6878**

5.2 Energy by Land Use - NaturalGas

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					
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
Racquet Club	113205	6.1000e-004	5.5500e-003	4.6600e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0411	6.0411	1.2000e-004	1.1000e-004	6.0770
Single Family Housing	100732	5.4000e-004	4.6400e-003	1.9800e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.3755	5.3755	1.0000e-004	1.0000e-004	5.4074
Strip Mall	48270.3	2.6000e-004	2.3700e-003	1.9900e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5759	2.5759	5.0000e-005	5.0000e-005	2.5912
Total		**1.4100e-003**	**0.0126**	**8.6300e-003**	**7.0000e-005**		**9.8000e-004**	**9.8000e-004**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**13.9924**	**13.9924**	**2.7000e-004**	**2.6000e-004**	**14.0756**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	8505.2	1.5810	1.1000e-004	2.0000e-005	1.5907
Racquet Club	36421	6.7702	4.8000e-004	1.0000e-004	6.8117
Single Family Housing	17071.5	3.1734	2.2000e-004	5.0000e-005	3.1928
Strip Mall	116857	21.7221	1.5400e-003	3.2000e-004	21.8553
Total		**33.2467**	**2.3500e-003**	**4.9000e-004**	**33.4506**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0989	4.3000e-004	0.0323	4.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.2542	0.0871	0.3414	5.1000e-004	1.0000e-005	0.3583
Unmitigated	0.0989	4.3000e-004	0.0323	4.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.2542	0.0871	0.3414	5.1000e-004	1.0000e-005	0.3583

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	0.0109					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0118	2.6000e-004	0.0171	4.0000e-005		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.2542	0.0624	0.3166	4.8000e-004	1.0000e-005	0.3330
Landscaping	4.8000e-004	1.8000e-004	0.0152	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0247	0.0247	3.0000e-005	0.0000	0.0253
Total	**0.0989**	**4.4000e-004**	**0.0323**	**4.0000e-005**		**2.5500e-003**	**2.5500e-003**		**2.5500e-003**	**2.5500e-003**	**0.2542**	**0.0871**	**0.3414**	**5.1000e-004**	**1.0000e-005**	**0.3583**

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	0.0109					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0118	2.6000e-004	0.0171	4.0000e-005		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.2542	0.0624	0.3166	4.8000e-004	1.0000e-005	0.3330
Landscaping	4.8000e-004	1.8000e-004	0.0152	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.0247	0.0247	3.0000e-005	0.0000	0.0253
Total	**0.0989**	**4.4000e-004**	**0.0323**	**4.0000e-005**		**2.5500e-003**	**2.5500e-003**		**2.5500e-003**	**2.5500e-003**	**0.2542**	**0.0871**	**0.3414**	**5.1000e-004**	**1.0000e-005**	**0.3583**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.0990	0.0398	9.6000e-004	3.3812
Unmitigated	2.0990	0.0398	9.6000e-004	3.3812

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.279747 / 0.171458	0.4817	9.1400e-003	2.2000e-004	0.7761
Single Family Housing	0.130308 / 0.0821507	0.2259	4.2600e-003	1.0000e-004	0.3630
Strip Mall	0.808131 / 0.495306	1.3915	0.0264	6.4000e-004	2.2421
Total		**2.0990**	**0.0398**	**9.6000e-004**	**3.3812**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.279747 / 0.171458	0.4817	9.1400e-003	2.2000e-004	0.7761
Single Family Housing	0.130308 / 0.0821507	0.2259	4.2600e-003	1.0000e-004	0.3630
Strip Mall	0.808131 / 0.495306	1.3915	0.0264	6.4000e-004	2.2421
Total		**2.0990**	**0.0398**	**9.6000e-004**	**3.3812**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.3105	0.4911	0.0000	20.5888
Unmitigated	8.3105	0.4911	0.0000	20.5888

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	26.96	5.4726	0.3234	0.0000	13.5582
Single Family Housing	2.52	0.5115	0.0302	0.0000	1.2673
Strip Mall	11.46	2.3263	0.1375	0.0000	5.7633
Total		**8.3105**	**0.4911**	**0.0000**	**20.5888**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	26.96	5.4726	0.3234	0.0000	13.5582
Single Family Housing	2.52	0.5115	0.0302	0.0000	1.2673
Strip Mall	11.46	2.3263	0.1375	0.0000	5.7633
Total		**8.3105**	**0.4911**	**0.0000**	**20.5888**

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

505 San Pedro Avenue Project (unmitigated)

Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	9.66	1000sqft	0.22	9,665.00	0
Racquet Club	4.73	1000sqft	0.11	4,730.00	0
Single Family Housing	2.00	Dwelling Unit	0.40	3,600.00	6
Strip Mall	10.91	1000sqft	0.13	10,911.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	409.81	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Summer

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions.

Land Use - *Applicant provided

Construction Phase - *Applicant provided

Grading - *applicant provided

Vehicle Trips - *Based on trip generation rates provided by Abrams Associates

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation -

Demolition - *Applicant provided

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	392.00
tblConstructionPhase	NumDays	100.00	392.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/26/2021	11/7/2019
tblConstructionPhase	PhaseEndDate	10/17/2019	10/24/2019
tblConstructionPhase	PhaseEndDate	10/24/2019	4/24/2018
tblConstructionPhase	PhaseStartDate	10/25/2019	5/9/2018
tblConstructionPhase	PhaseStartDate	4/18/2018	4/25/2018
tblConstructionPhase	PhaseStartDate	10/18/2019	4/18/2018
tblGrading	AcresOfGrading	1.00	0.86
tblGrading	MaterialExported	0.00	20.00
tblLandUse	BuildingSpaceSquareFeet	9,660.00	9,665.00
tblLandUse	BuildingSpaceSquareFeet	10,910.00	10,911.00
tblLandUse	LandUseSquareFeet	9,660.00	9,665.00

tblLandUse	LandUseSquareFeet	10,910.00	10,911.00
tblLandUse	LotAcreage	0.65	0.40
tblLandUse	LotAcreage	0.25	0.13
tblProjectCharacteristics	CO2IntensityFactor	641.35	409.81
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	3.00	2.00
tblVehicleTrips	ST_TR	21.35	71.33
tblVehicleTrips	ST_TR	9.91	9.57
tblVehicleTrips	ST_TR	42.04	42.70
tblVehicleTrips	SU_TR	17.40	71.33
tblVehicleTrips	SU_TR	8.62	9.57
tblVehicleTrips	SU_TR	20.43	42.70
tblVehicleTrips	WD_TR	14.03	71.33
tblVehicleTrips	WD_TR	9.52	9.57
tblVehicleTrips	WD_TR	44.32	42.70

