Pantoja Trucking Project

Draft Initial Study – Mitigated Negative Declaration

prepared by

City of Oxnard
Community Development Department
214 South C Street
Oxnard, California 93030
Contact: Jay Dobrowalski, Planning Supervisor

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

March 2025

RINCON CONSULTANTS, INC. SINCE 1994

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Initial Study

1. Project Title

Pantoja Trucking Project

2. Lead Agency Name and Address

City of Oxnard
214 South C Street
Oxnard, California 93030

3. Contact Person and Phone Number

Jay Dobrowalski, Planning Supervisor
Community Development Department
(805) 385-3948

4. Project Location

The project site is located at 210 and 320 East Hueneme Road in the City of Oxnard, Ventura County. The project site encompasses approximately 4.76 acres (207,346 square feet) and includes Assessor Parcel Numbers (APNs) 231-0-092-260, 231-0-092-270, and 231-0-092-280. Figure 1 shows the location of the site in the region and Figure 2 shows the project site in its neighborhood context.

5. Project Sponsor's Name and Address

Pantoja Truckline, Inc.
320 East Hueneme Road
Oxnard, California 93003

6. General Plan Designation

Light Industrial (ILT)

7. Zoning

Light Manufacturing Planned Development (M-1-PD)

Figure 1 Regional Location

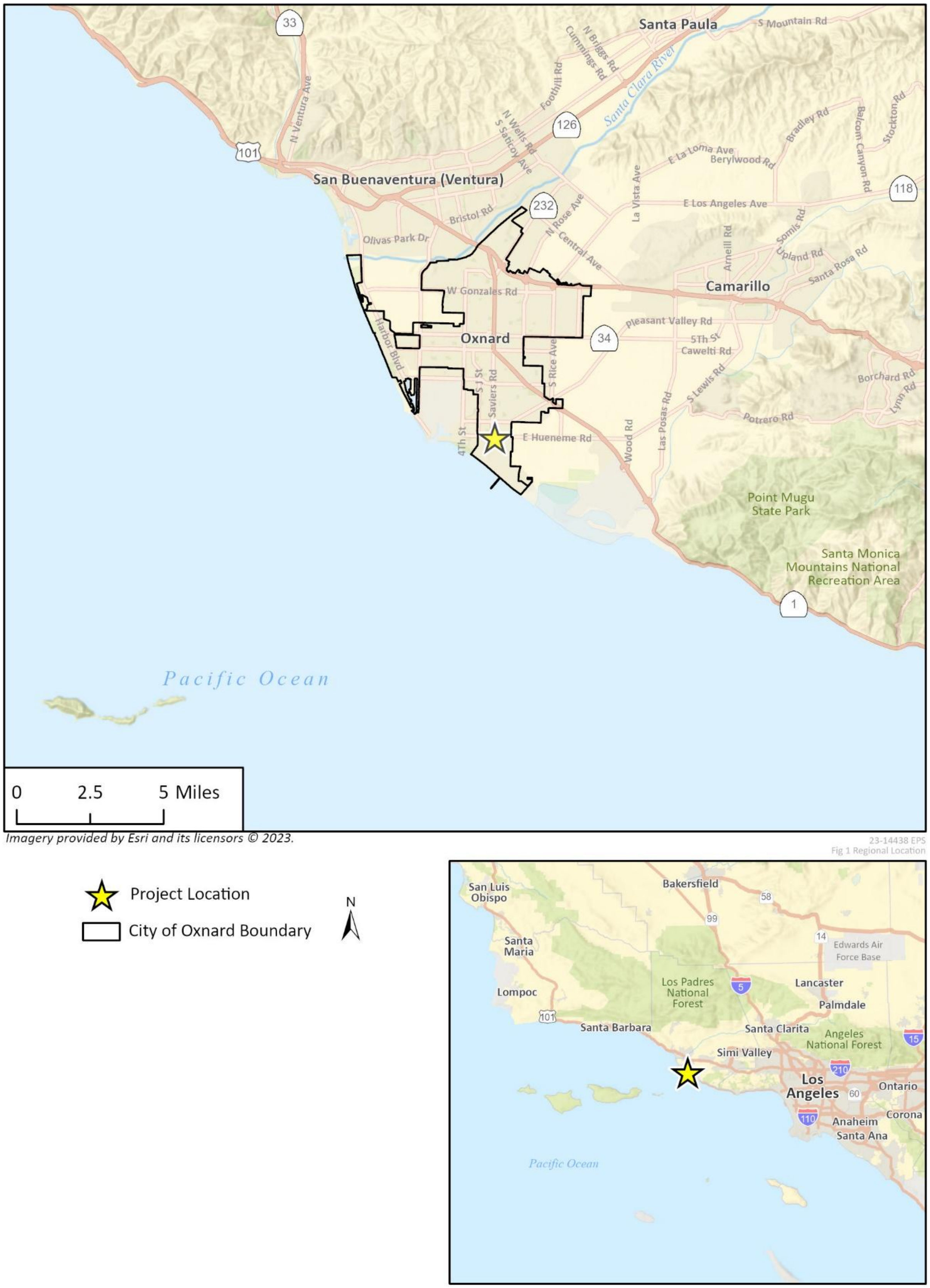
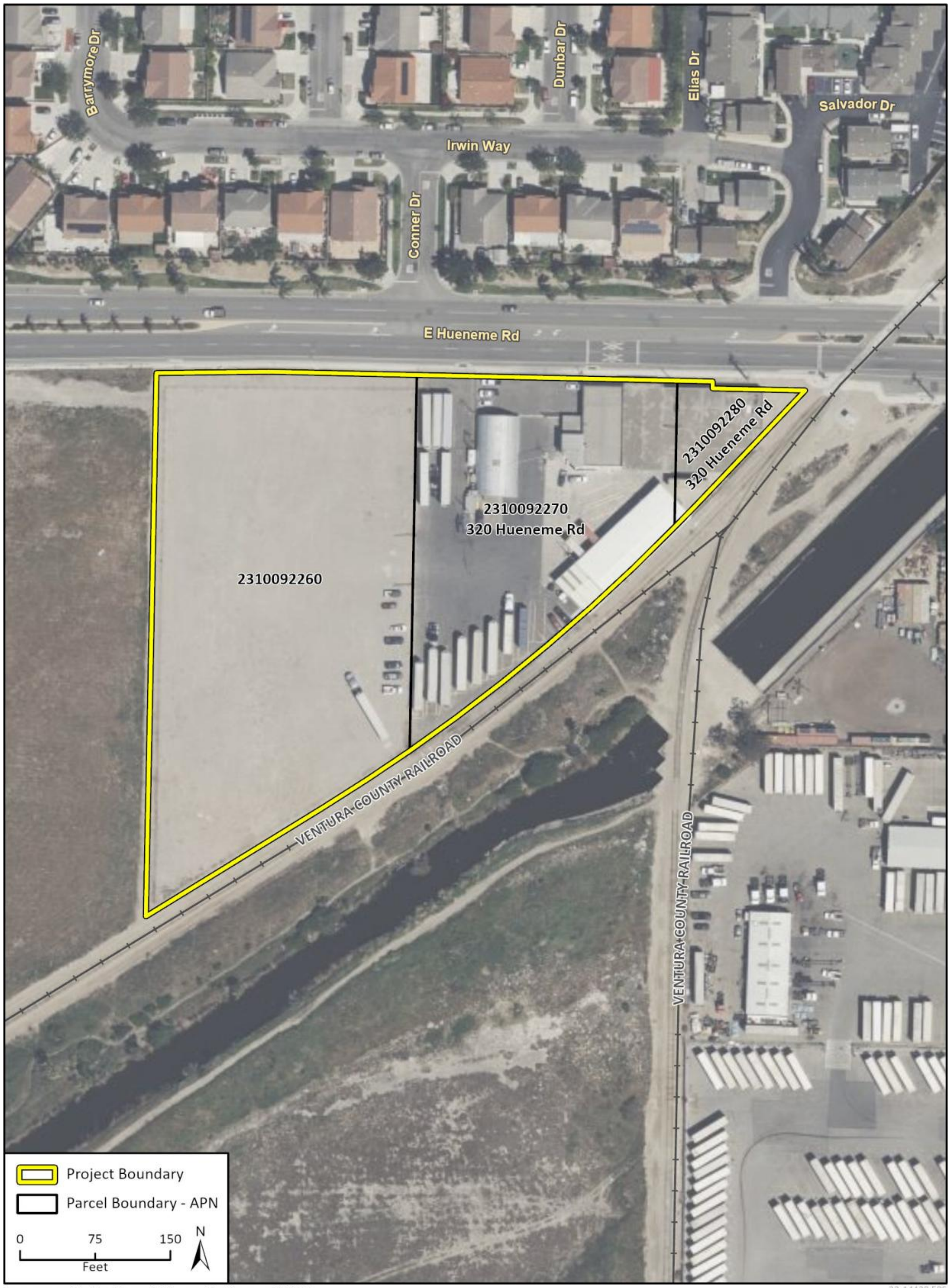


Figure 2 Project Location



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23-14438 EPS
Fig 2 Project Location

8. Description of Project

The proposed project includes the permitting of un-permitted development (both existing and proposed) on a property on East Hueneme Road with Assessor's Parcel Number (APN) 231-0-092-260, as well as an increase in the applicant's use of the project site. The proposed project would involve construction of an approximately 0.77-acre parking area for trucks, removal of a perimeter chain link fence, and construction of a perimeter wrought iron fence with landscaping, a detention basin (with a vegetated bioswale) to retain on-site drainage flows, and restoration of a portion of this parcel back to vacant undeveloped land. As shown on Figure 3, approximately 28,742 square feet (sf) of landscaping would be installed around the northern and western sides of the project site and along the southeastern side of the parcel within APN 231-0-092-260, but with no additional landscaping proposed for the remainder of the southeastern side of the project site. Three existing industrial buildings totaling 24,313 square-feet, as well as accessory structures with truck parking areas, are present on the two other parcels that make up the project site: APNs 231-0-092-270 and 231-0-092-280, both of which are addressed as 320 East Hueneme Road. No changes to these three buildings or accessory structures are proposed as part of the project. The parcel with APN 231-0-092-260 is currently unaddressed (according to Assessor's records) but would have an address of 210 East Hueneme Road once developed.

The project site has historically operated as a truck and freight transportation storage yard, and the applicant (Pantoja Trucking) intends to continue operating the site as such. The applicant is not proposing to add any buildings to the site. The applicant proposes to reuse the approximately 80 cubic yards of gravel that is currently being used as a parking surface on the westernmost parcel of the project site (APN 231-0-092-260) as road base to pave 0.77-acres of additional parking on this parcel with a chip seal paving. After construction, this parcel will be fenced for security with 8-foot wrought iron fence and gates, screened with landscaping, and utilized as truck overflow parking for trucks that are used to haul freight for the Pantoja Trucking Company. The Pantoja Trucking Company hauls frozen products (such as shrimp and fish) received in containers from the Port of Hueneme, either directly to customers or to the project site. Product stored on the project site is then shipped to customers throughout California during the next several days. The closest vehicular entry point to the Port of Hueneme is at the western terminus of the public portion of Hueneme Road just west of its intersection with Market Street approximately 1.4 miles west of the project site in the City of Port Hueneme. The assumed route for truck traffic between the project site and the Port of Hueneme is therefore entirely along Hueneme Road. The applicant proposes to construct a new vehicular entry point to the project site (referred to as the western entry gate) directly south of the intersection of East Hueneme Road and Conner Drive. The western entry gate would replace the current vehicular entry point, which is a driveway located approximately 125 feet east of the intersection of East Hueneme Road and Conner Drive (from the centerline of each roadway). The applicant also proposes to construct a vegetated bioswale with a 3-foot by 3-foot catch basin and stormwater detention basin near the southern end of the project site to retain stormwater flows on the site and prevent polluted runoff. The proposed improvements described above are shown on the proposed site plan shown on Figure 4.

The applicant proposes to continue to perform the same services at this site necessary to continue transporting product in containers between the Port of Hueneme and various other businesses in California. The applicant engages subhaulers as necessary to provide freight and transportation services during their operation, and anticipates an increase in truck trips and a slight increase in the number of employees. Table 1 presents relevant information about Pantoja Trucking's current and proposed operations at the project site, including hours of operation and typical numbers of daily employees and customers using the project site.

Table 1 Current and Proposed Operations

	Current	Proposed
Office		
Hours of Operation	8am - 5pm	8am - 5pm
Number of Employees	4	4
Number of Customers on an Average Day	1	1
Peak Daily Vehicle Trips	20	20
Peak Hourly Vehicle Trips	5 7:30am-8:30am	5 7:30am-8:30am
Trucking		
Hours of Operation	7 am to 5 pm	7 am to 5 pm
Number of Employees	6	11
Peak Daily Truck Trips	24 Includes Port to Customer	72 Includes Port to Customer
Peak Hourly Truck Trips (Thursday)	12 7:30 am - 8:30 am	12 7:30 am - 8:30 am

The business currently employs six truck drivers and four full-time employees providing office support services to the transportation and freight business. The support services include accounting, scheduling, and human resources. The proposed hours of truck operation would be 7:00 a.m. to 5:00 p.m., and the office staff hours of operation would be 8 a.m. to 5 p.m. The PM peak traffic hour (defined as one peak hour between 4:00 p.m. and 6:00 p.m.) trips consist of employee trips home at the end of the day with no truck trips occurring at that time.

Peak daily truck trips would increase from 24 per day to 72 per day. Office (support personnel) trips would remain the same, at 5 peak hour trips per day and 20 peak daily trips. Currently, the peak hourly truck trip traffic for on-site business operation is 12 trips between 7:30 a.m. to 8:30 a.m. on Thursdays but this depends on when the containers are ready for pickup at the port. The support personnel peak hourly trips consist of five trips from 7:30 a.m. to 8:30 a.m. on Monday through Friday.

The standard operation of the trucking business consists of truck driver employees driving to the Pantoja site, picking up the delivery trucks at the Pantoja site, parking their personal vehicles in the spaces that their trucks occupy when not in use, driving to the port, hooking up cargo containers on chassis at the port, delivering between 10-20% of these containers directly to businesses in California and the remainder to Pantoja's yard to be stored and delivered to customers statewide over the next several days, then driving their personal vehicles home at the end of the day. The containers remain on the same chassis from port to customer, with no transfer of the containers to different chassis in the Pantoja yard. Truck traffic on non-peak days averages approximately 10 in/out a day and consists of trucks hooking up the chassis with containers in Pantoja's yard and delivering to customers statewide then returning to Pantoja's yard, usually the following day. The proposed western entry gate would be open during hours of operation and monitored by security cameras.

The project is anticipated to be built over a period of approximately 6 months. Construction would occur in six phases – demolition, site preparation, grading, construction of proposed improvements[1], paving, and architectural coating.

9. Surrounding Land Uses and Setting

The project site is in a semi-urban area characterized by a mix of industrial and residential development and vacant land. Immediately surrounding uses consist of the following: to the west is a property that was recently developed[2] as a vehicle storage yard; to the southeast are railroad tracks, industrial warehouses, and vacant land; and to the north are East Hueneme Road and a residential community. A portion of the Ormond Lagoon Waterway is also southeast of the project site, beyond the railroad tracks that immediately border the project site. As shown on Figure 2, this water feature is contained in a concrete channel from East Hueneme Road southwest (downstream) to an at-grade concrete bridge over the channel, but southwest of this bridge it has earthen banks. Water in the Ormond Lagoon Waterway flows to the Pacific Ocean at Ormond Beach, approximately 0.71 miles south of the project site.

10. Required Approvals

The following entitlement is required for development of the proposed project:

- Special Use Permit to allow for the development of a freight classification yard on APNs 231-0-092-260, 231-0-092-270, and 231-0-092-280.

11. Other Public Agencies Whose Approval is Required

The City of Oxnard is the lead agency with responsibility for approving the proposed project. Approval from other public agencies is not anticipated.

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

Yes. Pursuant to Public Resources Code Section 21080.3.1, which was added to the CEQA statute as a result of enacting Assembly Bill (AB) 52, the City sent letters (via certified mail) to the following Native American tribes on October 5, 2023.

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Gabrieliño/Tongva San Gabriel Band of Mission Indians

[1] Normally this phase would be referred to as "building construction" but there are no new buildings included in the proposed project.
[2] This land use is not shown on any aerial photography of the site that was available to Rincon Consultants at the time of production of this IS-MND, apparently because it was only recently developed.

- Gabrieliño/Tongva Nation
- Gabrieliño-Tongva Tribe
- Northern Chumash Tribal Council
- Santa Ynez Band of Chumash Indians

The City requested a response within 30 days of receipt as specified by AB 52. The City received no consultation requests. AB 52 consultation concluded on November 5, 2023.