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					
2018	2.0103	21.8100	13.0156	0.0296	2.1967	1.0520	3.2486	0.4356	0.9896	1.3335	0.0000	2,977.8935	2,977.8935	0.5709	0.0000	2,992.1650
2019	1.8439	12.1842	9.8643	0.0165	0.1257	0.7382	0.8639	0.0339	0.6896	0.7236	0.0000	1,628.2298	1,628.2298	0.3895	0.0000	1,637.9665
Maximum	**2.0103**	**21.8100**	**13.0156**	**0.0296**	**2.1967**	**1.0520**	**3.2486**	**0.4356**	**0.9896**	**1.3335**	**0.0000**	**2,977.8935**	**2,977.8935**	**0.5709**	**0.0000**	**2,992.1650**

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					
2018	2.0103	21.8100	13.0156	0.0296	2.1967	1.0520	3.2486	0.4356	0.9896	1.3335	0.0000	2,977.8935	2,977.8935	0.5709	0.0000	2,992.1650
2019	1.8439	12.1842	9.8643	0.0165	0.1257	0.7382	0.8639	0.0339	0.6896	0.7236	0.0000	1,628.2298	1,628.2298	0.3895	0.0000	1,637.9665
Maximum	**2.0103**	**21.8100**	**13.0156**	**0.0296**	**2.1967**	**1.0520**	**3.2486**	**0.4356**	**0.9896**	**1.3335**	**0.0000**	**2,977.8935**	**2,977.8935**	**0.5709**	**0.0000**	**2,992.1650**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Energy	8.0800e-003	0.0718	0.0492	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.1912	88.1912	1.6900e-003	1.6200e-003	88.7153
Mobile	1.4836	5.4505	12.9174	0.0374	2.8385	0.0456	2.8841	0.7597	0.0430	0.8026		3,771.9749	3,771.9749	0.1620		3,776.0239
Total	**4.0445**	**5.5642**	**15.8156**	**0.0429**	**2.8385**	**0.4311**	**3.2696**	**0.7597**	**0.4285**	**1.1882**	**40.7567**	**3,872.8217**	**3,913.5784**	**0.2144**	**4.5000e-003**	**3,920.2760**

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	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Energy	7.7500e-003	0.0688	0.0473	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003		84.5150	84.5150	1.6200e-003	1.5500e-003	85.0172
Mobile	1.4475	5.1907	12.0254	0.0341	2.5637	0.0417	2.6054	0.6861	0.0393	0.7254		3,440.7629	3,440.7629	0.1518		3,444.5575
Total	**4.0081**	**5.3014**	**14.9216**	**0.0396**	**2.5637**	**0.4270**	**2.9907**	**0.6861**	**0.4246**	**1.1108**	**40.7567**	**3,537.9335**	**3,578.6902**	**0.2041**	**4.4300e-003**	**3,585.1115**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.90**	**4.72**	**5.65**	**7.72**	**9.68**	**0.95**	**8.53**	**9.68**	**0.91**	**6.52**	**0.00**	**8.65**	**8.56**	**4.78**	**1.56**	**8.55**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/2/2018	4/3/2018	5	2	
2	Demolition	Demolition	4/2/2018	4/2/2018	5	1	
3	Grading	Grading	4/4/2018	4/17/2018	5	10	
4	Building Construction	Building Construction	4/25/2018	10/24/2019	5	392	
5	Paving	Paving	4/18/2018	4/24/2018	5	5	
6	Architectural Coating	Architectural Coating	5/9/2018	11/7/2019	5	392	

Acres of Grading (Site Preparation Phase): 0.86

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.22

Residential Indoor: 7,290; Residential Outdoor: 2,430; Non-Residential Indoor: 23,462; Non-Residential Outdoor: 7,821; Striped Parking Area: 580 (Architectural Coating – sqft)

OffRoad Equipment

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	7.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4572	0.0000	0.4572	0.0494	0.0000	0.0494			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4572**	**0.4180**	**0.8752**	**0.0494**	**0.3846**	**0.4340**		**982.7113**	**982.7113**	**0.3059**		**990.3596**

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	9.4700e-003	0.3228	0.0607	8.1000e-004	0.0175	1.3000e-003	0.0188	4.7900e-003	1.2400e-003	6.0300e-003		86.8497	86.8497	4.4600e-003		86.9612
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101
Total	**0.0305**	**0.3364**	**0.2282**	**1.2500e-003**	**0.0585**	**1.5800e-003**	**0.0601**	**0.0157**	**1.5000e-003**	**0.0172**		**130.5279**	**130.5279**	**5.7400e-003**		**130.6713**

3.2 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4572	0.0000	0.4572	0.0494	0.0000	0.0494			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4572**	**0.4180**	**0.8752**	**0.0494**	**0.3846**	**0.4340**	**0.0000**	**982.7113**	**982.7113**	**0.3059**		**990.3596**

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	9.4700e-003	0.3228	0.0607	8.1000e-004	0.0175	1.3000e-003	0.0188	4.7900e-003	1.2400e-003	6.0300e-003		86.8497	86.8497	4.4600e-003		86.9612
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0136	0.1675	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		43.6782	43.6782	1.2800e-003		43.7101
Total	**0.0305**	**0.3364**	**0.2282**	**1.2500e-003**	**0.0585**	**1.5800e-003**	**0.0601**	**0.0157**	**1.5000e-003**	**0.0172**		**130.5279**	**130.5279**	**5.7400e-003**		**130.6713**

3.3 Demolition - 2018

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					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.4765**	**0.6228**	**2.0993**	**0.2236**	**0.5943**	**0.8179**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

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	0.0663	2.2597	0.4248	5.7000e-003	0.1223	9.0800e-003	0.1314	0.0335	8.6900e-003	0.0422		607.9477	607.9477	0.0312		608.7284
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.1084**	**2.2869**	**0.7598**	**6.5800e-003**	**0.2044**	**9.6300e-003**	**0.2141**	**0.0553**	**9.2000e-003**	**0.0645**		**695.3041**	**695.3041**	**0.0338**		**696.1485**

3.3 Demolition - 2018

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					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.4765**	**0.6228**	**2.0993**	**0.2236**	**0.5943**	**0.8179**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

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	0.0663	2.2597	0.4248	5.7000e-003	0.1223	9.0800e-003	0.1314	0.0335	8.6900e-003	0.0422		607.9477	607.9477	0.0312		608.7284
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.1084**	**2.2869**	**0.7598**	**6.5800e-003**	**0.2044**	**9.6300e-003**	**0.2141**	**0.0553**	**9.2000e-003**	**0.0645**		**695.3041**	**695.3041**	**0.0338**		**696.1485**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.7528**	**0.6228**	**1.3755**	**0.4138**	**0.5943**	**1.0081**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.0421**	**0.0272**	**0.3350**	**8.8000e-004**	**0.0822**	**5.5000e-004**	**0.0827**	**0.0218**	**5.1000e-004**	**0.0223**		**87.3564**	**87.3564**	**2.5500e-003**		**87.4202**

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.7528**	**0.6228**	**1.3755**	**0.4138**	**0.5943**	**1.0081**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.0421**	**0.0272**	**0.3350**	**8.8000e-004**	**0.0822**	**5.5000e-004**	**0.0827**	**0.0218**	**5.1000e-004**	**0.0223**		**87.3564**	**87.3564**	**2.5500e-003**		**87.4202**

3.5 Building Construction - 2018

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**		**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0206	0.5282	0.1338	1.1200e-003	0.0271	4.0900e-003	0.0312	7.7900e-003	3.9100e-003	0.0117		118.1991	118.1991	6.4900e-003		118.3614
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.0628**	**0.5554**	**0.4688**	**2.0000e-003**	**0.1092**	**4.6400e-003**	**0.1139**	**0.0296**	**4.4200e-003**	**0.0340**		**205.5555**	**205.5555**	**9.0400e-003**		**205.7816**

3.5 Building Construction - 2018

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**	**0.0000**	**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0206	0.5282	0.1338	1.1200e-003	0.0271	4.0900e-003	0.0312	7.7900e-003	3.9100e-003	0.0117		118.1991	118.1991	6.4900e-003		118.3614
Worker	0.0421	0.0272	0.3350	8.8000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		87.3564	87.3564	2.5500e-003		87.4202
Total	**0.0628**	**0.5554**	**0.4688**	**2.0000e-003**	**0.1092**	**4.6400e-003**	**0.1139**	**0.0296**	**4.4200e-003**	**0.0340**		**205.5555**	**205.5555**	**9.0400e-003**		**205.7816**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**		**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0186	0.4996	0.1220	1.1100e-003	0.0271	3.4600e-003	0.0305	7.7900e-003	3.3100e-003	0.0111		117.4220	117.4220	6.2100e-003		117.5773
Worker	0.0380	0.0238	0.2982	8.5000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		84.7418	84.7418	2.2500e-003		84.7981
Total	**0.0566**	**0.5234**	**0.4202**	**1.9600e-003**	**0.1092**	**4.0000e-003**	**0.1132**	**0.0296**	**3.8100e-003**	**0.0334**		**202.1638**	**202.1638**	**8.4600e-003**		**202.3754**

3.5 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**	**0.0000**	**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0186	0.4996	0.1220	1.1100e-003	0.0271	3.4600e-003	0.0305	7.7900e-003	3.3100e-003	0.0111		117.4220	117.4220	6.2100e-003		117.5773
Worker	0.0380	0.0238	0.2982	8.5000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		84.7418	84.7418	2.2500e-003		84.7981
Total	**0.0566**	**0.5234**	**0.4202**	**1.9600e-003**	**0.1092**	**4.0000e-003**	**0.1132**	**0.0296**	**3.8100e-003**	**0.0334**		**202.1638**	**202.1638**	**8.4600e-003**		**202.3754**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0355**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**		**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563
Total	**0.0758**	**0.0490**	**0.6030**	**1.5800e-003**	**0.1479**	**1.0000e-003**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**157.2415**	**157.2415**	**4.5900e-003**		**157.3563**

3.6 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0355**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**	**0.0000**	**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0758	0.0490	0.6030	1.5800e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		157.2415	157.2415	4.5900e-003		157.3563
Total	**0.0758**	**0.0490**	**0.6030**	**1.5800e-003**	**0.1479**	**1.0000e-003**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**157.2415**	**157.2415**	**4.5900e-003**		**157.3563**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**0.8543**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.4300e-003	5.4400e-003	0.0670	1.8000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		17.4713	17.4713	5.1000e-004		17.4840
Total	**8.4300e-003**	**5.4400e-003**	**0.0670**	**1.8000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**17.4713**	**17.4713**	**5.1000e-004**		**17.4840**

3.7 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**0.8543**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.4300e-003	5.4400e-003	0.0670	1.8000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		17.4713	17.4713	5.1000e-004		17.4840
Total	**8.4300e-003**	**5.4400e-003**	**0.0670**	**1.8000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**17.4713**	**17.4713**	**5.1000e-004**		**17.4840**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**0.8222**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6100e-003	4.7600e-003	0.0596	1.7000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		16.9484	16.9484	4.5000e-004		16.9596
Total	**7.6100e-003**	**4.7600e-003**	**0.0596**	**1.7000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**16.9484**	**16.9484**	**4.5000e-004**		**16.9596**

3.7 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**0.8222**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6100e-003	4.7600e-003	0.0596	1.7000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		16.9484	16.9484	4.5000e-004		16.9596
Total	**7.6100e-003**	**4.7600e-003**	**0.0596**	**1.7000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**16.9484**	**16.9484**	**4.5000e-004**		**16.9596**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	1.4475	5.1907	12.0254	0.0341	2.5637	0.0417	2.6054	0.6861	0.0393	0.7254		3,440.7629	3,440.7629	0.1518		3,444.5575
Unmitigated	1.4836	5.4505	12.9174	0.0374	2.8385	0.0456	2.8841	0.7597	0.0430	0.8026		3,771.9749	3,771.9749	0.1620		3,776.0239

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Racquet Club	337.39	337.39	337.39	573,890	518,324
Single Family Housing	19.14	19.14	19.14	44,206	39,926
Strip Mall	465.86	465.86	465.86	717,435	647,972
Total	822.39	822.39	822.39	1,335,531	1,206,222

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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Racquet Club	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Single Family Housing	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Strip Mall	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable 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	7.7500e-003	0.0688	0.0473	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003		84.5150	84.5150	1.6200e-003	1.5500e-003	85.0172
NaturalGas Unmitigated	8.0800e-003	0.0718	0.0492	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.1912	88.1912	1.6900e-003	1.6200e-003	88.7153