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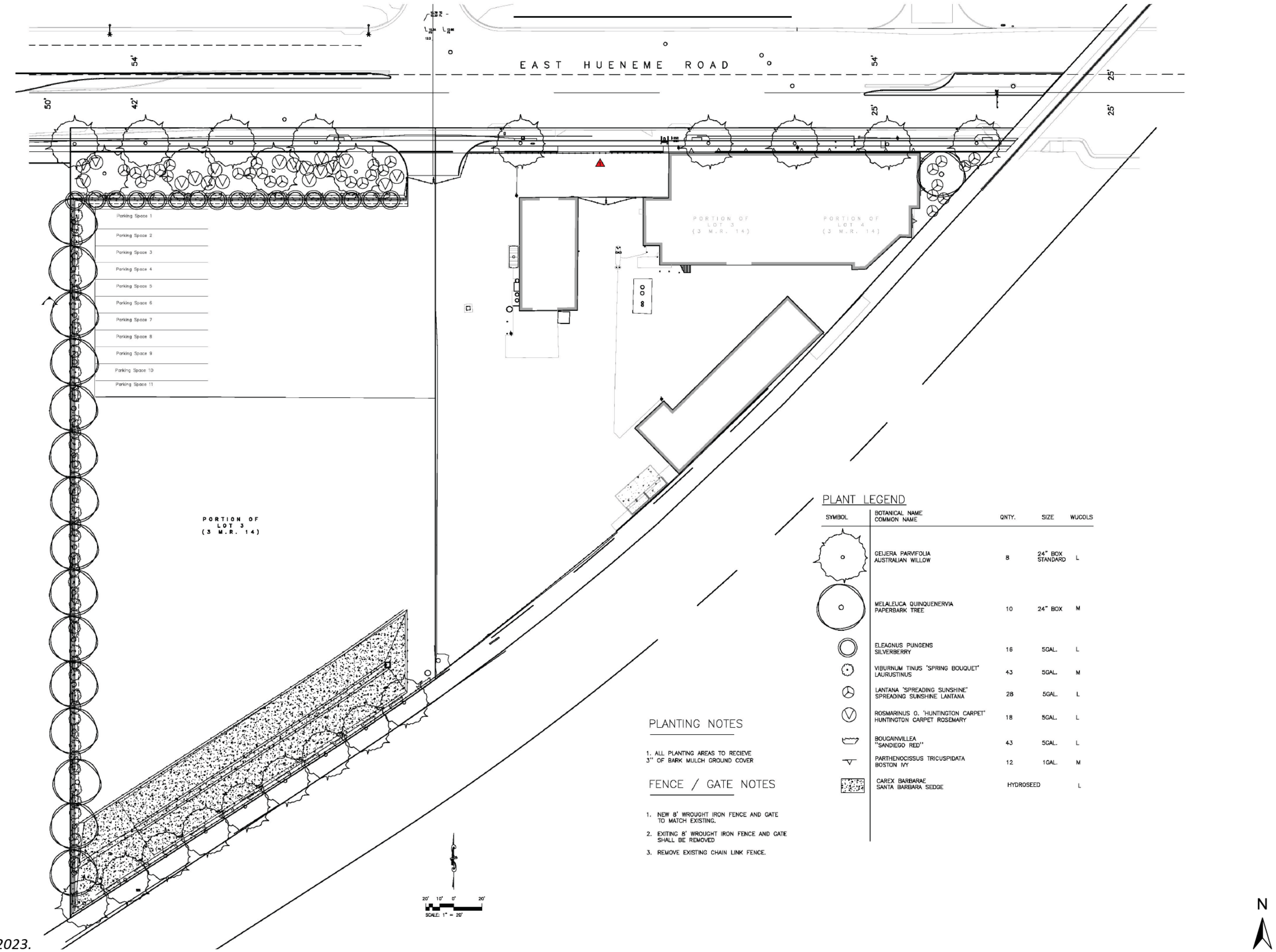
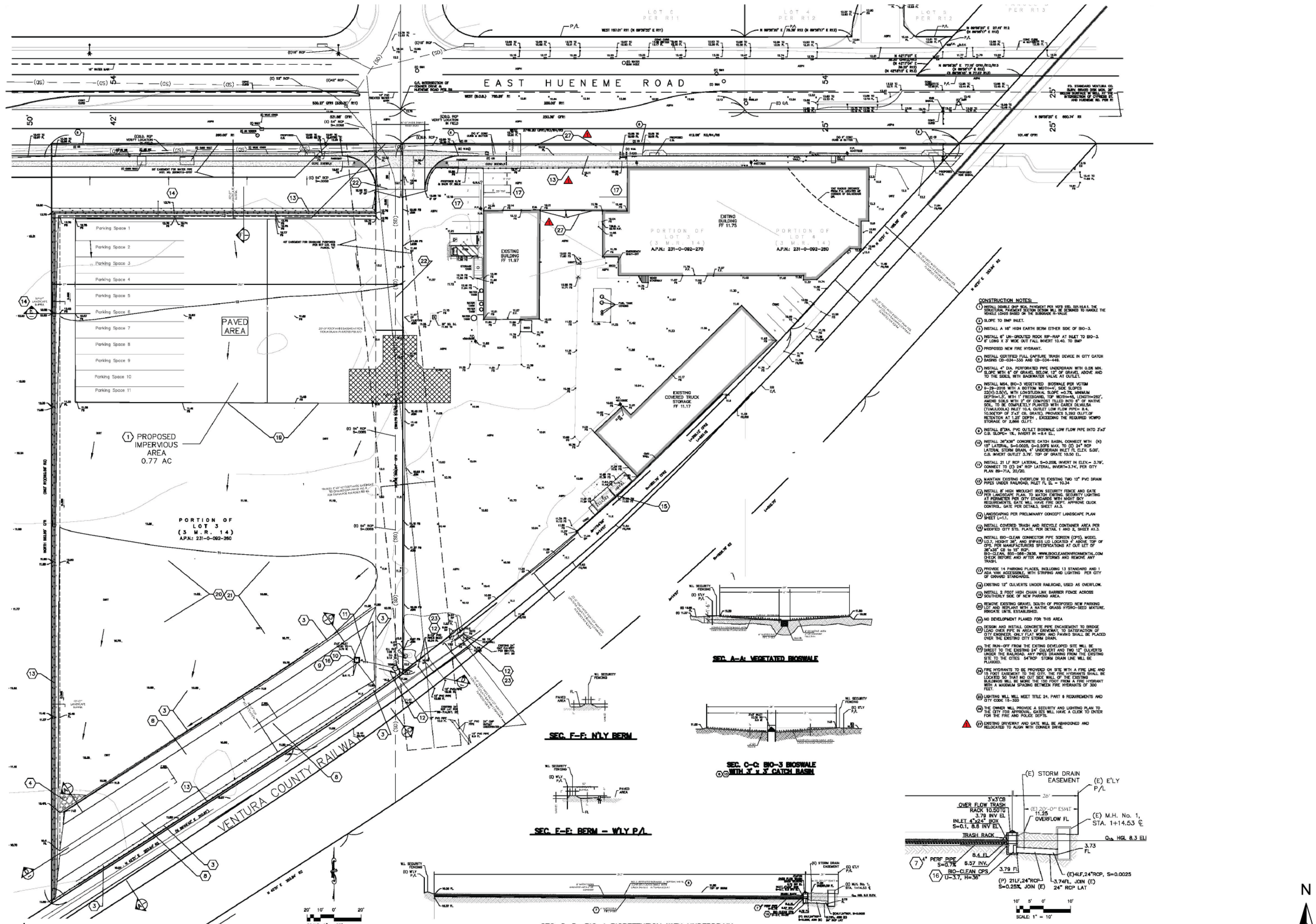
Figure 3 Landscape Plan



Source: R.W.C. LLC, March 20, 2023.

Figure 4 Site Plan



Source: R.W.C. LLC, March 22, 2023.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

☐	Aesthetics and Urban Design	☐	Agricultural Resources	☐	Air Quality
■	Biological Resources	☐	Climate Change and Greenhouse Gas Emissions	■	Cultural Resources
☐	Energy	☐	Geology and Soils	☐	Hazards and Hazardous Materials
☐	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
■	Noise	☐	Population, Education, and Housing	☐	Public Services and Recreation
☐	Transportation and Circulation	☐	Tribal Cultural Resources	☐	Utilities and Service Systems
☐	Wildfire	■	Mandatory Findings of Significance		

Determination

Based on this initial evaluation:

☐ 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	3/21/2025 Date
Joe Pearson II Printed Name	Planning Manager Title

Environmental Checklist

1 Aesthetics and Urban Design

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista such as an ocean or mountain view from an important view corridor or location as identified in the 2030 General Plan or other City Planning documents?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, or route identified as scenic by the County of Ventura or City of Oxnard?	☐	☐	■	☐
c. Substantially degrade the existing visual character or quality of the site or its surroundings such as by creating new development or other physical changes that are visually incompatible with surrounding areas or that conflict with visual resource policies contained in the 2030 General Plan or other City planning documents?	☐	☐	☐	■
d. Add to or compound an existing negative visual character associated with the project site?	☐	☐	☐	■
e. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	■	☐

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. *Would the project have a substantial adverse effect on a scenic vista such as an ocean or mountain view from an important view corridor or location as identified in the 2030 General Plan or other City Planning documents?*

The project site is located approximately one mile northeast of the Ormond Beach coastline and approximately six miles northwest of the nearest mountains (the Santa Monica Mountains). No new buildings are being proposed as part of the proposed project; therefore, the proposed project would not substantially alter any existing views of the Ormond Beach coastline or nearest mountains. In addition, the City's 2030 General Plan Background Report identifies the project site as being located outside of key aesthetic areas, such as public and conservation lands and agricultural greenbelts (City of Oxnard 2006). Accordingly, the proposed project would have no impact on scenic vistas.

NO IMPACT

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, or route identified as scenic by the County of Ventura or City of Oxnard?*

The project site is on Hueneme Road, which is designated as a Scenic Roadway by the City of Oxnard (City of Oxnard 2024). The project site is located approximately 0.5 miles south of Pleasant Valley Road, the next-nearest City-designated Scenic Roadway. The nearest state scenic highway is Highway 1, which is located approximately 2.3 miles northeast of the project site. Highway 1 is also designated as a Scenic Roadway by the City (City of Oxnard 2024). The project site is not visible from Pleasant Valley Road or Highway 1 due to the distance between these two roadways and the project site, and because of intervening obstructions such as buildings and trees.

There are no scenic resources (such as trees, rock outcroppings, or historic buildings) visible from any of the scenic roadways discussed above that the proposed project would remove or damage. While the proposed project would add development along a City-designated scenic roadway, landscaping will be provided to screen the newly developed parking area from this roadway, minimizing any impacts to the visual corridor. As discussed in Section 6, *Cultural Resources* , the project site does not include any built environment resources which could be considered historic, and the proposed project would not substantially damage any historic buildings. Therefore, the proposed project would have a less than significant impact on scenic resources within a state scenic highway or route identified as scenic by the County of Ventura or the City of Oxnard.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project substantially degrade the existing visual character or quality of the site or its surroundings such as by creating new development or other physical changes that are visually incompatible with surrounding areas or that conflict with visual resource policies contained in the 2030 General Plan or other City planning documents?*

The project site is in a semi-urban area and is characterized by a mix of industrial and residential development. Immediately surrounding uses consist of the following: to the west is a vehicle storage yard; to the southeast are railroad tracks, industrial warehouses, and vacant land; and to the north are East Hueneme Road and a residential community. The project site has historically operated as a truck and freight transportation storage yard, and after development of the proposed project it would continue operating as such. The proposed project does not include development of any buildings on the site.

The City's 2030 General Plan Policy ER-6.1 requires the following:

> Preserve important public views and viewsheds by ensuring that the scale, bulk and setback of new development does not significantly impede or disrupt them and ensure that important vistas and view corridors are enhanced. Require development to provide physical breaks to allow views into these vistas and view corridors. (City of Oxnard 2011).

The proposed project would not substantially alter public views because there are no scenic vistas within the vicinity of the project site (see also impact discussion 1(b)). Therefore, the proposed project would be consistent with Policy ER-6.1. The City's 2030 General Plan Policy ER-6.3 requires the preservation of significant small-scale aesthetic resources, such as plant communities (City of Oxnard 2011).

The proposed project would add approximately 28,742 sf of landscaping around the northern, western, and southeastern sides of the project site. The project site currently contains no vegetation aside from weeds; the addition of landscaping would enhance the project site. Therefore, the proposed project would not substantially degrade the existing visual character or quality of the site or its surroundings such as by creating new development or other physical changes that are visually incompatible with surrounding areas or that conflict with visual resources policies contained in the 2030 General Plan or other City planning documents. No impact related to visual character and quality would occur.

NO IMPACT

d. Would the project add to or compound an existing negative visual character associated with the project site?

The proposed project would make no changes to the project site's three existing buildings or accessory structures. The proposed project would involve paving an existing vacant lot and adding landscaping on the project site. As a result, the proposed project would introduce features which would add positive visual character to existing vacant land. As discussed under Section 1(a), 1(b), and 1(c), the proposed project would not substantially impair views, damage scenic resources, or degrade the existing visual character of the project site. Therefore, the proposed project would not add to or compound an existing negative visual character, and there would be no impact related to adding or compounding an existing negative visual character associated with the project site.

NO IMPACT

e. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

According to the applicant, construction would occur between the hours of 7:00 a.m. and 4:00 p.m. on weekdays and Saturdays, consistent with the permitted hours of construction of 7:00 a.m. to 6:00 p.m. on weekdays and Saturdays pursuant to Section 7-188(D) of the City's Municipal Code. No nighttime construction is proposed. Daytime construction would not require the use of temporary flood lights or other light/glare generating sources. As a result, construction activities would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The hours of truck operation would range from 7:00 a.m. to 5:00 p.m., and the hours of office staff operation would range from 8:00 a.m. to 5:00 p.m. Currently the peak hourly truck trip traffic for on-site business operation is 12 trips between 7:30 a.m. to 8:30 a.m. on Thursdays. Lighting would be required to be compliant with California Building Code (CBC) Title 24 standards and Section 16-320 of the City's Municipal Code. The City's Municipal Code prohibits lighting from illuminating surfaces not required to be lit and prohibits lighting from constituting a hazard to vehicular traffic, either on private property or on abutting streets (City of Oxnard 2022a). In addition, the proposed lighting would be required to comply with 2030 General Plan Policy ER-6.5 which requires all outdoor light fixtures including street lighting and externally illuminated signs to use low-energy shielded light fixtures which direct light downward and, where public safety would not be compromised, encourages the use of low-pressure sodium lighting for all outdoor light fixtures (City of Oxnard 2011). The applicant is required to submit an integrated lighting and landscape plan to demonstrate that the proposed project is consistent with the City's Zoning Code. At the time of building permit issuance, City staff would verify that the proposed lighting is consistent with the Zoning Code requirements. Therefore, operation of the proposed project would have a less-than-significant impact related to light and glare.

LESS THAN SIGNIFICANT IMPACT

2 Agricultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	□	□	□	■
b. Conflict with existing zoning for agricultural use or an existing Williamson Act contract?	□	□	□	■
c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of off-site farmland to non-agricultural use?	□	□	□	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use or an existing Williamson Act contract?

The project site is zoned M-1-PD (Light Manufacturing Planned Development). While agricultural use is permitted on land zoned as Light Manufacturing, the eastern part of the project site (APNs 231-0-092-270 and 231-0-092-280, shown on Figure 2) is currently occupied by three existing industrial buildings, as well as accessory structures with truck parking areas, and is not used for agriculture. The westernmost parcel of land that makes up the project site is also not used for agriculture but is instead a gravel lot used by the applicant for parking vehicles, as shown in the aerial photo on Figure 2. Before being developed into a gravel lot by the applicant, the westernmost parcel of land was a disked dirt field not used for agriculture. The project site is located on Urban and Built-Up Land, as defined in the California Department of Conservation's (DOC) California Important Farmland Finder (DOC 2018). In addition, the project site is not under an existing Williamson Act contract (DOC 2022). Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use or conflict with an existing Williamson Act contract, and therefore no impact to these resources would occur.

NO IMPACT

c. *Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of off-site farmland to non-agricultural use?*

The DOC identifies Farmland of Local Importance directly west of the project site (DOC 2018). However, the City of Oxnard General Plan Background Report identifies the surrounding land as Urban (City of Oxnard 2006), and the site directly west of the project site is zoned Light Manufacturing Planned Development and was recently developed as a vehicle storage yard. Land north of the project site (across Hueneme Road) is zoned Single-Family Planned Development, Garden Apartment Planned Development, and Limited Manufacturing Planned Development, and land south and southeast of the project site is zoned Coastal Resource Protection and Light Manufacturing. Based on the City's zoning map, site visits, and aerial images on Google Earth, the surrounding lands are not currently used for agriculture and are not planned for agricultural use in the future. The introduction of the proposed project would therefore have no impact related to changes in the existing environment that, due to their location or nature, could result in conversion of off-site farmland to non-agricultural use.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with population or other growth forecasts contained in the Ventura County AQMP or otherwise obstruct implementation of the Ventura County AQMP?	□	□	□	■
b. Violate any federal or state air quality standard or contribute substantially to an existing or projected air quality standard violation?	□	□	■	□
c. Result in a net increase of any criteria pollutant in excess of quantitative thresholds recommended by the VCAPCD?	□	□	■	□
d. Expose sensitive receptors to pollutant concentrations exceeding state or federal standards or in excess of applicable health risk criteria for toxic air contaminants?	□	□	■	□
e. Create objectionable odors affecting a substantial number of people?	□	□	■	□

Overview of Air Pollution

The federal and state Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),[3] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}), 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_X. Secondary

[3] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-MND.

pollutants include oxidants, ozone, sulfate, and nitrate particulates (smog). Air pollutants can be generated by the natural environment, such as when high winds suspend fine dust particles.

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

The human health effects associated with these criteria pollutants, as presented in Table 2, already occur in Ventura County as part of the environmental baseline condition.

Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, and risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures, and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	Reduces oxygen delivery leading to: aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; and possible increased risk to fetuses.
Nitrogen dioxide (NO_2)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO_2)	Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended particulate matter (PM_{10} and $PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma).
Lead	(1) Short-term lead poisoning overexposures can cause anemia, weakness, kidney damage, and brain damage; (2) long-term exposures to lead increases risk for high blood pressure, heart disease, kidney failure, and reduced fertility.