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					
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
Racquet Club	321.77	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8553	37.8553	7.3000e-004	6.9000e-004	38.0802
Single Family Housing	289.749	3.1200e-003	0.0267	0.0114	1.7000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		34.0882	34.0882	6.5000e-004	6.2000e-004	34.2907
Strip Mall	138.106	1.4900e-003	0.0135	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003		16.2478	16.2478	3.1000e-004	3.0000e-004	16.3444
Total		**8.0800e-003**	**0.0718**	**0.0492**	**4.4000e-004**		**5.5900e-003**	**5.5900e-003**		**5.5900e-003**	**5.5900e-003**		**88.1912**	**88.1912**	**1.6900e-003**	**1.6100e-003**	**88.7153**

5.2 Energy by Land Use - NaturalGas

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					
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
Racquet Club	0.310152	3.3400e-003	0.0304	0.0255	1.8000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003		36.4885	36.4885	7.0000e-004	6.7000e-004	36.7053
Single Family Housing	0.275978	2.9800e-003	0.0254	0.0108	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003		32.4680	32.4680	6.2000e-004	6.0000e-004	32.6610
Strip Mall	0.132247	1.4300e-003	0.0130	0.0109	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.5585	15.5585	3.0000e-004	2.9000e-004	15.6510
Total		**7.7500e-003**	**0.0688**	**0.0473**	**4.2000e-004**		**5.3600e-003**	**5.3600e-003**		**5.3600e-003**	**5.3600e-003**		**84.5150**	**84.5150**	**1.6200e-003**	**1.5600e-003**	**85.0172**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Unmitigated	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0726	0.0399	2.6806	5.0500e-003		0.3791	0.3791		0.3791	0.3791	40.7567	12.3529	53.1096	0.0504	2.8800e-003	55.2265
Landscaping	5.3200e-003	1.9400e-003	0.1684	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		0.3026	0.3026	3.1000e-004		0.3103
Total	**2.5528**	**0.0419**	**2.8490**	**5.0600e-003**		**0.3800**	**0.3800**		**0.3800**	**0.3800**	**40.7567**	**12.6556**	**53.4123**	**0.0507**	**2.8800e-003**	**55.5368**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0726	0.0399	2.6806	5.0500e-003		0.3791	0.3791		0.3791	0.3791	40.7567	12.3529	53.1096	0.0504	2.8800e-003	55.2265
Landscaping	5.3200e-003	1.9400e-003	0.1684	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		0.3026	0.3026	3.1000e-004		0.3103
Total	**2.5528**	**0.0419**	**2.8490**	**5.0600e-003**		**0.3800**	**0.3800**		**0.3800**	**0.3800**	**40.7567**	**12.6556**	**53.4123**	**0.0507**	**2.8800e-003**	**55.5368**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

505 San Pedro Avenue Project (unmitigated)

Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	9.66	1000sqft	0.22	9,665.00	0
Racquet Club	4.73	1000sqft	0.11	4,730.00	0
Single Family Housing	2.00	Dwelling Unit	0.40	3,600.00	6
Strip Mall	10.91	1000sqft	0.13	10,911.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	409.81	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Winter

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions.

Land Use - *Applicant provided

Construction Phase - *Applicant provided

Grading - *applicant provided

Vehicle Trips - *Based on trip generation rates provided by Abrams Associates

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation -

Demolition - *Applicant provided

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	392.00
tblConstructionPhase	NumDays	100.00	392.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	4/26/2021	11/7/2019
tblConstructionPhase	PhaseEndDate	10/17/2019	10/24/2019
tblConstructionPhase	PhaseEndDate	10/24/2019	4/24/2018
tblConstructionPhase	PhaseStartDate	10/25/2019	5/9/2018
tblConstructionPhase	PhaseStartDate	4/18/2018	4/25/2018
tblConstructionPhase	PhaseStartDate	10/18/2019	4/18/2018
tblGrading	AcresOfGrading	1.00	0.86
tblGrading	MaterialExported	0.00	20.00
tblLandUse	BuildingSpaceSquareFeet	9,660.00	9,665.00
tblLandUse	BuildingSpaceSquareFeet	10,910.00	10,911.00
tblLandUse	LandUseSquareFeet	9,660.00	9,665.00

tblLandUse	LandUseSquareFeet	10,910.00	10,911.00
tblLandUse	LotAcreage	0.65	0.40
tblLandUse	LotAcreage	0.25	0.13
tblProjectCharacteristics	CO2IntensityFactor	641.35	409.81
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	3.00	2.00
tblVehicleTrips	ST_TR	21.35	71.33
tblVehicleTrips	ST_TR	9.91	9.57
tblVehicleTrips	ST_TR	42.04	42.70
tblVehicleTrips	SU_TR	17.40	71.33
tblVehicleTrips	SU_TR	8.62	9.57
tblVehicleTrips	SU_TR	20.43	42.70
tblVehicleTrips	WD_TR	14.03	71.33
tblVehicleTrips	WD_TR	9.52	9.57
tblVehicleTrips	WD_TR	44.32	42.70

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					
2018	2.0142	21.8865	13.0332	0.0294	2.1967	1.0522	3.2488	0.4356	0.9898	1.3337	0.0000	2,956.3458	2,956.3458	0.5727	0.0000	2,970.6621
2019	1.8474	12.1977	9.8616	0.0164	0.1257	0.7383	0.8640	0.0339	0.6897	0.7236	0.0000	1,617.2943	1,617.2943	0.3898	0.0000	1,627.0399
Maximum	**2.0142**	**21.8865**	**13.0332**	**0.0294**	**2.1967**	**1.0522**	**3.2488**	**0.4356**	**0.9898**	**1.3337**	**0.0000**	**2,956.3458**	**2,956.3458**	**0.5727**	**0.0000**	**2,970.6621**

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					
2018	2.0142	21.8865	13.0332	0.0294	2.1967	1.0522	3.2488	0.4356	0.9898	1.3337	0.0000	2,956.3458	2,956.3458	0.5727	0.0000	2,970.6621
2019	1.8474	12.1977	9.8616	0.0164	0.1257	0.7383	0.8640	0.0339	0.6897	0.7236	0.0000	1,617.2943	1,617.2943	0.3898	0.0000	1,627.0399
Maximum	**2.0142**	**21.8865**	**13.0332**	**0.0294**	**2.1967**	**1.0522**	**3.2488**	**0.4356**	**0.9898**	**1.3337**	**0.0000**	**2,956.3458**	**2,956.3458**	**0.5727**	**0.0000**	**2,970.6621**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Energy	8.0800e-003	0.0718	0.0492	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.1912	88.1912	1.6900e-003	1.6200e-003	88.7153
Mobile	1.2853	5.7166	13.6368	0.0350	2.8385	0.0461	2.8846	0.7597	0.0435	0.8032		3,526.2398	3,526.2398	0.1686		3,530.4550
Total	**3.8462**	**5.8302**	**16.5351**	**0.0405**	**2.8385**	**0.4317**	**3.2702**	**0.7597**	**0.4290**	**1.1887**	**40.7567**	**3,627.0866**	**3,667.8432**	**0.2210**	**4.5000e-003**	**3,674.7071**

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	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Energy	7.7500e-003	0.0688	0.0473	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003		84.5150	84.5150	1.6200e-003	1.5500e-003	85.0172
Mobile	1.2497	5.4298	12.8397	0.0319	2.5637	0.0423	2.6059	0.6861	0.0398	0.7260		3,216.0157	3,216.0157	0.1590		3,219.9899
Total	**3.8103**	**5.5405**	**15.7360**	**0.0374**	**2.5637**	**0.4276**	**2.9912**	**0.6861**	**0.4251**	**1.1113**	**40.7567**	**3,313.1862**	**3,353.9429**	**0.2113**	**4.4300e-003**	**3,360.5439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.93**	**4.97**	**4.83**	**7.64**	**9.68**	**0.95**	**8.53**	**9.68**	**0.91**	**6.51**	**0.00**	**8.65**	**8.56**	**4.39**	**1.56**	**8.55**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/2/2018	4/3/2018	5	2	
2	Demolition	Demolition	4/2/2018	4/2/2018	5	1	
3	Grading	Grading	4/4/2018	4/17/2018	5	10	
4	Building Construction	Building Construction	4/25/2018	10/24/2019	5	392	
5	Paving	Paving	4/18/2018	4/24/2018	5	5	
6	Architectural Coating	Architectural Coating	5/9/2018	11/7/2019	5	392	

Acres of Grading (Site Preparation Phase): 0.86

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.22

Residential Indoor: 7,290; Residential Outdoor: 2,430; Non-Residential Indoor: 23,462; Non-Residential Outdoor: 7,821; Striped Parking Area: 580 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	7.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4572	0.0000	0.4572	0.0494	0.0000	0.0494			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846		982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4572**	**0.4180**	**0.8752**	**0.0494**	**0.3846**	**0.4340**		**982.7113**	**982.7113**	**0.3059**		**990.3596**

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	9.7500e-003	0.3312	0.0660	8.0000e-004	0.0175	1.3200e-003	0.0188	4.7900e-003	1.2700e-003	6.0500e-003		85.4458	85.4458	4.7100e-003		85.5636
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695
Total	**0.0320**	**0.3480**	**0.2252**	**1.2000e-003**	**0.0585**	**1.6000e-003**	**0.0601**	**0.0157**	**1.5300e-003**	**0.0172**		**125.6851**	**125.6851**	**5.9200e-003**		**125.8331**

3.2 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4572	0.0000	0.4572	0.0494	0.0000	0.0494			0.0000			0.0000
Off-Road	0.7858	9.7572	4.2514	9.7600e-003		0.4180	0.4180		0.3846	0.3846	0.0000	982.7113	982.7113	0.3059		990.3596
Total	**0.7858**	**9.7572**	**4.2514**	**9.7600e-003**	**0.4572**	**0.4180**	**0.8752**	**0.0494**	**0.3846**	**0.4340**	**0.0000**	**982.7113**	**982.7113**	**0.3059**		**990.3596**

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	9.7500e-003	0.3312	0.0660	8.0000e-004	0.0175	1.3200e-003	0.0188	4.7900e-003	1.2700e-003	6.0500e-003		85.4458	85.4458	4.7100e-003		85.5636
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0168	0.1592	4.0000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		40.2393	40.2393	1.2100e-003		40.2695
Total	**0.0320**	**0.3480**	**0.2252**	**1.2000e-003**	**0.0585**	**1.6000e-003**	**0.0601**	**0.0157**	**1.5300e-003**	**0.0172**		**125.6851**	**125.6851**	**5.9200e-003**		**125.8331**

3.3 Demolition - 2018

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					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.4765**	**0.6228**	**2.0993**	**0.2236**	**0.5943**	**0.8179**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

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	0.0683	2.3182	0.4619	5.6100e-003	0.1223	9.2700e-003	0.1316	0.0335	8.8700e-003	0.0424		598.1205	598.1205	0.0330		598.9449
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.1129**	**2.3518**	**0.7803**	**6.4200e-003**	**0.2044**	**9.8200e-003**	**0.2143**	**0.0553**	**9.3800e-003**	**0.0647**		**678.5991**	**678.5991**	**0.0354**		**679.4839**

3.3 Demolition - 2018

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					1.4765	0.0000	1.4765	0.2236	0.0000	0.2236			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**1.4765**	**0.6228**	**2.0993**	**0.2236**	**0.5943**	**0.8179**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

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	0.0683	2.3182	0.4619	5.6100e-003	0.1223	9.2700e-003	0.1316	0.0335	8.8700e-003	0.0424		598.1205	598.1205	0.0330		598.9449
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.1129**	**2.3518**	**0.7803**	**6.4200e-003**	**0.2044**	**9.8200e-003**	**0.2143**	**0.0553**	**9.3800e-003**	**0.0647**		**678.5991**	**678.5991**	**0.0354**		**679.4839**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943		1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.7528**	**0.6228**	**1.3755**	**0.4138**	**0.5943**	**1.0081**		**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.0446**	**0.0336**	**0.3184**	**8.1000e-004**	**0.0822**	**5.5000e-004**	**0.0827**	**0.0218**	**5.1000e-004**	**0.0223**		**80.4787**	**80.4787**	**2.4100e-003**		**80.5390**

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.0643	9.4295	7.7762	0.0120		0.6228	0.6228		0.5943	0.5943	0.0000	1,169.3502	1,169.3502	0.2254		1,174.9857
Total	**1.0643**	**9.4295**	**7.7762**	**0.0120**	**0.7528**	**0.6228**	**1.3755**	**0.4138**	**0.5943**	**1.0081**	**0.0000**	**1,169.3502**	**1,169.3502**	**0.2254**		**1,174.9857**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.0446**	**0.0336**	**0.3184**	**8.1000e-004**	**0.0822**	**5.5000e-004**	**0.0827**	**0.0218**	**5.1000e-004**	**0.0223**		**80.4787**	**80.4787**	**2.4100e-003**		**80.5390**

3.5 Building Construction - 2018

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520		1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**		**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0216	0.5360	0.1524	1.0900e-003	0.0271	4.1500e-003	0.0312	7.7900e-003	3.9700e-003	0.0118		115.2967	115.2967	7.0400e-003		115.4728
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.0662**	**0.5696**	**0.4708**	**1.9000e-003**	**0.1092**	**4.7000e-003**	**0.1139**	**0.0296**	**4.4800e-003**	**0.0341**		**195.7754**	**195.7754**	**9.4500e-003**		**196.0117**