Source: U.S. EPA 2023a

Air Quality Standards and Attainment

The project site is in the South Central Coast Air Basin (SCCAB), in the part of the SCCAB under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). VCAPCD is required to monitor air pollutant levels to ensure the NAAQS and CAAQS are met. If the standards are met, the SCCAB is classified as being in “attainment.” If the standards are not met, the SCCAB is classified as being in “nonattainment” and VCAPCD is required to develop strategies to meet the standards. The attainment status for the Ventura County portion of the SCCAB is included below in Table 3.

Table 3 Attainment Status of Criteria Pollutants in Ventura County portion of SCCAB

Pollutant	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
Particulate matter with diameters of ten microns or less (PM_{10})	Nonattainment	Attainment
Particulate matter with diameters of 2.5 microns or less ($PM_{2.5}$)	Attainment	Nonattainment
Carbon Dioxide (CO)	Attainment	Attainment
Nitrogen dioxide (NO_2)	Attainment	Attainment
Sulfur dioxide (SO_2)	Attainment	Attainment

Sources: CARB 2022, U.S. EPA 2023b

Significance Thresholds

VCAPCD’s Ventura County Air Quality Assessment Guidelines (2003) recommend specific air criteria pollutant emission thresholds for determining whether a project may have a significant adverse impact on air quality within the SCCAB. VCAPCD identifies separate ozone significance thresholds for (1) the Ojai Planning Area, (2) the City of Simi Valley, and (3) the remainder of Ventura County. The proposed project is within the City of Oxnard and would be subject to significant thresholds for “the remainder of Ventura County.”

VCAPCD recommends using a 25 pounds (lbs.) per day significance threshold for ozone precursor emissions (ROG and NO_X) in all areas of Ventura County outside of the Ojai Planning Area and the City of Simi Valley. Exceedance of the thresholds would indicate that a development project could jeopardize the attainment of the ozone standard. Therefore, impacts would be considered significant if the proposed project’s emissions exceed 25 lbs. per day for ozone precursors. VCAPCD Best Management Practices (BMPs) are required if project emissions exceed the ozone precursor thresholds. The VCAPCD guidelines do not include thresholds for CO, SO_2, PM_{10}, or $PM_{2.5}$.

VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. VCAPCD indicates a project generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during grading and excavation activities. The 2003 VCAPCD guidelines require fugitive dust mitigation measures be applied to all dust-generating activities. Such measures include minimizing a project’s disturbance area, watering a site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less on unpaved surfaces.

Current Air Quality

VCAPCD operates a network of air quality monitoring stations throughout the Ventura County portion of the SCCAB. The monitoring stations measure ambient concentrations of pollutants to help VCAPCD determine if ambient air quality meets the California and federal standards. Current air quality information is obtained from the closest monitoring station to the project site. The closest air monitoring station to the project site is the El Rio-Rio Mesa School #2 station, located at 545 Central Avenue in Oxnard, approximately 7.5 miles northeast of the project site. This station collects 8-hour ozone, hourly O_3, NO_2, $PM_{2.5}$, and PM_{10} measurements. Table 4 indicates the number of days each federal and state standard was exceeded at El Rio-Rio Mesa School #2 station during the 2020 to 2022 period. As shown in Table 4, 8-hour and hourly ozone measurements exceeded the federal and state standards in 2020. PM_{10} measurements exceeded the federal standard in 2020, 2021, and 2022, and exceeded the state standard in 2020 and 2021. In addition, $PM_{2.5}$ measurements exceeded the federal standards in 2020. No other state or federal standards were exceeded at these monitoring stations. SO_2 and CO are not monitored at any representative air monitoring station near the project site; therefore, SO_2 and CO are not reported for this pollutant.

Table 4 Ambient Air Quality at the Nearest Monitoring Stations

Pollutant	2020	2021	2022
8-Hour Ozone (ppm), 8-Hour Average	0.086	0.059	0.063
Number of Days of State exceedances (>0.070 ppm)	3	0	0
Number of days of federal exceedances (>0.070 ppm)	3	0	0
Ozone (ppm), Worst Hour	0.104	0.073	0.077
Number of days of State exceedances (>0.09 ppm)	2	0	0
Nitrogen Dioxide (ppm) - Worst Hour	0.031	0.033	0.032
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
Particulate Matter 10 microns, $\mu g/m^3$, Worst 24 Hours	200.7	377.8	57.9
Number of days of State exceedances (>50 $\mu g/m^3$)	21	12	3
Number of days above federal standard (>150 $\mu g/m^3$)	2	1	0
Particulate Matter <2.5 microns, $\mu g/m^3$, Worst 24 Hours	58.7	31.7	18.5
Number of days above federal standard (>35 $\mu g/m^3$)	3	0	0

Measurements were taken from Oxnard's -El Rio-Rio Mesa School #2 station.

Source: CARB 2023

Air Quality Management

The 2022 Air Quality Management Plan (AQMP) is the most recent attainment plan adopted by VCAPCD in 2022. The 2022 AQMP presents a combined local and state clean air strategy based on concurrent ROG and NO_X emission reductions to bring Ventura County into attainment of the 2015 federal 8-hour ozone standard. The 2022 AQMP control strategy consists of a local component implemented by the VCAPCD and a combined state and federal component implemented by the CARB and EPA. The local strategy includes emission control measures carried forward from previous Ventura County clean air plans plus new and further study emission control measures. It also includes a transportation conformity budget that sets the maximum amount of on-road motor vehicle emissions produced while continuing to demonstrate progress towards attainment (VCAPCD 2022).

According to the VCAPCD guidelines, in addition to the assessment of criteria pollutants, a lead agency should consider San Joaquin Valley Fever factors that are applicable to the proposed project or the project site. Based on these or other factors, if a lead agency determines that a project may create a significant Valley Fever impact, the VCAPCD recommends that the lead agency consider the Valley Fever mitigation measures listed in the VCAPCD guidelines to minimize fugitive dust as well as minimizing worker exposure. The VCAPCD guidelines provides the following list of standard construction measures to be considered if the lead agency determines a project site poses a risk of San Joaquin Valley Fever:

1. Restrict employment to persons with positive coccidioid in skin tests (since those with positive tests can be considered immune to reinfection).
2. Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
3. Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
4. Require that the cabs of grading and construction equipment be air-conditioned.
5. Require crews to work upwind from excavation sites.
6. Pave construction roads.
7. Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.

Methodology

Air pollutant emissions generated by proposed project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod uses project-specific information, including the project's land uses, square footage for different uses (e.g., parking), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the proposed project as described in Initial Study Section 8, *Description of Project.*

Construction emissions modeled include emissions generated by construction equipment used on the project site and vehicle trips associated with construction, such as worker and vendor trips. The proposed project is assumed to begin construction activities in February 2026.[4] The phases of construction and construction equipment list were provided by the applicant. In addition, according to the applicant, the construction equipment would be equipped with Tier 3 engines. CalEEMod default assumptions for worker trips and vendor trips were used for the model. During the demolition phase, approximately five peak truck trips are anticipated to export material from the project site approximately 12 miles to Vulcan Materials Company Saticoy Portable Asphalt and Recycle facility (located at 6029 East Vineyard Avenue in Oxnard). Approximately 120 cubic yards of material during grading would be exported from the site to local farms (within approximately four miles of the project site, according to the applicant) for topsoil replenishment. It is assumed that all construction equipment used would be diesel-powered and the proposed project would comply with all applicable regulatory standards, including VCAPCD Rule 55 for fugitive dust control

[4] This assumed construction start date is an estimate and is based on average processing and approval times for various future entitlements associated with the proposed project. The assumed construction start date at the time of modeling emissions for the proposed project in CalEEMod was July 2024. Construction activities with a later start date than 2024 would generate lower emissions, due to CalEEMod emissions factors accounting for the state's initiative for cleaner equipment fleet (i.e., each subsequent year assumes lower emission factors for each construction equipment). Therefore, because construction would occur at a later date than 2024, this analysis and the CalEEMod modeling upon which it is based provide a conservative assumption.

measures. In addition, construction equipment and vehicles would be restricted to five minutes of idling or less.

Operational emissions modeled include mobile source emissions, area source emissions, and energy source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The proposed project would generate approximately 72 peak daily truck trips. The trip generation rates and vehicle fleet mix in CalEEMod were adjusted to assume all 72 daily truck trips would be heavy-heavy trucks[5]. Area source emissions for the proposed project would be generated by landscape maintenance equipment and architectural coatings used to repaint/restripe paved surfaces. The proposed parking land use does not include features that would consume natural gas; therefore, energy emissions are excluded in the air quality analysis section.

a. *Would the project conflict with population or other growth forecasts contained in the Ventura County AQMP or otherwise obstruct implementation of the Ventura County AQMP?*

According to the 2003 Ventura County Air Quality Pollution Control District (VCAPCD) Ventura County Air Quality Assessment Guidelines (Guidelines), a project's consistency with the Ventura County AQMP can be determined by comparing population growth expected to occur due to that project to population growth forecasts used in the AQMP. The 2022 Ventura AQMP relies on the Southern California Association of Governments' (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) forecasts of regional population growth in its projections for managing Ventura County's air quality. Therefore, a demonstration of consistency with the population forecasts used in the most recently adopted AQMP is used for assessing the proposed project's consistency with the AQMP.

The proposed project would not include new residential development but would add approximately five new truck employees. Oxnard had a household size of 3.57 persons per household in 2024 according to the California Department of Finance (DOF) (DOF 2024). If the new truck drivers relocated from outside Oxnard, the proposed project would generate approximately 18 new residents in Oxnard. Oxnard's population is anticipated to increase by 32,100 residents by 2045 (SCAG 2020). Potential growth from the proposed project would be well within this growth forecast. Accordingly, the proposed project would not conflict with population or other growth forecasts contained in the Ventura County AQMP or otherwise obstruct implementation of the Ventura County AQMP and would have no impact in this regard.

NO IMPACT

b. *Would the project violate any federal or state air quality standard or contribute substantially to an existing or projected air quality standard violation?*

c. *Would the project result in a net increase of any criteria pollutant in excess of quantitative thresholds recommended by the VCAPCD?*

Primary criteria pollutants are emitted directly from a source (e.g., a vehicle tailpipe or an exhaust stack of a factory) into the atmosphere. Primary criteria pollutants include CO, NO_2, fine particulate matter (PM_{10} and $PM_{2.5}$), and SO_2. O_3 is considered a secondary criteria pollutant because it is created by atmospheric chemical and photochemical reactions between ROG and NO_X. These pollutants can have adverse impacts on human health at certain levels of exposure.

[5] Trucks with an estimated weight between 33,000 to 60,000 lbs. Heavy-heavy duty trucks have the highest emission factors; therefore, these emissions estimates are conservative.

Construction Emissions

Proposed project construction would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$), exhaust emissions from heavy construction equipment and construction vehicles, and ROG emissions released during the drying of architectural coating and paving phases. Table 5 summarizes the estimated maximum daily emissions of pollutants during construction of the proposed project. As shown therein, construction-related emissions would not exceed VCAPCD thresholds. Therefore, construction-related emissions would be less than significant.

Table 5 Project Construction Emissions

	Maximum Daily Emissions (Lbs./Day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Year						
2024	1	8	10	<1	1	<1
Maximum Daily Emissions	**1**	**8**	**10**	**<1**	**1**	**<1**
VCAPCD Thresholds	25	25	–	–	–	–
Threshold Exceeded?	**No**	**No**				

VCAPCD = Ventura County Air Pollution Control District; ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Notes: Some totals may not add up due to rounding. Emissions data is sourced from "mitigated" results, which incorporate emissions reductions from measures that would be implemented during proposed project construction (such as watering of soils during construction) as required under VCAPCD Rule 55.

Source: See Appendix A for CalEEMod calculations.

Operational Emissions

Operation of the proposed project would generate criteria air pollutant emissions associated with mobile sources (i.e., vehicle trips to and from the project site) and area sources (e.g., architectural coatings, consumer products, and landscaping equipment). Table 6 summarizes the proposed project's maximum daily operational emissions by emission source. As shown therein, operational emissions would not exceed VCAPCD regional thresholds for criteria pollutants. Therefore, proposed project operation would not result in a considerable net increase of any criteria pollutant in excess of VCAPCD thresholds, and therefore the proposed project would have a less than significant impact in this regard.

Table 6 Project Operational Emissions

	Maximum Daily Emissions (Lbs./Day)					
Emission Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	<1	0	0	0	0	0
Mobile	<1	4	1	<1	1	<1
Project Emissions	**<1**	**4**	**1**	**<1**	**1**	**<1**
VCAPCD Regional Thresholds	25	25	-	-	-	-
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

ROG = reactive organic gases; NO_x = nitrogen oxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns; SO_x = sulfur oxide

Notes: Some numbers may not add up precisely due to rounding considerations.

Source: See Appendix A for CalEEMod calculations.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project expose sensitive receptors to pollutant concentrations exceeding state or federal standards or in excess of applicable health risk criteria for toxic air contaminants?*

The closest sensitive receptors to the project site are single-family homes approximately 110 feet north of the project site. Toxic Air Contaminant (TAC) and San Joaquin Valley Fever impacts to sensitive receptors are discussed in the following subsections.

Toxic Air Contaminants

A TAC is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM); however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

Construction Impacts

Construction-related activities would result in temporary project-generated DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, building construction, and other construction activities. Generation of DPM, which was identified as a TAC by CARB in 1998, from construction projects typically occurs in a single area for a short period. The proposed project's construction would occur in phases over approximately six months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, and a more extended exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a more extended period.

The proposed project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The proposed project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these measures and regulations would minimize emissions of TACs during construction. In addition, the proposed project's construction period of six months would not expose sensitive receptors to a large dose of TACs due to the temporary nature of the work. Therefore, construction activities would not create a significant impact from TAC exposure.

Operational Impacts

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB guidelines recommend siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. Parking land uses are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in CARB's guidelines. Based on guidance from the CARB's Air Quality and Land Use Handbook, CARB recommends a buffer of at least 1,000 feet between land uses that will have 100 or more trucks per day and sensitive land uses. The proposed project would include 72 peak daily truck trips, which would not exceed the 100 or more trucks per day guidance from CARB. Therefore, the proposed project would be consistent with CARB's guidelines and would not include substantial TAC sources. Therefore, operation of the proposed project would not create a significant impact from TAC exposure.

San Joaquin Valley Fever

San Joaquin Valley Fever is an airborne fungal infection caused by the fungus *Coccidioides immitis*. The fungal spores responsible for the disease generally grow in undisturbed soil and have affected residents of Ventura County. Ground disturbance during proposed project construction may release fungal spores if they are present on the project site. However, standard construction measures in accordance with VCAPCD rules (which are discussed under the heading of *Air Quality Management* in this *Air Quality* section of the IS-MND) would reduce fugitive dust generation, thus minimizing the potential risk of infection if San Joaquin Valley Fever is present on the project site. Therefore, with compliance with standard construction measures required by the VCAPCD, construction of the proposed project would not substantially increase the risk to public health above existing conditions. In addition, given the temporary nature of construction emissions, as well as incorporation of fugitive dust reduction measures through required compliance with VCAPCD Rule 55[6], the potential impact associated with San Joaquin Valley Fever would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

Odor sensitive receptors near the site include single-family residences approximately 110 feet north of the project site boundary on East Hueneme Road. The proposed project would generate oil and diesel fuel odors during construction from equipment use, but these odors would be limited to the construction period (estimated to be six months) and would be intermittent and temporary. Furthermore, these odors would dissipate rapidly with distance from in-use construction equipment. Accordingly, proposed project construction would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people.

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of odors (e.g., sewage treatment plants, landfills, recycling facilities, biomass operations, autobody shops, fiberglass manufacturing, and livestock operations). A parking lot/trucking operation is not identified on this list as a potential odor source.

For the reasons discussed above, the proposed project would have a less than significant impact related to the creation of objectionable odors.

LESS THAN SIGNIFICANT IMPACT

[6] Fugitive dust measures include watering site, control on-site vehicle speeds, and earth moving activity restrictions based on winds speed.

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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, or 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 waters of the U.S. as defined by Section 404 of the federal Clean Water Act or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources?	☐	☐	■	☐
f. Conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

The biological analysis presented in this section is based on the results of a desktop and database review of the project region and a reconnaissance-level field survey completed within the biological study area on September 11, 2023. For purpose of this report, the biological study area is defined by the project site and a 100-foot buffer radius, where feasible. Binoculars (10x42) were used to aid in observation of the 500-foot buffer radius.

The field survey was conducted between 7 a.m. and 8:30 a.m. Weather conditions included temperatures between 65 and 67 degrees Fahrenheit, partially cloudy skies, and a slight breeze. The purpose of the field survey was to document the existing biological conditions, including all plant and wildlife species, vegetation communities, land cover types, potentially suitable habitat for regionally occurring wildlife, and aquatic resources. Vegetation communities were classified using the systems provided in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), in conjunction with the CDFW California Sensitive Natural Communities List (CDFW 2023c).

The following resources were analyzed in the desktop/database review: United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (USFWS 2023b), USFWS Critical Habitat Portal (USFWS 2023a), USFWS National Wetland Inventory (USFWS 2023c), United States Geological Survey (USGS) National Hydrography Dataset (USGS 2023), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2023a), CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2023b) and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2023). The CNDDB review focused on a query of biological resources previously documented within a two-mile radius around the project site. The query of the CNPS and CNDDB databases included six quadrangles surrounding the project site, including the following USGS 7.5-minute topographic quadrangles: *Camarillo, Point Mugu, Ventura, Oxnard, Saticoy, and Santa Paula, California*. A two-mile radius was used to further determine the potential for occurrence of plants and wildlife in similar habitat communities in the immediate vicinity. This radius limits most beach habitats (which do not occur on the project site) but does include any beach habitats within the immediate vicinity, such as Ormond Beach to the south of the site where species may locally migrate within or adjacent to the project site. The review also analyzed available historical aerial imagery via Google Earth Pro and digitally available historical topographic imagery. The desktop/database review evaluated the potential for the project site to support special-status species, aquatic resources, and sensitive natural vegetation communities, and assessed the potential for the proposed project to result in significant impacts to these resources.