3.5 Building Construction - 2018

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	1.0848	11.0316	7.7512	0.0114		0.7087	0.7087		0.6520	0.6520	0.0000	1,146.5323	1,146.5323	0.3569		1,155.4555
Total	**1.0848**	**11.0316**	**7.7512**	**0.0114**		**0.7087**	**0.7087**		**0.6520**	**0.6520**	**0.0000**	**1,146.5323**	**1,146.5323**	**0.3569**		**1,155.4555**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0216	0.5360	0.1524	1.0900e-003	0.0271	4.1500e-003	0.0312	7.7900e-003	3.9700e-003	0.0118		115.2967	115.2967	7.0400e-003		115.4728
Worker	0.0446	0.0336	0.3184	8.1000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		80.4787	80.4787	2.4100e-003		80.5390
Total	**0.0662**	**0.5696**	**0.4708**	**1.9000e-003**	**0.1092**	**4.7000e-003**	**0.1139**	**0.0296**	**4.4800e-003**	**0.0341**		**195.7754**	**195.7754**	**9.4500e-003**		**196.0117**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**		**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0194	0.5063	0.1393	1.0800e-003	0.0271	3.5100e-003	0.0306	7.7900e-003	3.3600e-003	0.0112		114.5008	114.5008	6.7200e-003		114.6689
Worker	0.0402	0.0294	0.2815	7.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		78.0632	78.0632	2.1200e-003		78.1162
Total	**0.0596**	**0.5358**	**0.4208**	**1.8600e-003**	**0.1092**	**4.0500e-003**	**0.1133**	**0.0296**	**3.8600e-003**	**0.0334**		**192.5640**	**192.5640**	**8.8400e-003**		**192.7851**

3.5 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	**0.9576**	**9.8207**	**7.5432**	**0.0114**		**0.6054**	**0.6054**		**0.5569**	**0.5569**	**0.0000**	**1,127.6696**	**1,127.6696**	**0.3568**		**1,136.5892**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0194	0.5063	0.1393	1.0800e-003	0.0271	3.5100e-003	0.0306	7.7900e-003	3.3600e-003	0.0112		114.5008	114.5008	6.7200e-003		114.6689
Worker	0.0402	0.0294	0.2815	7.8000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		78.0632	78.0632	2.1200e-003		78.1162
Total	**0.0596**	**0.5358**	**0.4208**	**1.8600e-003**	**0.1092**	**4.0500e-003**	**0.1133**	**0.0296**	**3.8600e-003**	**0.0334**		**192.5640**	**192.5640**	**8.8400e-003**		**192.7851**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735		1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0355**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**		**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702
Total	**0.0802**	**0.0605**	**0.5731**	**1.4600e-003**	**0.1479**	**1.0000e-003**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**144.8616**	**144.8616**	**4.3400e-003**		**144.9702**

3.6 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9202	8.7447	7.2240	0.0113		0.5109	0.5109		0.4735	0.4735	0.0000	1,070.1372	1,070.1372	0.3017		1,077.6798
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0355**	**8.7447**	**7.2240**	**0.0113**		**0.5109**	**0.5109**		**0.4735**	**0.4735**	**0.0000**	**1,070.1372**	**1,070.1372**	**0.3017**		**1,077.6798**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0605	0.5731	1.4600e-003	0.1479	1.0000e-003	0.1489	0.0392	9.2000e-004	0.0401		144.8616	144.8616	4.3400e-003		144.9702
Total	**0.0802**	**0.0605**	**0.5731**	**1.4600e-003**	**0.1479**	**1.0000e-003**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**144.8616**	**144.8616**	**4.3400e-003**		**144.9702**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**0.8543**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.9100e-003	6.7200e-003	0.0637	1.6000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		16.0957	16.0957	4.8000e-004		16.1078
Total	**8.9100e-003**	**6.7200e-003**	**0.0637**	**1.6000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**16.0957**	**16.0957**	**4.8000e-004**		**16.1078**

3.7 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**0.8543**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.9100e-003	6.7200e-003	0.0637	1.6000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		16.0957	16.0957	4.8000e-004		16.1078
Total	**8.9100e-003**	**6.7200e-003**	**0.0637**	**1.6000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**16.0957**	**16.0957**	**4.8000e-004**		**16.1078**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**0.8222**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.0400e-003	5.8900e-003	0.0563	1.6000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		15.6126	15.6126	4.2000e-004		15.6232
Total	**8.0400e-003**	**5.8900e-003**	**0.0563**	**1.6000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**15.6126**	**15.6126**	**4.2000e-004**		**15.6232**

3.7 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.5557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**0.8222**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.0400e-003	5.8900e-003	0.0563	1.6000e-004	0.0164	1.1000e-004	0.0165	4.3600e-003	1.0000e-004	4.4600e-003		15.6126	15.6126	4.2000e-004		15.6232
Total	**8.0400e-003**	**5.8900e-003**	**0.0563**	**1.6000e-004**	**0.0164**	**1.1000e-004**	**0.0165**	**4.3600e-003**	**1.0000e-004**	**4.4600e-003**		**15.6126**	**15.6126**	**4.2000e-004**		**15.6232**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	1.2497	5.4298	12.8397	0.0319	2.5637	0.0423	2.6059	0.6861	0.0398	0.7260		3,216.0157	3,216.0157	0.1590		3,219.9899
Unmitigated	1.2853	5.7166	13.6368	0.0350	2.8385	0.0461	2.8846	0.7597	0.0435	0.8032		3,526.2398	3,526.2398	0.1686		3,530.4550

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Racquet Club	337.39	337.39	337.39	573,890	518,324
Single Family Housing	19.14	19.14	19.14	44,206	39,926
Strip Mall	465.86	465.86	465.86	717,435	647,972
Total	822.39	822.39	822.39	1,335,531	1,206,222

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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Racquet Club	9.50	7.30	7.30	11.50	69.50	19.00	52	39	9
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Racquet Club	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Single Family Housing	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837
Strip Mall	0.570523	0.041853	0.194077	0.115893	0.018544	0.005373	0.016909	0.024079	0.002502	0.002562	0.005975	0.000872	0.000837

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable 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	7.7500e-003	0.0688	0.0473	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003		84.5150	84.5150	1.6200e-003	1.5500e-003	85.0172
NaturalGas Unmitigated	8.0800e-003	0.0718	0.0492	4.4000e-004		5.5900e-003	5.5900e-003		5.5900e-003	5.5900e-003		88.1912	88.1912	1.6900e-003	1.6200e-003	88.7153

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					
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
Racquet Club	321.77	3.4700e-003	0.0316	0.0265	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003		37.8553	37.8553	7.3000e-004	6.9000e-004	38.0802
Single Family Housing	289.749	3.1200e-003	0.0267	0.0114	1.7000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		34.0882	34.0882	6.5000e-004	6.2000e-004	34.2907
Strip Mall	138.106	1.4900e-003	0.0135	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003		16.2478	16.2478	3.1000e-004	3.0000e-004	16.3444
Total		**8.0800e-003**	**0.0718**	**0.0492**	**4.4000e-004**		**5.5900e-003**	**5.5900e-003**		**5.5900e-003**	**5.5900e-003**		**88.1912**	**88.1912**	**1.6900e-003**	**1.6100e-003**	**88.7153**

5.2 Energy by Land Use - NaturalGas

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					
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
Racquet Club	0.310152	3.3400e-003	0.0304	0.0255	1.8000e-004		2.3100e-003	2.3100e-003		2.3100e-003	2.3100e-003		36.4885	36.4885	7.0000e-004	6.7000e-004	36.7053
Single Family Housing	0.275978	2.9800e-003	0.0254	0.0108	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003		32.4680	32.4680	6.2000e-004	6.0000e-004	32.6610
Strip Mall	0.132247	1.4300e-003	0.0130	0.0109	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.5585	15.5585	3.0000e-004	2.9000e-004	15.6510
Total		**7.7500e-003**	**0.0688**	**0.0473**	**4.2000e-004**		**5.3600e-003**	**5.3600e-003**		**5.3600e-003**	**5.3600e-003**		**84.5150**	**84.5150**	**1.6200e-003**	**1.5600e-003**	**85.0172**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368
Unmitigated	2.5528	0.0419	2.8490	5.0600e-003		0.3800	0.3800		0.3800	0.3800	40.7567	12.6556	53.4123	0.0507	2.8800e-003	55.5368

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0726	0.0399	2.6806	5.0500e-003		0.3791	0.3791		0.3791	0.3791	40.7567	12.3529	53.1096	0.0504	2.8800e-003	55.2265
Landscaping	5.3200e-003	1.9400e-003	0.1684	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		0.3026	0.3026	3.1000e-004		0.3103
Total	**2.5528**	**0.0419**	**2.8490**	**5.0600e-003**		**0.3800**	**0.3800**		**0.3800**	**0.3800**	**40.7567**	**12.6556**	**53.4123**	**0.0507**	**2.8800e-003**	**55.5368**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0597					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4152					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0726	0.0399	2.6806	5.0500e-003		0.3791	0.3791		0.3791	0.3791	40.7567	12.3529	53.1096	0.0504	2.8800e-003	55.2265
Landscaping	5.3200e-003	1.9400e-003	0.1684	1.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		0.3026	0.3026	3.1000e-004		0.3103
Total	**2.5528**	**0.0419**	**2.8490**	**5.0600e-003**		**0.3800**	**0.3800**		**0.3800**	**0.3800**	**40.7567**	**12.6556**	**53.4123**	**0.0507**	**2.8800e-003**	**55.5368**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

505 San Pedro Avenue Project (unmitigated)

Bay Area AQMD 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

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	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	2	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	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	5.49400E-002	3.74130E-001	3.61990E-001	5.80000E-004	2.70800E-002	2.70800E-002	0.00000E+000	5.00438E+001	5.00438E+001	4.45000E-003	0.00000E+000	5.01552E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	2.86000E-003	2.15300E-002	2.04800E-002	3.00000E-005	1.47000E-003	1.47000E-003	0.00000E+000	2.95711E+000	2.95711E+000	2.30000E-004	0.00000E+000	2.96283E+000
Cranes	5.23800E-002	6.25100E-001	2.34960E-001	5.70000E-004	2.67700E-002	2.46300E-002	0.00000E+000	5.11641E+001	5.11641E+001	1.60700E-002	0.00000E+000	5.15658E+001
Forklifts	4.94700E-002	4.39550E-001	3.53380E-001	4.50000E-004	3.45400E-002	3.17800E-002	0.00000E+000	4.06595E+001	4.06595E+001	1.27700E-002	0.00000E+000	4.09787E+001
Graders	5.20000E-004	7.13000E-003	1.91000E-003	1.00000E-005	2.30000E-004	2.10000E-004	0.00000E+000	6.07760E-001	6.07760E-001	1.90000E-004	0.00000E+000	6.12490E-001
Pavers	7.10000E-004	7.89000E-003	6.40000E-003	1.00000E-005	3.90000E-004	3.50000E-004	0.00000E+000	9.38920E-001	9.38920E-001	2.90000E-004	0.00000E+000	9.46220E-001
Rollers	5.60000E-004	5.45000E-003	4.23000E-003	1.00000E-005	3.80000E-004	3.50000E-004	0.00000E+000	5.23710E-001	5.23710E-001	1.60000E-004	0.00000E+000	5.27790E-001
Rubber Tired Dozers	8.00000E-004	8.63000E-003	3.01000E-003	1.00000E-005	4.20000E-004	3.90000E-004	0.00000E+000	5.36480E-001	5.36480E-001	1.70000E-004	0.00000E+000	5.40660E-001
Tractors/Loaders/Backhoes	1.00260E-001	9.98660E-001	9.35470E-001	1.25000E-003	6.87200E-002	6.32200E-002	0.00000E+000	1.13462E+002	1.13462E+002	3.56200E-002	0.00000E+000	1.14353E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	5.49400E-002	3.74130E-001	3.61990E-001	5.80000E-004	2.70800E-002	2.70800E-002	0.00000E+000	5.00438E+001	5.00438E+001	4.45000E-003	0.00000E+000	5.01551E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	2.86000E-003	2.15300E-002	2.04800E-002	3.00000E-005	1.47000E-003	1.47000E-003	0.00000E+000	2.95711E+000	2.95711E+000	2.30000E-004	0.00000E+000	2.96283E+000
Cranes	5.23800E-002	6.25100E-001	2.34960E-001	5.70000E-004	2.67700E-002	2.46300E-002	0.00000E+000	5.11640E+001	5.11640E+001	1.60700E-002	0.00000E+000	5.15657E+001
Forklifts	4.94700E-002	4.39550E-001	3.53380E-001	4.50000E-004	3.45400E-002	3.17800E-002	0.00000E+000	4.06594E+001	4.06594E+001	1.27700E-002	0.00000E+000	4.09787E+001
Graders	5.20000E-004	7.13000E-003	1.91000E-003	1.00000E-005	2.30000E-004	2.10000E-004	0.00000E+000	6.07750E-001	6.07750E-001	1.90000E-004	0.00000E+000	6.12480E-001
Pavers	7.10000E-004	7.89000E-003	6.40000E-003	1.00000E-005	3.90000E-004	3.50000E-004	0.00000E+000	9.38920E-001	9.38920E-001	2.90000E-004	0.00000E+000	9.46220E-001
Rollers	5.60000E-004	5.45000E-003	4.23000E-003	1.00000E-005	3.80000E-004	3.50000E-004	0.00000E+000	5.23710E-001	5.23710E-001	1.60000E-004	0.00000E+000	5.27790E-001
Rubber Tired Dozers	8.00000E-004	8.63000E-003	3.01000E-003	1.00000E-005	4.20000E-004	3.90000E-004	0.00000E+000	5.36480E-001	5.36480E-001	1.70000E-004	0.00000E+000	5.40660E-001
Tractors/Loaders/Backhoes	1.00260E-001	9.98660E-001	9.35470E-001	1.25000E-003	6.87200E-002	6.32200E-002	0.00000E+000	1.13462E+002	1.13462E+002	3.56200E-002	0.00000E+000	1.14353E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19895E-006	1.19895E-006	0.00000E+000	0.00000E+000	1.19629E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17270E-006	1.17270E-006	0.00000E+000	0.00000E+000	1.16356E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22973E-006	1.22973E-006	0.00000E+000	0.00000E+000	1.22015E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.64539E-005	1.64539E-005	0.00000E+000	0.00000E+000	1.63268E-005
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23389E-006	1.23389E-006	0.00000E+000	0.00000E+000	1.22428E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	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
Architectural Coating	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	0.02	0.01	0.02	0.01	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