Existing Biological Resource Setting

The project site can generally be described as a developed 4.76-acre lot in a semi-urban area characterized by a mix of industrial and residential development. The project site is currently in operation as a trucking service that moves and transports business property containers between the Port of Hueneme and various other businesses in California. The project site is generally flat and includes paved roads, driveways, a gravel lot, and three large structures. The westernmost parcel of the project site was a maintained, undeveloped field which was regularly disked prior to being converted to a gravel lot by the applicant. However, the conversion to the gravel lot was done without permits and has therefore been included as part of the development included in the proposed project. The project site is currently surrounded by chain link fencing. Elevations within the biological study area range from approximately 8 to 14 feet above mean sea level. While minimal vegetation was present prior to the unpermitted work, no vegetation communities currently occur on-site.

To the north of the project site (past East Hueneme Road) are commercial and residential developments, to the west is a property that was recently developed as a vehicle storage yard[7], and to the east is the Ventura County Railway. To the south is the Ormond Lagoon Waterway, previously called the Oxnard Industrial Drain, followed by land that is currently in the planning stages for future wetland restoration, and is owned by The Nature Conservancy (TNC).

The Ormond Beach Restoration and Public Access Project (OBRAP) is designed to enhance and restore existing habitat, increase public access to Ormond Beach and allow for habitat changes in response to sea-level rise and shore migration. Part of the OBRAP property includes the entirety of the land owned by TNC south of the project site. The OBRAP will be implemented in five phases. The first two phases have been completed with the development of a Preliminary Restoration Plan completed in May of 2019 and a Preferred Alternative and Preliminary Design Plan completed in September 2021. The next three phases (Phase 3, 4, and 5) are anticipated to be completed between 2025 to 2028 or later, and include final design, environmental review, permitting, adaptive restoration, and monitoring for vegetation and water management.

The project site occurs within the McGrath Lake-Frontal Pacific Ocean Hydrological Unit (Code 180701030202). The Ormond Lagoon Waterway passes the southeastern portion of the project site, draining to the Pacific Ocean at Ormond Beach, approximately 0.7 mile to the south. No signs of flooding or inundation of the project site were observed, indicating that the raised railway line cuts-off hydrological connection to waters to the south of the project site.

Because of the surrounding developed areas, nearby railway tracks, and the fencing around the project site, the project site is not likely to support significant wildlife movement. The project site is not located in any essential connectivity areas or natural lands site blocks (Spencer et al. 2023), or in an area zoned by the County of Ventura as a Habitat Connectivity Wildlife Corridor (County of Ventura Resource Management Agency 2019). However, the Ormond Lagoon Waterway adjacent to the project site may support common wildlife movement as it is a linear corridor that provides wildlife access to the open space south of the project site.

The Ormond Lagoon Waterway is concrete-lined southeast of the project site, and directly south of the project site where TNC land begins, the Ormond Lagoon Waterway transitions into riparian vegetated banks. While this area was not closely surveyed, the banks of the drain are vegetated by California bulrush (*Schoenoplectus californicus*) and pampas grass (*Cortaderia selloana*) with scattered trees. Two portions of the Ormond Lagoon Waterway south and southeast of the project site have bridge crossovers, one for Hueneme Road and one for the railway tracks. These bridges, the southern riparian vegetated banks, and the TNC's open space could support nesting birds and other wildlife.

Nesting bird behavior, such as courtship displays, copulation, vegetation or food carries, presence of fledglings or territorial displays (e.g. singing or aggression) was not observed during the survey. Telephone poles, bridges, shrubbery and trees adjacent to the project site (within the study area), and existing structures within the project site, may also provide suitable nesting habitat for some common bird species, and protected raptors. It is also expected that other common wildlife may occur within the project site, including but not limited to western side blotched lizard (*Uta stansburiana elegans*) and California ground squirrel (*Otospermophilus beecheyi*).

Wildlife species observed during the survey included snowy egret (*Egretta thula*), black phoebe (*Sayornis nigricans*), California towhee (*Melozone crissalis*), song sparrow (*Melospiza melodia*),

[7] At the time of the September 11, 2023, reconnaissance-level field survey, this property to the west was not yet developed as a vehicle storage yard. At that time, it was a disturbed vacant plot of land.

Cassin's kingbird (*Tyrannus vociferans*), savannah sparrow (*Passerculus sandwichensis*), house finch (*Haemorhous mexicanus*), hooded oriole (*Icterus cucullatus*), Allen's hummingbird (*Selasphorus sasin*), lesser goldfinch (*Spinus psaltria*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), barn swallow (*Hirundo rustica*), bushtit (*Psaltriparus minimus*), Coopers hawk (*Accipiter cooperii*), and American goldfinch (*Spinus tristis*).

The nearest USFWS designated Critical Habitat, located approximately 0.5 mile to the southwest along Ormond Beach, is habitat for the federally listed tidewater goby (*Eucyclogobius newberryi*) and western snowy plover (*Charadrius nivosus nivosus*) (USFWS 2023b). The project site does not overlap these delineated protected habitat areas or other wildlife habitats suitable for these protected species.

Special-Status Species

A total of four special-status plant species were identified in the desktop/database review as occurring within 0.5 mile of the project site. Specifically, the CDFW CNDDB documents two special-status plant species between 0.36 and 0.42 mile south of the project site, including Coulters' goldfields (*Lasthenia glabrata* ssp. *coulteri*) observed in 2015 and salt marsh birds-beak (*Chloropyron maritimum* ssp*. maritimum*) observed in 2016, 2018 and 2019. Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*) was also documented in May of 2015 approximately 0.36 mile south of the project site, as well as Conejo buckwheat (*Eriogonum crocatum*) in April of 2017 approximately 450 feet west of the project site (iNaturalist 2023). None of these species were observed during the field visit and are not expected to occur within the project site based on the absence of suitable habitat, and the highly disturbed and developed nature of the site.

Five special-status wildlife species were identified in the desktop/database review as occurring within two-miles of the project site and are discussed below.

Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), a USFWS Bird of Conservation Concern and California Endangered species, has been documented 0.42 mile south of the study area on TNC land as recently as 2016 (CDFW 2023b) and along Ormond Beach wetlands as recently as 2022 (eBird 2023). One savannah sparrow was seen foraging 50 to 75 feet south of the project site during the reconnaissance-level survey, but identification down to subspecies was not obtained. However, the project site does not provide suitable nesting or foraging habitat for Belding's savannah sparrows, such as pickleweed (*Salicornia virginica*) and saltgrass (*Distichlis spicata*) marshes or wetland habitats, and therefore the species is not expected to occur within the project site.

Monarch butterfly (*Danaus plexippus plexippus*) was documented within the CNDDB (CDFW 2023a) and Xerces Society (2022) 1.75 miles northeast of the study area in 2022.The study area does not provide any suitable habitat for monarchs and the species was not observed during the survey.

Mimic tryonia (*Tryonia imitator*) was documented approximately half a mile west of the study area in 2006 (CDFW 2023a). This species is not expected to occur on the project site and was not observed during the survey. However, this species could occur within the Ormond Lagoon Waterway adjacent to the project site.

Western snowy plover (*Charadrius nivosus nivosus*) and California least tern (*Sternula antillarum browni*) were both documented approximately half a mile south of the study area in 2015 and 2016 along Ormond Beach (CDFW 2023a). These bird species are not expected to occur within the study area as the study area does not provide suitable sand for nesting or foraging habitat for either species, and the project site is both graveled and paved.

American peregrine falcon (*Falco peregrinus anatum*) observations have been recorded throughout the region (CDFW 2023a). This species was previously listed as endangered both by the Federal Endangered Species Act and the California Endangered Species Act but was delisted in 2006 due to diligent conservation and recovery efforts (CDFW 2023d). No suitable habitat for the falcon is present within the project site, but the species may forage in the adjacent open space.

Significance Thresholds

The impact analysis below relies on the impact criteria listed at the beginning of this *Biological Resources* section of the IS-MND, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Based on the desktop/database review, field observations, and evaluation of potentially suitable habitat within the survey area, no special-status plants are expected to occur on the project site based on the lack of suitable habitat and the developed nature of the site. TNC wetlands located just south of the Ormond Lagoon Waterway have the potential to support special-status plants but are not anticipated to be impacted by proposed project activity.

Similarly, due to the developed nature of the site, the project site provides minimal habitat for wildlife; therefore, no special-status wildlife is expected to occur within the project site.

Several common bird species protected by the federal Migratory Bird Treaty Act (MBTA) and Section 3503 of the California Fish and Game Code (CFGC) may nest on the existing structures within the project site and on trees, shrubbery, under bridges, and on telephone poles adjacent to the project site. The proposed project may indirectly disturb nesting birds through construction noise, dust, and other human disturbances that can cause nest failure. Therefore, implementation of Mitigation Measure BIO-1 is required to ensure compliance with the MBTA and CFGC Section 3503 through pre-construction nesting bird surveys and avoidance of active nests within the project site and surrounding areas. This mitigation measure would address potential indirect impacts to Belding's savannah sparrow found on TNC property located approximately 100 feet south of the project site.

Mitigation Measures

BIO-1 Nesting Bird Avoidance and Minimization Measures

The following avoidance and minimization measures shall be implemented during project construction activities:

- To avoid the disturbance of nesting and special-status birds, including raptor species protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), initial ground disturbance activities related to the project including, but not limited to, vegetation removal, ground disturbance, demolition, and construction shall occur outside of the bird breeding season (February 1 through August 31), if feasible.
- If construction must begin within the general avian nesting season indicated above, a qualified biologist shall conduct a pre-construction nesting bird survey no more than 7 days prior to initial disturbances in the work area. The pre-construction nesting bird survey shall be conducted on

foot inside the project site, including a 100-foot buffer and in inaccessible areas (e.g., private lands) from afar using binoculars, to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California.

- If active nests are discovered, a qualified biologist shall establish a species-specific avoidance buffer around the nest where no construction activity is allowed until they have determined that the nest is no longer active. The buffer shall be a minimum of 100 feet for non-raptor bird species and 300 feet for raptor species. Larger buffers may be required and/or smaller buffers may be established depending upon the species, status of the nest, and construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. Encroachment into the buffer shall only occur at the discretion of a qualified biological monitor.
- If construction activities in a given work area cease for more than 7 days, additional surveys shall be conducted for the work area if suitable nesting habitat is present. If active nests are located, the buffer zone measures shall be implemented.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would ensure compliance with the California Fish and Game Code Section 3503 and the federal Migratory Bird Treaty Act with respect to nesting birds by requiring pre-construction nesting bird surveys and avoidance of active nests to reduce potential impact to nesting birds. With implementation of Mitigation Measure BIO-1, impacts to nesting birds would be reduced to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c. Would the project have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the federal Clean Water Act or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?

No sensitive natural communities or critical habitat occur within the project site; therefore, no adverse effects to natural communities would occur as a result of the proposed project. The proposed project would provide a detention basin with a vegetated bioswale for drainage and restore part of the project site to vacant undeveloped land, all north of the Ormond Lagoon Waterway. As explained in impact discussion 10(a) of Section 10, *Hydrology and Water Quality*, the vegetated bioswale would connect to an existing 24" corrugated metal pipe (CMP) culvert that drains to the County channel (Ormond Lagoon Waterway). However, the bioswale would reduce stormwater flows and provide filtration, preventing discharge of pollutants during storm events in accordance with the requirements of the *Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer (MS4) Discharges within the Coastal Watershed of Los Angeles and Ventura Counties* (MS4 Permit; Order No. R4-2021-0105) and the *Ventura County Technical Guidance Manual for Stormwater Quality Control Measures* (Ventura County Technical Guidance Manual) (County of Ventura 2018), throughout both construction and operation of the project. Therefore, the proposed project would have a less than significant impact on any sensitive natural communities including riparian habitat, or to federally protected waters of the United States.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

As shown on Figure 2, land uses immediately surrounding the project site consist of the following: a property to the west that was recently developed as a vehicle storage yard; railroad tracks, industrial warehouses, and vacant land to the southeast; and East Hueneme Road and a residential community to the north. A portion of the Ormond Lagoon Waterway is southeast of the project site, beyond the railroad tracks immediately bordering the project site, and undeveloped TNC land is south of the project site beyond that. The project site does not function as a wildlife movement corridor or habitat linkage, nor does it impede the use of native wildlife nursery sites. Wildlife activity within the project site is minimal, with potential occurrences of ground squirrels and birds temporarily perching on fencing and buildings, and no wildlife movement through the site is expected.

The adjacent Ormond Lagoon Waterway may function as a nursery site, or a wildlife corridor for common fish species. Wildlife may also utilize TNC land south of the project site to travel to and from the Pacific Ocean. As noted in impact discussions 4(b) and 4(c), a detention basin with a bioswale will connect to an existing 24” CMP culvert that drains to the county channel (Ormond Lagoon Waterway) on the south side of the project site. The bioswale would provide filtration, preventing discharge of pollutants in accordance with the MS4 Permit and Ventura County Technical Guidance Manual (County of Ventura 2018), avoiding any significant impacts to nursery sites, or movement of fish or other wildlife within the Ormond Lagoon Waterway.

Given the nearby location of the Ormond Lagoon Waterway and TNC to the south, proposed project activities that result in continual noise from proposed project operations and any proposed night lighting may indirectly affect wildlife movement in the adjacent waterway by disturbing passage behaviors. Existing conditions include lighting from sources such as streetlights, headlights from vehicles, and adjacent residences and site operations. As outlined in the applicant’s Lighting and Security Plan’s General Operation Notes, all exterior lighting installations and lamp types shall comply with local City-adopted outdoor lighting regulations, all exterior lighting shall be on an astronomical time clock (automatic timer that adjusts to dawn and dusk lighting in the region), and all outdoor lighting shall be circuited and independently controlled by an automatic scheduling control. Lighting would be required to be compliant with California Building Code (CBC) Title 24 standards and Section 16-320 of the City’s Municipal Code. The City’s Municipal Code prohibits lighting from illuminating surfaces not required to be lit and prohibits lighting from constituting a hazard to vehicular traffic, either on private property or on abutting streets (City of Oxnard 2022a). In addition, the proposed lighting would be required to comply with 2030 General Plan Policy ER-6.5 which requires all outdoor light fixtures including street lighting and externally illuminated signs to use low-energy shielded light fixtures which direct light downward and, where public safety would not be compromised, encourages the use of low-pressure sodium lighting for all outdoor light fixtures (City of Oxnard 2011). The applicant is required to submit an integrated lighting and landscape plan to demonstrate that the proposed project is consistent with the City’s Zoning Code. At the time of building permit issuance, City staff would verify that the proposed lighting is consistent with the Zoning Code requirements.

For the reasons described above, the proposed project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources?

There are no biological resources on the project site (such as protected trees, creeks, waters, wetlands, or other environmentally sensitive habitat) that are subject to local policies or ordinances within the project site. The development of OBRAP is anticipated to be south of the Ormond Lagoon Waterway and will include the creation of a primary walking trail, minor grading, cut and fill, creation of a bioswale and realigning the Ormond Lagoon Waterway to allow engagement with floodplain and brackish marsh. Although OBRAP restoration activities are anticipated to occur in close proximity of the project site (within and south of the Ormond Lagoon Waterway), proposed project activities (such as development of the bioswale that connects to the Ormond Lagoon Waterway) would not conflict with the OBRAP Preliminary Restoration Plan or the Preferred Alternative and Preliminary Design Plan. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

f. Would the project conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not located within a Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, and the proposed project would therefore have no impact in this regard.

NO IMPACT

5 Climate Change and Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	□	□	■	□
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases or otherwise conflict with state goals for reducing GHG emissions in California?	□	□	■	□
c. Contribute or be subject to potential secondary effects of climate change (e.g., sea level rise, increase fire hazard)?	□	□	■	□

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and from human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of a specific GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).

The United Nations IPCC's Sixth Assessment Report (2021) states that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities. Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between 1850 and 2019 a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between 2010 and 2019 (IPCC 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Natural Resource Agency 2019).

Significance Thresholds

According to the City of Oxnard *CEQA Guidelines* (City of Oxnard 2024), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of a project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. The City of Oxnard has not adopted a numerical significance threshold for assessing impacts related to GHG emissions but has an adopted Climate Adaptation and Action Plan (CAAP) for reduction of GHG emissions. Neither the VCAPCD, California Office of Planning and Research, CARB, California Air Pollution Control Officers Associated, nor any other state or applicable regional agency has adopted a numerical significance threshold for assessing GHG emissions that is applicable to the proposed project.

In the absence of any adopted numeric threshold, the significance of the proposed project's GHG emissions is evaluated consistent with *CEQA Guidelines* Section 15064.4(b) by considering whether the proposed project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Therefore, the significance of the proposed project's potential impacts regarding GHG emissions and climate change is evaluated based on consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change. The most directly applicable adopted regulatory plans to reduce GHG emissions are the State of California's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), SCAG's 2024-2050 RTP/SCS, the City of Oxnard General Plan, and the City of Oxnard CAAP. These regulatory plans are described in the *Consistency with Applicable Plans and Policies* section below. GHG emissions from the construction and operation of the proposed project are provided for informational purposes.