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
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	2.74	4.91	6.18	8.72	8.40	8.41	0.00	8.76	8.76	5.92	0.00	8.76
Natural Gas	4.08	4.12	4.00	0.00	3.92	3.92	0.00	4.17	4.17	3.57	0.00	4.17
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
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.27	0.59		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.08	0.50		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.08			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
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	0.10			
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			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.10			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	5.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	100.00

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	

505 San Pedro Avenue Project (unmitigated)

Bay Area AQMD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	9.66	1000sqft	0.22	9,665.00	0
Racquet Club	4.73	1000sqft	0.11	4,730.00	0
Single Family Housing	2.00	Dwelling Unit	0.40	3,600.00	6
Strip Mall	10.91	1000sqft	0.13	10,911.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	409.81	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions.

Land Use - *Applicant provided

Construction Phase - *Applicant provided

Grading - *applicant provided

Vehicle Trips - *Based on trip generation rates provided by Abrams Associates

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation -

Demolition - *Applicant provided

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

505 San Pedro Avenue Project (unmitigated) - Bay Area AQMD Air District, Summary Report

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2018	Site Preparation	0.8178 W	10.1052 W	4.4796 S	0.0110 S	0.9353 W	0.4512 W	0.8178 W	10.1052 W	4.4796 S	0.0110 S	0.9353 W	0.4512 W
2018	Demolition	1.1771 W	11.7813 W	8.5566 W	0.0186 S	2.3135 W	0.8825 W	1.1771 W	11.7813 W	8.5566 W	0.0186 S	2.3135 W	0.8825 W
2018	Grading	1.1088 W	9.4632 W	8.1113 S	0.0129 S	1.4582 S	1.0304 S	1.1088 W	9.4632 W	8.1113 S	0.0129 S	1.4582 S	1.0304 S
2018	Building Construction	1.1510 W	11.6012 W	8.2221 W	0.0134 S	0.8226 W	0.6861 W	1.1510 W	11.6012 W	8.2221 W	0.0134 S	0.8226 W	0.6861 W
2019	Building Construction	1.0172 W	10.3565 W	7.9640 W	0.0133 S	0.7187 W	0.5904 W	1.0172 W	10.3565 W	7.9640 W	0.0133 S	0.7187 W	0.5904 W
2018	Paving	1.1157 W	8.8053 W	7.8271 S	0.0128 S	0.6598 S	0.5136 S	1.1157 W	8.8053 W	7.8271 S	0.0128 S	0.6598 S	0.5136 S
2018	Architectural Coating	0.8633 W	2.0125 W	1.9212 S	3.1500e-003 S	0.1671 S	0.1550 S	0.8633 W	2.0125 W	1.9212 S	3.1500e-003 S	0.1671 S	0.1550 S
2019	Architectural Coating	0.8302 W	1.8413 W	1.9010 S	3.1400e-003 S	0.1453 S	0.1332 S	0.8302 W	1.8413 W	1.9010 S	3.1400e-003 S	0.1453 S	0.1332 S
	Peak Daily Total	1.1771 W	11.7813 W	8.5566 W	0.0186 S	2.3135 W	1.0304 S	1.1771 W	11.7813 W	8.5566 W	0.0186 S	2.3135 W	1.0304 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	2.5528 S	0.0419 S	2.8490 S	5.0600e-003 S	0.3800 S	0.3800 S	2.5528 S	0.0419 S	2.8490 S	5.0600e-003 S	0.3800 S	0.3800 S
On-Site	Energy	8.0800e-003 S	0.0718 S	0.0492 S	4.4000e-004 S	5.5900e-003 S	5.5900e-003 S	7.7500e-003 S	0.0688 S	0.0473 S	4.2000e-004 S	5.3500e-003 S	5.3500e-003 S
Off-Site	Mobile	1.4836 S	5.7166 W	13.6368 W	0.0374 S	2.8846 W	0.8032 W	1.4475 S	5.4298 W	12.8397 W	0.0341 S	2.6059 W	0.7260 W
	Peak Daily Total	4.0445 S	5.8302 W	16.5351 W	0.0429 S	3.2702 W	1.1887 W	4.0081 S	5.5405 W	15.7360 W	0.0396 S	2.9912 W	1.1113 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2018	142.2827	0.0339	0.0000	143.1311	142.2825	0.0339	0.0000	143.1309
Construction	2019	157.8512	0.0377	0.0000	158.7949	157.8510	0.0377	0.0000	158.7947
Operational	2019	646.7979	0.5610	1.7327e-003	661.3385	561.4043	0.5570	1.2338e-003	575.6975
	Total								
	Significance Threshold								
	Exceed Significance?								