Methodology

Calculations of CO_2, CH_4, and N_2O emissions are provided for informational purposes. The analysis focuses on CO_2, CH_4, and N_2O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions the proposed project would emit in the largest quantities (IPCC 2014). Emissions of all GHGs are converted into their equivalent GWP in terms of CO_2 (i.e., CO_2e). Minimal amounts of other GHGs (such as chlorofluorocarbons) would be emitted; however, these other GHG emissions would not substantially add to the total GHG emissions. GHG emissions associated with proposed project construction and operation were estimated using CalEEMod, version 2022.1, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

- The analysis uses CalEEMod default assumptions for water and energy sources for parking lot uses and landscaping.
- In accordance with Association of Environmental Professionals (AEP's) recommendation, GHG emissions from construction of the proposed project were amortized over a 30-year period and added to annual operational emissions to determine the proposed project's total annual GHG emissions (AEP 2016).

a. *Would the project generate greenhouse emissions, either directly or indirectly, that may have a significant impact on the environment?*

b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases or otherwise conflict with state goals for reducing GHG emissions in California?*

Consistency with Applicable Plans and Policies

2022 Scoping Plan

California's principal legislation regulating GHG emissions is Assembly Bill (AB) 32, Senate Bill (SB) 32, and AB 1279. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020; the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030; and the goal of AB 1279 is to achieve net zero greenhouse gas emissions no later than 2045 and reduce GHG emissions by 85 percent below 1990 levels no later than 2045. The 2022 Scoping Plan expands upon earlier plans to include the AB 1279 targets. The 2022 Scoping Plan's strategies include reducing fossil fuel use and vehicle miles traveled; decarbonizing the electricity sector, maximizing recycling and diversion from landfills; and increasing water conservation. The proposed project's truck parking/storage yard would not be a use that would have components that would conflict with the goals of the 2022 Scoping Plan that are more focused on building development.

2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2024, SCAG's Regional Council formally adopted the 2024-2050 RTP/SCS (titled Connect SoCal). The 2024-2050 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars in the SCAG region by eight percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the CARB targets adopted in March 2018. The 2024-2050 RTP/SCS includes four goals with corresponding policies: 1) Mobility: build and maintain an integrated multimodal transportation network; 2) Communities: develop, connect and sustain livable and thriving communities; 3) Environment: create a healthy region for the people of today and tomorrow; and 4) Economy: support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region. The proposed project's parking lot use is planned to satisfy existing vehicle transportation demand and is inherently not oriented towards achieving RTP/SCS policies such as pursuing efficient use of the transportation system or promoting equitable use of and access to clean transportation technologies. Therefore, while the proposed project would not help achieve the goals of the 2024-2050 RTP/SCS it would also not conflict with them.

City of Oxnard General Plan & Climate Adaption and Action Plan

In October 2011, the City of Oxnard adopted the City of Oxnard 2030 General Plan to provide the city with a consistent framework for land use decisions. In December 2022, the City of Oxnard adopted a resolution approving the City's CAAP. The City of Oxnard CAAP outlines goals, strategies, and actions for reducing emissions and increasing community resilience to climate change. The proposed project would be consistent with the 2030 General Plan's Policy ICS-11.7: Water Wise Landscapes, which would promote water conservation in landscaping. The proposed project would comply with the latest water conservation measures in the California Green Building Standards. The CAAP ensures Oxnard does its part to contribute to the goals of AB 32 and its successor legislation, SB 32, while remaining consistent with the City's General Plan vision for future growth. As mentioned above, a parking lot use is planned to satisfy existing vehicle transportation demand and is inherently not oriented towards achieving other General Plan or CAAP goals such as increasing sustainable transportation uses. Therefore, the proposed project would not conflict with the City's 2030 General Plan and CAAP.

Summary

The proposed project would generate GHG emissions during construction and operation. However, the proposed project would implement design features, such as hardscape lighting and irrigation features consistent with Title 24 standards, consistent with the guidance and requirements of applicable GHG-reduction plans and policies. Therefore, the proposed project would have a less than significant impact related to the generation of GHG emissions and would be consistent with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions.

Greenhouse Gas Generation

Construction of the proposed project would generate temporary GHG emissions primarily from the operation of construction equipment as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials. Consistent with guidance from the AEP, GHG emissions from construction have been amortized over a 30-year period. Table 7 shows the proposed project's estimated GHG emissions from construction. Amortized over a 30-year period, proposed project construction would generate an estimated 2 metric tons (MT) CO_2e per year.

Table 7 Estimated Greenhouse Gas Emissions from Construction

Construction	Project Emissions MT CO_2e
Construction Year	
2024	46
Amortized over 30 Years	**2**

MT CO_2e = metric tons of carbon dioxide equivalent

Source: See Appendix A for CalEEMod calculations

Operation of the proposed project would generate GHG emissions associated with mobile sources, energy and water usage. Table 8 combines the estimated construction and operational GHG emissions associated with development of the proposed project. As shown therein, annual emissions from the proposed project would be approximately 304 MT CO_2e per year.

Table 8 Combined Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions (MT CO_2e)
Construction[1]	**2**
Operational	**302**
Mobile	297
Energy	5
Water	<1
Total	**304**

MT CO_2e = metric tons of carbon dioxide equivalent

[1]Amortized construction related GHG emissions over 30 years.

Source: See Appendix A for CalEEMod calculations

LESS THAN SIGNIFICANT IMPACT

c. *Would the project contribute or be subject to potential secondary effects of climate change (e.g., sea level rise, increase fire hazard)?*

Climate change may result in a number of secondary effects, including an unpredictability in the quality and supply of water from the Sierra snowpack, increased risk of large wildfires, reductions in the quality and quantity of certain agricultural products, exacerbation of air quality problems, increase in temperature and extreme weather events, and a decrease in the health and productivity of California's forests.

An individual project could potentially be vulnerable to secondary effects of climate change because of its site location, or it could increase secondary effects to the surrounding area because of its presence. To determine if the proposed project would contribute or be subject to potential secondary effects of climate change, Table 9 evaluates the consequences of climate change in California as they relate to the proposed project. As described in Table 9, the proposed project would have a less than significant impact related to potential secondary effects of climate change.

LESS THAN SIGNIFICANT IMPACT

Table 9 Secondary Effects of Climate Change

Consequences of Climate Change in California	Project Evaluation
Unpredictability in the quality and supply of water from the Sierra snowpack. If heat-trapping emissions continue unabated, more precipitation would fall as rain instead of snow, and the snow that does fall would melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change**. According to the City of Oxnard Urban Water Management Plan (UWMP), the City anticipates it will be able to manage its water supply portfolio to provide adequate water to meet demand in normal, single-dry, and multiple dry years through the year 2045 (City of Oxnard 2021). The proposed project's annual demand of 1.1 AFY (acre feet per year)[8] would account for 0.0038 percent of the projected 28,819 AFY demand in 2025 and 0.0033 percent of the projected 33,349 AFY demand in 2045 (City of Oxnard 2021). The proposed project would account for a minimal portion of total demand anticipated by the City and would not substantially contribute to the reduction of the snowpack.

[8] The project would consume approximately 371,564 gallons per year, as shown in the CalEEMod output in Appendix A of this IS-MND. One gallon equals 3.0688×10^{-6} AFY, so 371,564 gallons equals 1.1 AFY.

Consequences of Climate Change in California	Project Evaluation
Increased risk of large wildfires. If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain would stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change.** The project site is approximately 4.76-acres. While the project site is undeveloped, it is surrounded by urban development and vacant lots that are mostly unvegetated and is not in or near a forested area. As a result, it would not cause surrounding development to be subject to wildfire or itself be subject to wildfire. The proposed project would not contribute to or be subject to an increased risk of large wildfires; related impacts would be less than significant.
Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change.** The project site is currently used as a commercial business and is not under agricultural production. The westernmost parcel of the project site, which was a vacant dirt lot before the applicant converted it to a gravel parking lot, was not under agricultural production before that action. The proposed project would continue the use of the project site for these purposes, would not engage in the production of agricultural products, and would not interfere with agricultural production (see Section 2, *Agricultural Resources*).
A rise in sea levels resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change.** The project site is approximately 17 feet (204 inches) above local mean sea level. In addition, the project site is approximately 0.75 miles inland from the Pacific Ocean. The proposed project would involve construction and operation of a parking lot that would not result in the displacement of coastal businesses and residences or be displaced due to a rise in sea levels.
Increased temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change.** Development of the proposed project would not directly contribute to an increase in temperature or extreme weather events. It would also not include any new residences or induce substantial population growth (see Section 14, *Population, Education, and Housing*) and would not expose new residents to extreme heat events.
A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.	**The proposed project would not contribute to or be subject to this potential secondary effect of climate change.** The project site is not forested, and development of the site would not contribute to a change in the health and productivity of forested land. Development and operations of the proposed project would not result in an increase in wildfire, nor would it enhance insect populations or establish non-native species, resulting in a decrease in the health or productivity of California's forests.

Source of Consequences of Climate Change in California: CCCC 2006; and Moser et al. 2009.

6 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of an historical resource as defined in State CEQA Guidelines Section 15064.5?	□	□	□	■
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to State CEQA Guidelines Section 15064.5?	□	■	□	□
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	□	□	■	□
d. Disturb any human remains, including those interred outside of formal cemeteries?	□	□	■	□

Significance Thresholds and Overview of Cultural Resources

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

Broadly defined, any trace of past human activity greater than 50 years old may be an important cultural resource. For the purposes of this CEQA analysis, Cultural Resources include historical resources, archaeological resources, paleontological resources, and human remains.

Impact criteria 6.a in the environmental checklist above asks if the proposed project would cause a substantial adverse change in the significance of an historical resource as defined in State CEQA Guidelines Section 15064.5. CEQA Guidelines Section 15064.5(a) defines historical resources as follows:

(a) For purposes of this section, the term "historical resources" shall include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.).

2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must

treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 14 CCR, Section 4852) including the following:
   A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
   B. Is associated with the lives of persons important in our past;
   C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
   D. Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Impact criteria 6.b in the environmental checklist above asks if the proposed project would cause a substantial adverse change in the significance of a unique archaeological resource pursuant to State CEQA Guidelines Section 15064.5. CEQA Guidelines Section 15064.5(c) states the following regarding archaeological resources:

(c) CEQA applies to effects on archaeological sites.

1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).

2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 21084.1(g) of the Public Resources Code defines "unique archaeological resources" as follows:

a) As used in this section, "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
    1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
    2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
    3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underly the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, thereby evaluating the potential for impacts to those resources, and provide mitigation for paleontological resources if they are discovered during construction of a development project.

A Cultural Resources Assessment for the proposed project was completed in February 2024, which informs the analysis of potential impacts to cultural and tribal cultural resources. The Cultural Resources Assessment consists of information gathered from a California Historical Resources Information System (CHRIS) records search, a Sacred Lands File (SLF) search, a pedestrian survey, and desktop analysis (Appendix B).

a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in State CEQA Guidelines Section 15064.5?

According to the CHRIS records search, one cultural resource was identified within 0.5-mile of the project site. The resource is building debris and habitation debris including cut bone, shell, glass, and dishware from farm buildings built in the early 20th century (P-56-000664), which is not considered a historical resource as defined in *CEQA Guidelines* Section 15064.5. In addition, no historical resources were identified during the pedestrian survey of the project site conducted on February 13, 2024. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5. No impact to historical resources would occur.

NO IMPACT

b. *Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to State CEQA Guidelines Section 15064.5?*

There are no known archaeological resources or archaeological deposits at the project site, and there is also an absence of substantial prehistoric or historic-period archaeological remains. However, the project site lies within an area with increased sensitivity for the presence of archaeological resources based on the presence of the present-day Ormond Lagoon Waterway, a watercourse that once traversed the project site and would have provided a variety of subsistence resources for prehistoric and historic period occupants of the area. In addition, the identification of burials within the surrounding area, as identified by Maki in 2007, suggests that the project site and surrounding area is sensitive for buried archaeological resources. Although resources have been identified within 0.5-mile of the project site, the project site has already been developed and/or its ground surface has been disturbed. Furthermore, as described in Section 8, *Project Description* of the *Initial Study* section of this IS-MND, ground disturbance involved with development of the proposed project would be limited due to the scope of improvements proposed. For these reasons, there is a low potential for encountering intact subsurface archaeological deposits. However, the potential for encountering previously undiscovered subsurface archaeological deposits cannot be ruled out.

Based on the analysis above, the proposed project could potentially cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *CEQA Guidelines* Section 15064.5 and Mitigation Measure CUL-1 is required to reduce impacts.

Mitigation Measure

CUL-1 Unanticipated Discovery of Cultural Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determine it to be appropriate, archaeological testing for California Register of Historic Resources eligibility shall be completed. If the resource proves to be eligible for the California Register of Historic Resources and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of California Code of Regulations Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall review and approve the treatment plan and archaeological testing, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Code of Regulations Guidelines Section 15126.4(b)(3)(C).

Significance After Mitigation

Implementation of Mitigation Measure CUL-1 would provide a standard procedure following the unanticipated discovery of an archaeological resource, including evaluation, consultation with Native American representatives, avoidance, and data recovery, if applicable. With implementation of Mitigation Measure CUL-1, the proposed project would not cause a substantial adverse change in the significance of a unique archaeological resource pursuant to *CEQA Guidelines* Section 15064.5, and impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is in the Transverse Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Transverse Ranges extend approximately 275 miles west-east from Point Arguello in Santa Barbara County, east to the San Bernardino Mountains, and south to the Anacapa-Santa Monica-Hollywood-Raymond-Cucamonga fault zone. The Transverse Ranges are composed of Proterozoic to Mesozoic intrusive crystalline igneous and metamorphic rocks overlain by Cenozoic marine and terrestrial sedimentary deposits and volcanic rock. More specifically, the project site is in the Oxnard Plain, a large coastal alluvial plain located south of the Santa Susana Mountains and west of the Santa Monica Mountains.

The geology of the region surrounding the project site was mapped by Clahan (2003), who identified one geologic unit, fine-grained alluvial fan deposits, underlying the project site. Fine-grained alluvial fan deposits consist of primarily clay with occasional sand and gravel lenses that are Holocene in age (Clahan 2003). Given their young age, these sediments are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources (SVP 2010) and, therefore, have low paleontological sensitivity. As a result, potential impacts to paleontological resources from construction of the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to be present within the project site. However, it is possible to discover human remains during ground disturbing activities. Pursuant to California Health and Safety Code Section 7050.5, if human remains are found the County Coroner shall be contacted immediately and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. If human remains are determined to be of Native American origin, the County Coroner shall notify the Native American Heritage Commission (NAHC) which would identify and notify a Most Likely Descendant (MLD). The MLD has 48 hours from being granted access to the project site to make recommendations for the disposition of the remains. If the MLD does not make a recommendation within the 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to procedures required through California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, impacts to human remains, including those interred outside of formal cemeteries, would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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7 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	□	□	■	□
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	□	□	■	□

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Energy use during construction activities would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, and other machinery. Energy use during construction would be temporary in nature. The construction contractor would be required to demonstrate compliance with California Code of Regulations Title 13 Sections 2449 and 2485 which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes. In addition, heavy equipment would be subject to the United States Environmental Protection Agency Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, in the interest of both environmental awareness and cost efficiency, construction contractors would reasonably be expected to utilize fuel in a manner that is not wasteful, inefficient, or unnecessary. The proposed project has no unusual characteristics or construction processes that would be more energy-intensive than are used for comparable activities. Therefore, no construction impacts would occur related to wasteful, inefficient, or unnecessary consumption of energy or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The proposed project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6 of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards

Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated buildings constructed in California. The California Energy Code applies to the building envelope, space-conditioning systems, and water heating and lighting systems of buildings and appliances and provides guidance on construction techniques to maximize energy conservation (California Energy Commission [CEC] 2022). Minimum efficiency standards are given for a variety of building elements including appliances, water and space heating and cooling equipment, and insulation for doors, pipes, walls, and ceilings. The CEC emphasizes saving energy at peak periods and seasons and improving the quality of installation of energy efficiency measures. The proposed project would adhere to these energy-saving regulations, such as mandatory requirements for lighting controls (Section 110.9) in the California Energy Code and light pollution reduction (Section 5.106.8) and Outdoor Water Use (Section 5.304) in the California Green Building Standards Code.

In addition, in the interest of both environmental awareness and cost efficiency, the proposed project would reasonably be expected to not utilize fuel in a manner that is wasteful, inefficient, or unnecessary. As a result, the proposed project would promote the use of energy conservation on the project site, consistent with the City's Energy Action Plan (City of Oxnard 2013). In addition, as discussed in Section 5, *Climate Change and Greenhouse Gas Emissions*, the proposed project would be consistent with the goals outlined in the CAAP. Therefore, proposed project operation would not result in wasteful, inefficient, or unnecessary consumption of energy or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

For the reasons described above, the proposed project would have a less than significant impact related to wasteful, inefficient, or unnecessary consumption of energy, or potential conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency.

LESS THAN SIGNIFICANT IMPACT

8 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	□	□	□	■
2. Strong seismic groundshaking that cannot be addressed through compliance with standard Code requirements?	□	□	□	■
b. 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 that cannot be addressed through compliance with standard Code requirements?	□	□	□	■
c. Be located on expansive soil, creating substantial risks to life or property that cannot be addressed through compliance with standard Code requirements?	□	□	■	□
d. Expose people or structures to inundation by seiche or tsunami?	□	□	□	■
e. Rely on dredging or other maintenance activity by another agency that is not guaranteed to continue?	□	□	□	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a.1. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

According to California Geological Survey's Earthquake Zones of Required Investigation map, the project site is not located on an active fault or within a mapped Alquist-Priolo Earthquake Fault Zone (CGS 2022). To experience direct effects from rupture of an earthquake fault (rather than strong seismic ground shaking, discussed in Impact 8a.2 below), a site would have to be directly on an active fault. As shown on Figure 5, the nearest active fault to the project site is the Bailey fault, which is approximately 5.9 miles east of the project site. Because there are no known faults located on the project site, the proposed project would have no impact related to directly or indirectly exposing people or structures to substantial adverse effects related to rupture of a known earthquake fault.

NO IMPACT

a.2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic groundshaking that cannot be addressed through compliance with standard Code requirements?

The project site is in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the proposed project. This risk is not considered substantially different than that of other similar properties in southern California. Additionally, no new structures would be built on the site. The proposed project would include minor grading, paving, and landscaping for a truck storage yard. As a result, the proposed project would have no impact related to directly or indirectly exposing people or structures to substantial adverse effects, including loss, injury, or death, involving seismic ground shaking.

NO IMPACT

b. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse that cannot be addressed through compliance with standard Code requirements?

Landslides (or slope failure) refer to the dislodging and falling of a mass of soil or rocks along a sloped surface. The project site is flat and does not have steep topography conducive to landslides. Therefore, impacts related to landslides would not occur.

Figure 5 Nearby Faults

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Additional data provided by USGS, 2020.

23-14438 EPS
Fig X Faults

A majority of the City of Oxnard is susceptible to liquefaction as a result of underlying thick alluvial deposits and high groundwater levels. In addition, the City of Oxnard is in a Seismic Hazard Area for liquefaction according to seismic hazard mapping conducted by the California Geological Survey. According to California Geological Survey's Earthquake Zones of Required Investigation map, the project site is within a liquefaction zone (CGS 2022). However, no new structures would be built on the site. The proposed project would include minor grading, paving, and landscaping for a truck storage yard. Grading and paving would be completed in accordance with City Building Division code requirements. Therefore, no impact would occur with respect to construction on potentially unstable soils resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

NO IMPACT

c. Would the project be located on expansive soil, creating substantial risks to life or property that cannot be addressed through compliance with standard Code requirements?

As shown on Figure 6, according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the project site is underlain with Camarillo sandy loam, 0 to 2 percent slopes (Cc).

Expansive soils are characterized by the presence of swelling clay minerals that can absorb a significant amount of water molecules and are susceptible to large volume changes of swelling and shrinking that are directly related to changes in the water content. Expansive soils are typically very fine grained with a high to very high percentage of clay. The on-site soils (Camarillo sandy loam and Camarillo loam) are characterized as hydric soils, not expansive soils. Therefore, the proposed project would not create a risk to life or property related to expansive soil, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project expose people or structures to inundation by seiche or tsunami?

There are no large bodies of water near the project site which would provide conditions for potential inundation by seiche or tsunami. The project site is approximately 2.8 miles southeast of the City's Channel Islands Harbor, which is the nearest area which could be affected by a seiche (City of Oxnard 2006). The southern boundary of the project site borders Ormond Lagoon Waterway, which is the nearest tsunami hazard area, but the project site itself is not located in a tsunami hazard area (DOC 2022b). Because the project site is located outside of the nearest seiche and tsunami hazard areas, the proposed project would have no impact related to exposure of people or structures to inundation by seiche or tsunami.

NO IMPACT

e. Would the project rely on dredging or other maintenance activity by another agency that is not guaranteed to continue?

The proposed project does not include dredging or maintenance activities and would therefore not rely on, and would have no impact related to, dredging or other maintenance activity by another agency that is not guaranteed to continue.

NO IMPACT

Figure 6 Project Site Soils

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Additional data provided SSURGO Downloader, 2023.

23-14438 EPS
Fig X Soils

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials that cannot be addressed through compliance with standard regulatory requirements?	☐	☐	■	☐
b. Create a substantial hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous substances or waste within one-quarter mile of an existing or proposed school, in quantities or a manner that would create a substantial hazard?	☐	☐	☐	■
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a substantial hazard to the public or the environment?	☐	☐	☐	■
e. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials that cannot be addressed through compliance with standard regulatory requirements?

Proposed project construction would involve the temporary use of potentially hazardous materials, such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction Best Management Practices (BMPs) for the use and handling of such materials would avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials during construction of the proposed project would comply with all local, state, and federal regulations regarding the handling of potentially hazardous materials, including Title 49 of the Code of Federal Regulations, Title 13 of the California Code of Regulations, and Title 22, Division 4.5 of the California Code of Regulations. The risk of construction-related spills would cease after construction is completed.

Once operational, the proposed project would involve very limited use, storage, or transport of hazardous materials because the proposed use of the site as a truck storage/parking area would not include the transport, use, or disposal of any substantive quantities of hazardous materials or wastes outside of the fuel, oils, and coolant contained within each truck and employee vehicle as part of their operation. Land uses that use, create, or dispose of hazardous materials are regulated and monitored by federal, state, and local regulations and policies. Specifically, the proposed project would be subject to compliance with the programs administered by nearby agencies, including the County of Ventura. Businesses that handle or store hazardous materials equal to or above the reportable quantities are subject to compliance with these regulatory agencies and applicable regulations around the transport, storage, and disposal of hazardous materials. These programs, as well as other federal, state, and local regulations and policies, provide a high level of protection to the public and the environment. As a result, the proposed project would have a less than significant impact related to the routine transport, use, or storage of hazardous materials or wastes.

LESS THAN SIGNIFICANT IMPACT

b. Would the project create a substantial hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment?

During construction, hazardous materials such as fuels, oils, and lubricants would be transported to the project site and used in construction vehicles and equipment. If not managed appropriately, these hazardous materials could be unintentionally released resulting in adverse effects to workers, the public and/or the environment. However, the potential for accidental releases would be minimized through adherence to existing regulatory requirements because the contractor and construction crews for the proposed project would be required to comply with all applicable regulations governing the storage, handling, and disposal of hazardous materials and waste. Adherence to applicable hazardous materials and waste regulations would minimize the risk of the release of hazardous materials to the public and environment to less than significant levels.

Similarly, compliance with applicable regulations involving hazardous materials and waste during operation, including Title 49 of the Code of Federal Regulations and Title 13 of the California Code of Regulations, would ensure that such materials are transported, used, stored, and disposed of in a manner that minimizes the potential for upset and accidental conditions resulting in the release of hazardous materials into the environment. The proposed use of the site as a truck parking and storage area would not include the storage of substantial quantities of hazardous materials. With compliance with existing regulations, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, the proposed project's potential impacts related to reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous substances or waste within one-quarter mile of an existing or proposed school, in quantities or a manner that would create a substantial hazard?

There are no existing or proposed schools within 0.25-mile of the project site. The nearest school is Art Haycox Elementary School, located at 544 Perkins Road, approximately 0.3-mile northwest of the project site. Therefore, the proposed project would not have a significant effect in emitting hazardous emissions nor handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school. Furthermore, as discussed in Section 9(a) and 9(b), operational use of hazardous materials would be carried out in accordance with all applicable regulations including Title 49 of the Code of Federal Regulations and Title 13 of the California Code of Regulations. As required by Chapter 6.95 of the California Health and Safety Code, hazardous materials storage and use during operation of the proposed project would be carried out in accordance with a Hazardous Materials Business Plan (HMBP) for the proposed project, which would establish emergency response procedures for the release or threatened release of a hazardous material. The HBMP and subsequent prevention and emergency response plans would require certification from the Oxnard Fire Department prior to operation. Implementation of the HMBP would reduce the risk of release of hazardous materials within 0.25 mile of a school. The proposed project would have no impact related to hazardous emissions or handling of hazardous or acutely hazardous substances or waste within one-quarter mile of an existing or proposed school.

NO IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a substantial hazard to the public or the environment?

The following databases were reviewed on October 30, 2023, as part of the Hazardous Materials Evaluation, to determine if a hazardous material site listed pursuant to Government Code Section 65962.5 is present on the project site:

- California Department of Toxic Substances Control (DTSC) EnviroStor (DTSC 2023)
- State Water Resources Control Board (SWRCB) GeoTracker (SWRCB 2023a)
- SWRCB Cease and Desist Orders and Cleanup Abatement Orders (SWRCB 2023b)

The database search did not identify any hazardous material sites listed pursuant to Government Code 65962.5 on the project site (DTSC 2023; SWRCB 2023a and 2023b). According to GeoTracker, there are five Leaking Undergound Storage Tank cleanup sites and three cleanup program sites within 2,000 feet of the project site, all of which have statuses of "Completed – Case Closed." Therefore, the proposed project would have no impact related to creation of a substantial hazard to the public or environment from being listed on hazardous materials sites compiled pursuant to Government Code Section 65962.5.

NO IMPACT

e. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. The proposed project would not interfere with implementation of the Ventura County Multi-Hazard Mitigation Plan because the proposed project would not preclude the County from fulfilling overarching goals in the plan (County of Ventura 2022). As part of standard development procedures, the proposed project's development plans would be submitted to the City for review and approval to ensure all new development has adequate emergency access in compliance with the Oxnard Fire Department's standards. Furthermore, implementation of the proposed project would not introduce new features that would preclude implementation of or alter the City's emergency access standards. Therefore, the proposed project would have a less than significant impact related to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a violation of any adopted water quality standards or waste discharge or treatment requirements?	☐	☐	■	☐
b. Substantially decrease 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 (e.g., the production rate of pre-existing nearby wells would drop to a level that 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 that would result in on- or off-site flooding or exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	■	☐
d. Place new structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
e. Impede or redirect flood flows such that it would increase on- or off-site flood potential?	☐	☐	☐	■
f. 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?	☐	☐	☐	■
g. Be exposed to a substantial risk related to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

A Preliminary Drainage Report by Wade E. Lewis, RCE, was completed in December 2022 which informs this analysis of potential impacts related to hydrology and water quality (Appendix D).

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project cause a violation of any adopted water quality standards or waste discharge or treatment requirements?

The proposed project would involve construction of a 0.77-acre parking lot with a perimeter fence, detention basin (with vegetated bioswale) for drainage, and restoration of a portion of a parcel back to vacant undeveloped land.

Construction activities could impact water quality due to increased erosion and sedimentation resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids. The federal Clean Water Act requires compliance with the SWRCB's *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Order No. 2009-0009-DWQ) for projects disturbing more than one acre of soil during construction. This standard is not applicable to the proposed project because the proposed project would only disturb 0.77 acres of soil. Therefore, the City would not be subject to the Construction General Permit for this project prior to construction. The City's Stormwater Quality Management Ordinance, codified in Municipal Code Chapter 22, Article XII, also implements the provisions of the federal Clean Water Act. The proposed project would be required to adhere to Municipal Code requirements, including prohibiting leaving trash or other discarded objects on site; maintaining structures within or adjacent to a storm drain system to prevent hazards to the storm drain system; and prohibiting the alteration or modification of a storm drain system without a permit (City of Oxnard 2022a).

As discussed in the Supplemental Stormwater Infiltration Test Report (Appendix C) conducted by Workman Geotechnical in October 2022, it is unlikely high groundwater levels would be encountered during proposed project construction. Mapping of historically shallowest groundwater indicates the depth to historical groundwater is approximately five feet below grade (Workman 2022). If groundwater is encountered during excavation, dewatering (pumping out subsurface groundwater) would be required to lower the on-site groundwater level to the point that it would allow subsurface construction activities to be performed in a dry condition. Disposal of dewatered groundwater to the storm drain system can introduce total dissolved solids and other constituents to surface waters. Any groundwater dewatering during excavation would be conducted in accordance with the *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (NPDES Permit No. CAG94004) which would require testing and treatment, as necessary, of groundwater encountered during dewatering prior to release to the City's storm drain system (Los Angeles Regional Water Quality Control Board [RWQCB] 2024). Compliance with RWQCB and City regulations would ensure BMPs are implemented during construction to minimize potential impacts to water quality standards, as well as ensure compliance with waste discharge and treatment requirements.

Municipal Code Section 22-223 requires a Post Construction Storm Water Management Plan be implemented to describe the design, placement, and implementation of stormwater retention and stormwater treatment BMPs for post-construction urban runoff in accordance with the requirements of the *Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer (MS4) Discharges within the Coastal Watershed of Los Angeles and Ventura Counties* (MS4 Permit; Order No. R4-2021-0105) and the *Ventura County Technical Guidance Manual for Stormwater Quality Control Measures* (Ventura County Technical Guidance Manual) (County of Ventura 2018). To control pollutants during operation, the proposed project would be required to implement BMPs to prevent and/or reduce pollutants in stormwater runoff (County of Ventura 2018). The proposed project would comply with stormwater requirements through construction of a bioswale which would be designed and installed to reduce stormwater flows and reduce discharge of pollutants during storm events. BMPs would also include, but not be limited to, using plant materials tolerant of drought and saturated soil conditions, and periodically inspecting flow entrances, ponding areas, and surface overflow areas (County of Ventura 2018). Implementation of post-construction stormwater BMPs would ensure impacts to water quality are minimized. Adherence to regulatory requirements would ensure proposed project operation would result in less than significant impacts related to violation of water quality standards or waste discharge or treatment requirements.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease 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 (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

As discussed in Section 10(a), groundwater dewatering may be required during construction. However, groundwater dewatering would be minimal and temporary, and would not substantially change the groundwater level on the project site or interfere with groundwater recharge. The City extracts groundwater from the Oxnard Basin, which is under the management of the Fox Canyon Groundwater Management Agency (FCGMA) (City of Oxnard 2021a). To achieve sustainability and prevent seawater intrusion after 2040 the FCGMA has imposed allocation cutbacks for the City, and as a result the City is required to reduce groundwater extractions by 45 percent by 2040 (City of Oxnard 2021b).

The City's UWMP anticipates the City will be able to manage its water supply portfolio to provide adequate water to meet demand through the year 2045, taking into account FCGMA management requirements (City of Oxnard 2021b). The City would provide water to the proposed project in accordance with the management requirements of the FCGMA. Therefore, water supplied to the proposed project would not substantially decrease groundwater supplies. The proposed project does not propose any new buildings and would not require on-site pumping of groundwater; therefore, the proposed project would not impact production rates or groundwater levels of pre-existing nearby wells. Although the proposed project would result in the introduction of impervious surfaces on the project site, the proposed project would implement a bioswale which would allow stormwater to infiltrate into pervious areas rather than entirely leading to the City's storm drain system. Therefore, the proposed project would result in a less than significant impact to groundwater supplies and groundwater recharge.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in on- or off-site flooding or exceed the capacity of existing or planned stormwater drainage systems?*

The project site is already developed and/or disturbed and is predominantly paved. The project site does not contain any streams or rivers. The proposed project would add 0.77 acres of impervious area to the 4.67-acre project site. The increased amount of impervious surfaces on the project site would increase stormwater runoff from the project site. However, the proposed project design includes stormwater BMPs, including a vegetated bioswale with underdrain which would accommodate peak stormwater flows in accordance with the requirements of the MS4 Permit and Ventura County Technical Guidance Manual (County of Ventura 2018). According to the Preliminary Drainage Report (Appendix D) prepared for the proposed project, the required detention volume for a 100-year storm event is 2,866 cubic feet. The bioswale would provide a detention volume of 5,292 cubic feet, which exceeds the required detention volume. Therefore, the bioswale would be sufficient to mitigate the increase of peak runoff due to the proposed increase in impervious area of the project site. The proposed project would be consistent with the MS4 Permit and Ventura County Technical Guidance Manual requirements and impacts related to alteration of the existing drainage pattern of the site in a manner that would result in on- or off-site flooding or exceedance of the capacity of existing or planned stormwater drainage systems would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project place new structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

e. *Would the project impede or redirect flood flows such that it would increase on- or off-site flood potential?*

The project site is not in the 100-year flood plain but is in a special flood hazard area (SFHA) with a 0.2 percent annual chance flood hazard (500-year flood) as defined by the Federal Emergency Management Agency (FEMA) (FEMA 2021). The proposed project does not include the construction of any substantial above-ground improvements or place new structures in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. Therefore, the proposed project would not impede or redirect flood flows, and no impact related to flooding would occur.

NO IMPACT

f. *Would the project 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?*

As discussed in impact 10(f), the project site is not in a 100-year flood hazard zone and therefore the project site is not at risk from inundation from flooding during a storm event. However, several dams, including the Santa Felicia Dam, the Castaic Lake Dam, and the Pyramid Lake Dam, are located at least 35 miles east and northeast of Oxnard (City of Oxnard 2006). The entire city of Oxnard, including the project site, is in a Dam Inundation Zone (City of Oxnard 2006). However, according to the Oxnard General Plan Background Report, the potential for dam failure is low as all dams have been constructed to the specifications set forth by State and federal agencies (City of Oxnard 2006). In addition, the California Department of Water Resources (DWR) inspects dams on an annual basis to identify any issues and ensure the continued safety of a dam's operation (DWR 2023). The proposed project does not include any features which would preclude the routine inspection of dams or otherwise increase the risk for dam failure and inundation. As a result, the proposed project would not expose additional people to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. While the proposed project would be placed within a dam inundation zone, the risk of inundation from dam failure is low as the dams are properly constructed and maintained. Given the low likelihood of dam failure combined with the characteristics of the proposed project, the potential impact from flooding due to levee or dam failure would be less than significant.

LESS THAN SIGNIFICANT IMPACT

g. Would the project be exposed to a substantial risk related to inundation by seiche, tsunami, or mudflow?

The project site is approximately 2.8 miles southeast of the City's Channel Islands Harbor, which is the nearest area that could be affected by seiche (City of Oxnard 2006). As detailed in Section 8, *Geology and Soils*, there are no large bodies of water near the project site that would facilitate conditions for potential inundation by seiche. The southern boundary of the project site borders the nearest tsunami hazard area, but the project site itself is not located in a tsunami hazard area and thus would not be at substantial risk of a tsunami (DOC 2022). The project site is flat and does not have steep topography conducive to conditions for mudflows. Therefore, the proposed project would have no impact related to exposure to a substantial risk related to inundation by seiche, tsunami, or mudflow.

NO IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable land use plan, policy, or regulation of the City or other agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating a significant environmental effect?	□	□	□	■
b. Involve land uses that are not allowed under an applicable airport land use compatibility plan?	□	□	□	■
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	□	□	□	■
d. Physically divide an established community?	□	□	□	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project conflict with an applicable land use plan, policy, or regulation of the City or other agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating a significant environmental effect?

The entire project site is designated as Light Industrial (ILT) in the City's General Plan and zoned Light Manufacturing Planned Development (M1-PD) (City of Oxnard 2023). The proposed project involves the development of a freight classification yard which includes truck parking, which would be consistent with the existing General Plan land use designation and Zoning Code. The environmental impacts of the proposed project are evaluated throughout this IS-MND, and all impacts would be reduced to a less than significant level with adherence to applicable regulations and/or incorporation of mitigation measures. Therefore, the proposed project would have no impact related to conflicts with an applicable land use plan, policy, or regulation of the City adopted for the purpose of avoiding or mitigating a significant environmental effect.

NO IMPACT

b. Would the project involve land uses that are not allowed under an applicable airport land use compatibility plan?

The closest public airport to the project site is Oxnard Airport, approximately 3.7 miles northwest of the project site. The project site is not located within the airport land use plan for Oxnard Airport and the project site is not within two miles of Naval Base Ventura County (NBVC) Point Mugu, which is approximately 3.3 miles southeast of the project site. The project site is not located in an area covered by an airport land use compatibility plan. Therefore, the proposed project would not be subject to land use restrictions under an applicable airport land use compatibility plan. For the reasons discussed above, the proposed project would have no impact related to having land uses that are not allowed under an applicable airport land use compatibility plan.

NO IMPACT

c. Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

As discussed in Section 4(f), the project site is not within any habitat conservation plan or natural community conservation plan and would therefore have no impact related to conflicting with any such plan.

NO IMPACT

d. Would the project physically divide an established community?

The proposed project involves the development of a freight classification yard which includes truck parking on a 4.76-acre property. The project site is in a semi-urban area characterized by a mix of industrial and residential development and vacant land. Immediate surrounding uses consist of the following: to the west is a property that was recently developed as a vehicle storage yard; to the southeast are railroad tracks, industrial warehouses, and vacant land; and to the north are East Hueneme Road and a residential community. A portion of the Ormond Lagoon Waterway is also southeast of the project site, beyond the railroad tracks that immediately border the project site. The proposed project would not include any features which would physically divide an established community. Therefore, the proposed project would have no impact related to physically dividing an established community.

NO IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource of value to the region or state?	□	□	□	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated in the 2030 General Plan or other adopted land use plan?	□	□	□	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project result in the loss of availability of a known mineral resource of value to the region or state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated in the 2030 General Plan or other adopted land use plan?

According to the DOC, the project site is within Mineral Resources Zone-1 (MRZ) which indicates an area containing little or no mineral deposits (CGS 2022). Additionally, the City does not designate the project site as an area containing mineral resources (City of Oxnard 2006). Therefore, the proposed project would not result in, and would have no impact related to, the loss of availability of a known mineral resource of value to the region or state, or a locally important mineral resource recovery site delineated in the 2030 General Plan.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate or expose persons to noise levels exceeding standards established in the Oxnard 2030 General Plan or Noise Ordinance, or applicable standards of other agencies?	□	□	■	□
b. Generate or expose persons to excessive groundborne vibration or groundborne noise levels?	□	□	■	□
c. Generate a substantial temporary or periodic increase in ambient noise in the project vicinity above levels existing without the project?	□	□	■	□
d. Generate a substantial permanent increase in ambient noise in the project vicinity above levels existing without the project?	□	□	■	□
e. For a project located within the airport land use plan for Oxnard Airport or within two miles of Naval Base, Ventura County at Point Mugu, would the project expose people residing or working in the area to excessive noise levels?	□	□	□	■
f. Expose non-human species to excessive noise?	□	■	□	□

Overview of Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes, which is also logarithmic. In logarithmic scales, each value is a multiple of some base value raised to a power (such as to the power of 10). On the logarithmic decibel scale, a doubling of the energy of a noise source, such as doubling of traffic volume, increases the noise level by 3 dBA; dividing the energy in half results in a 3 dBA decrease. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible; and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of a project's noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time.

The City of Oxnard *CEQA Guidelines* (City of Oxnard 2024) define noise sensitive uses as residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. Noise sensitive receptors near the site include single-family residences approximately 110 feet north of the project site boundary on East Hueneme Road. An existing concrete wall separates the nearest residences from the project site, which contributes to the attenuation of noise originating on the project site.

Ambient Noise Levels

The primary noise source in the immediate vicinity of the proposed project site is vehicular traffic on East Hueneme Road. To determine the average ambient noise levels at nearby sensitive receptors, Rincon Consultants collected two 15-minute noise measurements using an ANSI Type II integrating sound level meter (Appendix F). These noise measurements were taken between 3:12 p.m. and 3:53 p.m. on October 26, 2023. Figure 7 shows the noise measurement locations and Table 10 summarizes the results of sound level monitoring. As shown in Table 10, the 15-minute ambient sound level at the project site ranges between approximately 51 and 73 L_{eq}, with measured noise levels being much higher near East Hueneme Road.

Table 10 Sound Level Monitoring Results

Measurement Location	Sample Time	Primary Noise Source	Approximate Distance to Primary Noise Source (feet)	Leq (dBA)	Lmin (dBA)	Lmax (dBA)
ST-1	3:38 p.m.-3:53 p.m.	Traffic on East Hueneme Road	Approximately 45 feet from the centerline of East Hueneme Road	73	56	89
ST-2	3:12 p.m.-3:27 p.m.	Traffic on East Hueneme Road	Approximately 410 feet from the centerline of East Hueneme Road	51	45	60

Source: Appendix F

Figure 7 Noise Monitoring Locations

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Significance Thresholds

Construction Noise

As stated in the City of Oxnard *CEQA Guidelines* (2017), activities associated with construction are exempt from specific quantitative noise limitations in the City's Noise Ordinance but are restricted to the hours between 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays pursuant to Section 7-188(D) of the City's Noise Ordinance. According to the guidelines, construction related impacts would normally be less than significant if construction activity occurs within the timing restrictions specified in the Noise Ordinance. The guidelines also state that if construction would occur within 500 feet of a noise sensitive use, it may be appropriate to consider measures to minimize noise effects. Although construction-related noise impacts would normally be less than significant, if construction activity occurs within the timing restrictions specified in the Noise Ordinance, for purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2018) criteria will be used as a quantitative threshold to determine if it would be appropriate to consider measures to minimize noise effects. The FTA provides criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period.

On-site Stationary Operational Noise

The City has adopted exterior noise standards in the Oxnard Municipal Code regulating operational noise sources in the city. The proposed project would result in a significant impact if noise from the proposed project's stationary operational and recreational noise sources at the receptor exceeds the City's Municipal Code standards shown in Table 11.

Table 11 Exterior Noise Standards

		Allowable Exterior Sound Level (dBA)	
Sound Zone	**Type of Land Use**	**7:00 a.m. to 10:00 p.m.**	**10:00 p.m. to 7:00 a.m.**
I	Residential	55	50
II	Commercial	65	60
III	Industrial	70	70
IV	As identified on Figure IX-2 of the 2020 General Plan		

dBA = A-weighted decibel

Source: City of Oxnard Municipal Code Section 7-185, 2023.

Traffic Noise

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas. The thresholds of significance provided in Table 12 are used to assess whether or not traffic noise impacts at sensitive receptor locations are substantial; these thresholds are included in the City of Oxnard *CEQA Guidelines* and recommended by the FTA.

Table 12 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure ($dBA\ L_{dn}$ or L_{eq})	Allowable Noise Exposure Increase ($dBA\ L_{dn}$ or L_{eq})
45-49	7
50-54	5
55-59	3
60-64	2
65-74	1
75+	0

Source: FTA 2018

a. *Would the project generate or expose persons to noise levels exceeding standards established in the Oxnard 2030 General Plan or Noise Ordinance, or applicable standards of other agencies?*

c. *Would the project generate a substantial temporary or periodic increase in ambient noise in the project vicinity above levels existing without the project?*

d. *Would the project generate a substantial permanent increase in ambient noise in the project vicinity above levels existing without the project?*

Construction Noise

Over the course of a typical construction day, construction equipment activity would occur as close as 110 feet to the nearest sensitive single-family residential receptor to the north but would typically be located further away as equipment is mobile throughout the site during the day. As part of this noise and vibration analysis (the technical output of which is shown in Appendix F), construction noise was estimated using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Per applicant-provided information, the most intensive construction phase would have a dozer, excavator, and grader operating at the same time. Noise levels from these activities would be 84 dBA at 50 feet, which would be 77 dBA at the residences located 110 feet to the north, which in turn would be below the FTA's 80 dBA (8-hour) daytime construction noise threshold for residential uses. Construction would occur further away from other sensitive receptors and would therefore be less than 80 dBA L_{eq} at all other sensitive receptors. These estimates also conservatively did not account for the existing concrete wall that separates the nearest residences from the project site, which would be expected to attenuate noise further.

According to the applicant, construction would occur between the hours of 7:00 a.m. and 4:00 p.m. on weekdays and Saturdays, which is within the permitted hours of construction of 7:00 a.m. to 6:00 p.m. on weekdays and Saturdays pursuant to Section 7-188(D) of the City's Municipal Code. According to the City of Oxnard *CEQA Guidelines*, when construction would occur within 500 feet of a noise sensitive use, it may be appropriate to consider measures to minimize noise effects. However, since the proposed project is below FTA construction noise thresholds and would also comply with the City's allowed construction noise hours, noise effects would not be substantial at the nearest noise-sensitive uses. Therefore, construction noise impacts would be less than significant.

According to the City of Oxnard *CEQA Guidelines*, when construction occurs within 500 feet of a noise sensitive use, noise minimization measures are prudent. Therefore, if uncontrolled, proposed project construction noise may be considered significant. However, as explained in this impact analysis, construction noise from the proposed project would not be uncontrolled; rather, it would be governed by applicable regulations and attenuated at the nearest sensitive receptors by existing barriers.

On-Site Operational Stationary Source Noise

The primary noise source on the project site during operation would be truck parking lot noise. Proposed project operational activities would occur during Pantoja Trucking's normal business hours as shown in Table 1, from 7:00 a.m. to 5:00 p.m., Monday through Friday, consistent with the hours designated in the City's Municipal Code Section 7-185 (7:00 a.m. to 10:00 p.m) as the hours during which noise would qualify as "daytime noise." According to information provided by the applicant, no activities are proposed after 5:00 p.m. and therefore the proposed project would not generate nighttime noise. According to the applicant, the number of truck drivers employed by the company would go from its current level of six to 11 after development of the proposed project. For purposes of this analysis, a reference noise level for one truck with a sound level of 40 dBA at 50 feet was analyzed (Placeworks 2012). Using this reference noise level, a conservative approach of using the cumulative noise level of all 11 trucks being in the parking lot at once was used, as shown in Table 13. As shown in Table 13, noise generated by the proposed project would not exceed the City's most stringent daytime exterior noise level limit of 55 dBA. Therefore, the proposed project would have a less than significant impact on operational stationary noise.

Table 13 On-Site Stationary Operational Noise Levels, dBA

Source	Single-Family Residential to the North 340 feet[1] (dBA)
Cumulative Noise Level (11 trucks)	34

Source: Placeworks, 2012
[1] As measured from the approximate center of the project site

Off-Site Traffic Noise

The proposed project would generate up to 58 new daily peak vehicle trips that would increase noise levels on nearby roadways. The proposed project would not make substantial alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes. The increase in roadway traffic noise was estimated by adding the proposed project's daily trip generation, provided by the applicant, to the existing average daily traffic (ADT) volume on the surrounding roadways analyzed in the City of Oxnard Traffic Circulation Study (City of Oxnard 2008).

The existing ADT on Hueneme Road, between Oxnard Boulevard/Saviers Road to Rose Boulevard, is 15,900. This addition of 58 daily vehicle trips would result in an increase in traffic noise that would be less than 0.1 dBA Leq. For traffic-related noise, impacts would be considered significant if proposed project-generated traffic would result in exposure of sensitive receptors to an unacceptable increase in noise levels, which, for purposes of this analysis, would occur if proposed project-related traffic increases the measured 73 dBA ambient noise environment of noise-sensitive locations by 1 dB or more (see Table 12). The proposed project would result in a traffic noise increase of less than 0.1 dBA.

Additionally, proposed project-related traffic would not increase the ambient noise environment of noise-sensitive locations by 3 dB or more, which is the level of human perception for an increase in noise. The proposed project would result in a traffic noise increase of less than 0.1 dBA on the segment of Hueneme Boulevard from Oxnard Boulevard/Saviers Road to Rose Avenue. Therefore, the proposed project's traffic noise increase would not exceed 3 dBA or more, and off-site traffic noise impacts would be imperceptible at the nearest sensitive receptors.

As described throughout this impact analysis, the proposed project would generate construction noise, on-site operational noise, and off-site traffic noise, but project-related noise from these sources would be below applicable significance thresholds. The proposed project would therefore not generate or expose persons to noise levels exceeding standards established in the Oxnard 2030 General Plan or Noise Ordinance or applicable standards of other agencies; generate a substantial temporary or periodic increase in ambient noise in the project vicinity above levels existing without the project; or generate a substantial permanent increase in ambient noise in the project vicinity above levels existing without the project, and the proposed project would have a less than significant impact related to all these impact criteria.

LESS THAN SIGNIFICANT IMPACT

b. Would the project generate or expose persons to excessive groundborne vibration or groundborne noise levels?

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. While people have varying sensitivities to vibrations at different frequencies, in general people are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle.

Vibration sensitive receptors are similar to noise sensitive receptors and include residences and institutional uses such as schools, churches, and hospitals. However, vibration sensitive receptors also include buildings where vibrations may interfere with vibration-sensitive equipment. Vibration sensitive receptors near the site include single-family residences 110 feet to the north of the proposed project site.

Threshold of Significance

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as, vibratory compaction or excavation, are based on information contained in the 2018 FTA *Transit Noise and Vibration Impact Assessment Manual*. Groundborne vibration levels that could induce potential architectural damage to buildings are identified in Table 14. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec peak particle velocity (PPV) at non-engineered timber and masonry buildings (which would apply to the nearby residential structures) would prevent architectural damage.

Table 14 Groundborne Vibration Architectural Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity

Source: FTA 2018

Groundborne Vibration

Construction activities have the greatest potential to generate ground-borne vibration affecting nearby receptors, especially during grading and paving of the project site. Construction activities known to generate excessive groundborne vibration, such as pile driving and blasting, would not be needed to construct the proposed project. The greatest vibratory source during construction in the project vicinity would be a roller used during paving. Construction vibration estimates are based on vibration levels reported by the FTA. Table 15 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration.

Table 15 Construction Vibration Levels

	in/sec PPV	
Equipment	**Reference Level 25 Feet**	**Single Family Residential to the North 110 Feet**
Large Bulldozer	0.089	0.010
Loaded Trucks	0.076	0.008
Small Bulldozer	0.003	<0.001
Threshold for Structural Damage to Building		0.2
Threshold Exceeded?		**No**

Source: FTA 2018

PPV = peak particle velocity; in/sec = inches per second

Notes: Vibration analysis worksheets are included in Appendix F.

Based on the recommendations of the FTA, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent architectural damage regardless of building construction type. According to information provided by the applicant, the greatest anticipated source of vibration during the proposed project's construction activities would be from a large bulldozer/front end loader, which would be used during site preparation and grading. Based on the proposed project site plan, it is assumed the large bulldozer may be used within 110 feet of the nearest off-site residential structures to the north of the proposed project site during paving activities. A large bulldozer generates approximately 0.010 in/sec PPV at 110 feet, which would not exceed the significance threshold of 0.2 inches per second PPV. Therefore, proposed project construction activities would have a less than significant impact on the generation or exposure of persons to excessive groundborne vibration.

Operation of the proposed project would not include substantial sources of vibration. Therefore, operation of the proposed project would have no impact related to exposure to excessive groundborne vibration or groundborne noise levels.

Because the proposed project's construction vibration impacts would be less than significant and it would have no operational vibration impacts, overall vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. *For a project located within the airport land use plan for Oxnard Airport or within two miles of Naval Base, Ventura County at Point Mugu, would the project expose people residing or working in the area to excessive noise levels?*

Oxnard Airport is located approximately 3.7 miles northwest of the project site, and NBVC Point Mugu is approximately 3.3 miles southeast of the project site. The project site is not located within the airport land use plan for Oxnard Airport and is not within two miles of NBVC. Therefore, the proposed project would not expose people working in the project area to excessive noise levels related to airports or NBVC Point Mugu, and no impact would occur.

NO IMPACT

f. *Would the project expose non-human species to excessive noise?*

As discussed in Section 4, *Biological Resources,* based on the desktop/database review, field observations, and evaluation of potentially suitable habitat within the survey area, no special-status plants are expected to occur on the project site or in the vicinity based on the lack of suitable habitat and the developed nature of the site.

Similarly, due to the developed nature of the site, the project site provides minimal habitat for wildlife; therefore, no special-status wildlife is expected to occur within the project site.

Several common bird species protected by the federal Migratory Bird Treaty Act (MBTA) and Section 3503 of the California Fish and Game Code (CFGC), may nest on the existing infrastructure within the project site and on trees, shrubbery, under bridges, and on telephone poles adjacent to the project site. The proposed project may indirectly disturb nesting birds through construction noise, dust, and other human disturbances that can cause nest failure. Therefore, implementation of Mitigation Measure BIO-1 is required for compliance with the MBTA and CFGC Section 3503 through pre-construction nesting bird surveys and avoidance of active nests within the project site and surrounding areas. Mitigation Measure BIO-1 would address potential indirect impacts to nesting birds in the adjacent open space in the TNC property south of the project site.

Mitigation Measures

Implement Mitigation Measure BIO-1, as described in Section 4, *Biological Resources*.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would require preconstruction surveys and establishment of buffer zones if construction would occur during the bird breeding season. This would minimize noise impacts during construction to nesting birds, and this impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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14 Population, Education, and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Involve a General Plan amendment that could result in an increase in population beyond that projected in the 2030 General Plan that may result in one or more significant physical environmental effects?	☐	☐	☐	■
b. Induce substantial growth on the project site or surrounding area, resulting in one or more significant environmental effects?	☐	☐	☐	■
c. Result in a substantial (15 single-family or 25 multi-family dwelling units – about one-half block) net loss of housing units through demolition, conversion, or other means that may necessitate the development of replacement housing?	☐	☐	☐	■
d. Result in a net loss of existing housing units affordable to very low- or low-income households (as defined by federal and/or City standards), through demolition, conversion, or other means that may necessitate the development of replacement housing?	☐	☐	☐	■
e. Cause an increase in enrollment at local public schools that would exceed capacity and necessitate the construction of new or expanded facilities?	☐	☐	☐	■
f. Directly or indirectly interfere with the operation of an existing or planned school?	☐	☐	☐	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. *Would the project involve a General Plan amendment that could result in an increase in population beyond that projected in the 2030 General Plan that may result in one or more significant physical environmental effects?*

The proposed project would not involve a General Plan amendment. Therefore, no impact from a General Plan amendment resulting in a population increase would occur.

NO IMPACT

b. *Would the project induce substantial growth on the project site or surrounding area, resulting in one or more significant environmental effects?*

The proposed project does not include residential development and therefore would not directly cause population growth resulting in one or more significant environmental effects. The proposed project would be utilized by four office employees (under both existing and proposed conditions) and 11 truck driver employees, five more than the current level of six truck driver employees. Therefore, after development of the proposed project, the total number of employees would increase from its current level of 10 employees to 15 employees. While the proposed project would increase the total number of employees at the site by five, the proposed project's operational activities would not substantially increase as compared to its current use and the five employees are expected to be drawn from the local population and existing workforce in the area; therefore, there would be no new substantial growth on the project site or surrounding area. The proposed project would neither result in direct population growth nor result in substantial indirect population growth. Therefore, the proposed project would have no impact related to inducing substantial growth on the project site or surrounding areas that would result in one or more significant environmental effects.

NO IMPACT

c. *Would the project result in a substantial (15 single-family or 25 multi-family dwelling units – about one-half block) net loss of housing units through demolition, conversion, or other means that may necessitate the development of replacement housing?*

d. *Would the project result in a net loss of existing housing units affordable to very low- or low-income households (as defined by federal and/or City standards), through demolition, conversion, or other means that may necessitate the development of replacement housing?*

The proposed project does not involve the demolition, conversion, or other means of reduction of housing which may necessitate the development of replacement housing. Therefore, the proposed project would have no impact related to net loss of housing.

NO IMPACT

e. *Would the project cause an increase in enrollment at local public schools that would exceed capacity and necessitate the construction of new or expanded facilities?*

The proposed project would not construct residences or otherwise induce substantial population growth that could cause an increase in enrollment at local public schools. Therefore, no impact would occur.

NO IMPACT

f. Would the project directly or indirectly interfere with the operation of an existing or planned school?

The school closest to the project site is Art Haycox Elementary School, 0.3 miles northwest of the project site. However, construction and operation of the proposed project would not require a major reorganization of students or classrooms, major revisions to the school calendar, or other actions which would create temporary or permanent impacts at this or any other school. Therefore, no impact would occur.

NO IMPACT

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15 Public Services and Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Increase demand for fire protection service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects?	□	□	■	□
b. Increase demand for law enforcement service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects?	□	□	■	□
c. Increase the use of existing park facilities such that substantial physical deterioration of the facilities would occur or be accelerated or that new or expanded park facilities would be needed to maintain acceptable service levels?	□	□	■	□
d. Increase the need for or use of existing library or other community facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	□	□	■	□

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project increase demand for fire protection service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects?

The Oxnard Fire Department provides emergency and non-emergency services to the community. Station 2 located at 531 East Pleasant Valley Road is the closest fire station to the project site. This station is approximately 0.5 miles northeast of the project site when measured in a straight line between the two locations, but along the most logical driving route from the station to the project site (west on East Pleasant Valley Road, then south on Saviers Road, then east on East Hueneme Road), it is approximately 0.9 miles from the project site. The Oxnard Fire Department has a service goal of four minutes for first response travel time (Oxnard Fire Department 2023). Based on the project site's proximity to Oxnard Fire Station 2, the proposed project is expected to be adequately served by the existing fire station and no new or expanded facilities would be required.

The proposed project does not include construction of any new structures. As discussed in Section 14, *Population, Education, and Housing*, the proposed project would not generate new residents. While the proposed project would increase the total number of employees at the site by five, the proposed project's operational activities would not substantially increase compared to its current use, and the five employees are expected to be drawn from the local population and existing workforce in the area. Therefore, there would be no new substantial demand on existing fire protection services such that new or expanded facilities would be needed to maintain acceptable service levels, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project increase demand for law enforcement service such that new or expanded facilities would be needed to maintain acceptable service levels, the construction of which may have significant environmental effects?*

The project site is within the Oxnard Police Department's District 4, Beat 42 (Oxnard Police Department 2023) and is located approximately 0.3-mile southeast of an Oxnard police administrative facility within Southwinds Park, located at 300 West Clara Street. Based on the project site's proximity to the Oxnard police facility in Southwinds Park, the proposed project is expected to be adequately served by the existing police station and no new or expanded facilities would be required.

As discussed in Section 14, *Population, Education, and Housing*, the proposed project would not induce substantial population growth. Therefore, it also would not significantly increase demand for law enforcement or reduce the officer per capita service ratio. Furthermore, the proposed project would incorporate security features, such as surveillance cameras and security lighting, to minimize trespassing, vandalism, and other activities which could cause additional demand for police services. Therefore, the proposed project would not increase demand for law enforcement service such that new or expanded facilities would be needed to maintain acceptable service levels, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project increase the use of existing park facilities such that substantial physical deterioration of the facilities would occur or be accelerated or that new or expanded park facilities would be needed to maintain acceptable service levels?*

The proposed project involves the development of a truck storage yard and includes no new residential uses or recreational facilities. As discussed in Section 14, *Population, Education, and Housing,* the proposed project would not generate new residents but would increase the total number of employees at the site by five. It is not anticipated that the five new employees associated with the proposed project would result in a significant increase in the use of the existing City parks and recreational facilities, as the employees would likely be from the local population and existing workforce in the area. Thus, the proposed project would not have a significant impact on the use of existing park facilities such that substantial physical deterioration of the facilities would occur or be accelerated or that new or expanded park facilities would be needed to maintain acceptable service levels, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project increase the need for or use of existing library or other community facilities such that substantial physical deterioration of the facilities would occur or be accelerated?

As discussed in Section 14, *Population, Education, and Housing*, the proposed project would not generate new residents. While the proposed project would increase the total number of truck driver employees at the site by five, the proposed project's operational activities would not substantially increase compared to the site's current use and the five employees are expected to be drawn from the local population and existing workforce in the area. The proposed project would therefore not increase the need for, or use of, existing library or other community facilities such that substantial physical deterioration of the facilities would occur or be accelerated, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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16 Transportation and Circulation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	□	□	■	□
b. 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?	□	□	□	■
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	□	□	■	□
d. Result in inadequate emergency access?	□	□	■	□
e. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	□	□	□	■

A transportation study titled *Traffic Study and Vehicle Miles Traveled Analysis* (Appendix E) was completed for the proposed project in January 2024, which informs the entire analysis of potential impacts to transportation and circulation below.

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Pursuant to Senate Bill 743, vehicle miles traveled (VMT) has replaced level of service (LOS) as the appropriate metric for evaluating environmental transportation impacts in accordance with CEQA. While LOS measures automobile delay, VMT measures the amount of travel on roadways by all types of motorized vehicles carrying passengers or cargo. Each mile traveled is counted as one vehicle mile regardless of the number of people in a vehicle. The Technical Advisory on Transportation (published by the Governor’s Office of Planning and Research (OPR)), provides screening tools to determine when a project may have a significant VMT impact as follows:

> Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing.
>
> Screening Threshold for Small Projects
>
> Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

Trip generation estimates were calculated for the proposed project based on operational data provided by the applicant. Table 16 presents the proposed project's estimated trip generation. The business currently employs 6 truck drivers and 4 full-time office employees providing office support services to the transportation and freight business. As shown in Table 1 (which shows relevant information about Pantoja Trucking's current and proposed operations at the project site), Pantoja Trucking is expected to employ 11 truck drivers and 4 full-time office employees at the project site after completion of the proposed project. The support services include accounting, scheduling, and human resources. The hours of truck operation range from 7:00 a.m. to 4:00 p.m., and the office staff hours of operation would range from 8:00 a.m. to 5:00 p.m. Miscellaneous and customer trips occur during off-peak hours.

The peak hourly truck trip traffic for on-site business operation is 12 trips between 7:30 a.m. to 8:30 a.m. on Thursdays but this depends on when the containers are ready for pickup at the Port. The office support personnel peak trips occur from 7:30 a.m. to 8:30 a.m. on Monday through Friday. The standard operation of the trucking business consists of hooking up cargo containers on chassis at the Port of Hueneme and delivering between 10 to 20 percent directly to businesses in California and the remainder to Pantoja's yard to be stored then delivered to customers statewide over the next several days. The containers remain on the same chassis from Port to customer, with no transfer of the containers to different chassis in the Pantoja yard. Truck traffic on non-peak days averages approximately 20 (10 in/10 out) trips per day and consists of trucks hooking up the chassis with containers in Pantoja's yard and delivering to customers statewide, then returning to Pantoja's yard, usually the following day.

As shown in Table 16, the proposed project would result in a net increase of 58 average daily trips (ADT) compared to existing conditions, which would be less than the Small Project screening criteria of 110 ADT. Therefore, the proposed project would have a less than significant VMT impact.

LESS THAN SIGNIFICANT IMPACT

Table 16 Project Trip Generation Estimates

Land Use	Employee	ADT	AM Peak Hour Trips (Entering/Exiting)	PM Peak Hour Trips (Entering/Exiting)
Existing Trucking Operation:		-	-	-
Office Employees	4	16	4 (4/0)	4(0/4)
Customer/Miscellaneous	2	4	0 (0/0)	0 (0/0)
Truck Drivers	6	12	6 (6/0)	6 (0/6)
Truck Deliveries	-	24[a]	12 (6/6)	6 (6/0)
Total Trip Generation		56	22 (16/6)	16 (6/10)
Proposed Trucking Operation:		-	-	-
Office Employees	4	20	4 (4/0)	4 (0/4)
Customer/Miscellaneous	2	4	0 (0/0)	0 (0/0)
Truck Drivers	11	22	11 (11/0)	11 (0/11)
Truck Deliveries	-	72(b)	12 (6/6)	6 (6/0)
Total Trip Generation		114	27 (21/6)	21 (6/15)
Net Trip Generation		+58	5 (5/0)	5 (0/5)

a =based on peak existing daily trips
b = based on peak future daily trips

b. *Would the project 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?*

The project site is not located within an airport land use compatibility plan or in the vicinity of an airport. The closest airport is Oxnard Airport, located approximately 3.7 miles northwest of the project site. Because the project site is not within the airport land use plan/sphere of influence, the proposed project would not interfere with air traffic from Oxnard Airport.

The project site is located approximately 3.3 miles northwest of the airport landing strip on NBVC Point Mugu but is not within the flight path of NBVC Point Mugu. No new structures are being proposed on the project site. Additionally, the proposed project does not include any features that would involve or accommodate air traffic (such as a helicopter landing pad) and would not generate new air traffic or divert existing air traffic. Therefore, the proposed project would not result in a change in air traffic patterns, and no impact would occur.

NO IMPACT

c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

Vehicular access to the project site would be facilitated via the proposed new driveway along the project site's frontage with Hueneme Road opposite Conner Drive. This driveway would be 36 feet wide and permit vehicle ingress and egress from the project site. The existing driveway would be gated off after construction of the new driveway with an eight-foot high wrought iron security fence. The proposed project would be subject to review and approval by the City of Oxnard Community Development and Public Works Departments. Access to the project site would be required to comply with all City design standards thus ensuring adequate design and construction of the proposed improvements. For the reasons discussed above, the proposed project does not include design features, such as sharp curves or dangerous intersections, or incompatible uses that would result in traffic safety hazards, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in inadequate emergency access?

The proposed project is a truck storage yard with vehicle access provided via a new driveway along Hueneme Road directly opposite its intersection with Conner Drive. The proposed driveway is required to be designed and constructed to meet City of Oxnard design standards. Furthermore, the proposed project would not construct any improvements within the public right-of-way that would adversely affect local circulation/access or hinder emergency response. With required adherence to City requirements for emergency vehicle access, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Transit Facilities

Gold Coast Transit District (GCTD) provides fixed-route and paratransit services in the Cities of Ojai, Oxnard, Port Hueneme, Ventura and in the unincorporated County areas between the cities. The project site is served by Route 23 (Oxnard College – Naval Base – Esplanade). The closest GCTD stops to the project site include the Hueneme Road and Courtland Street stop (approximately 400 feet west of the project site) and the Saviers Road and Hood Way stop (approximately 0.2-mile northwest of the project site). The project site is not located along a high-quality transit corridor[9]; however, GCTD transit service would be available to employees of the proposed project.

Bike and Pedestrian Facilities

There are existing sidewalks along Hueneme Road and Saviers Road, which connect the project site to transit service within its vicinity. In addition, Hueneme Road and Saviers Road are identified as part of the City of Oxnard Bikeway System. Class II bike lanes currently exist along Hueneme Road from "J" Street to Saviers Road and Arcturus Avenue to Edison Drive through the City of Oxnard. Class II bike lanes are provided on Saviers Road from Hueneme Road to Birch Street just south of the Five Points intersection. The bike lanes on Hueneme Road and Saviers Road connect the project site to the residential areas north, east, and west of the project site. In conclusion, the project site is well served by existing bike lanes and transit facilities, and the proposed project does not include any components that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. There would be no impact related to any potential conflicts with adopted policies, plans, or programs supporting alternative transportation.

NO IMPACT

[9] California Public Resources Code Section 21155 defines a high-quality transit corridor as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (FindLaw, 2025).

17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:	☐	☐	■	☐
b. 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)?	☐	☐	■	☐

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?*

On September 1, 2023, Rincon Consultants sent an SLF search request to the NAHC (see Section 6, *Cultural Resources* for an explanation of these acronyms, and Appendix B for documentation related to the tribal consultation process). An SLF search is the process of investigating official records and documents, such as government archives, historical maps, land surveys, property deeds, etc. to identify and verify the presence of sacred or culturally significant sites within a given geographic area. On September 8, 2023, the NAHC responded to Rincon's SLF request, stating the SLF search results were negative. The records search identified no tribal cultural resources within the project site or within the records search radius of five miles from the project site. Therefore, the proposed project would not adversely affect known tribal cultural resources that are listed or eligible for listing in the state or local register and impacts would be less than significant. On October 5, 2023, the City sent AB 52 letters to Native American tribal groups. No responses were received from any of the tribes; therefore, on November 5, 2023[10], AB 52 consultation concluded. Because no tribal cultural resources were identified as a result of AB 52 consultation, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

[10]Pursuant to AB 52, each tribe has 30 days to request consultation upon receipt of a written project notice from the lead agency. AB 52 consultation concludes when either: 1) the parties agree to measures to mitigate to avoid significant effects on the tribal cultural resources; or 2) a party, acting in good faith and after reasonable effort, concludes that a mutual agreement cannot be reached.

18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Need new or expanded water supply entitlements that are not anticipated in the current Urban Water Management Plan?	☐	☐	■	☐
b. Would additional wastewater conveyance or treatment capacity be required to serve project demand and existing commitments?	☐	☐	■	☐
c. Generate solid waste that would exceed the permitted capacity of a landfill serving the City?	☐	☐	■	☐
d. Conflict with federal, state, or local statues or regulations related to solid waste?	☐	☐	☐	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Would the project need new or expanded water supply entitlements that are not anticipated in the current Urban Water Management Plan?

The project site is within the boundary of the City of Oxnard's water service area, with existing potable water infrastructure and water supply available to service the proposed project. The City's 2020 Urban Water Management Plan (UWMP) addresses water supply during normal, dry, and multiple dry years for 2025, 2030, 2035, 2040, and 2045 (City of Oxnard 2021b). The proposed project would utilize water for the maintenance of the landscape screening along the site perimeter. The proposed project would install water lines on the project site to connect to the City's system, and the City would provide water service to the proposed project through these lines. The proposed project would be required to comply with City Code Chapter 22, Article XIII, Landscape Water Conservation Standards, as well as any other City-mandated water use restrictions, which would help reduce water consumption needed for on-site landscaping.

Furthermore, the 2020 UWMP accounts for the water use of current and future development of all use types for the years 2020 to 2045. The project site is zoned M-1-PD (Light Manufacturing Planned Development). Therefore, the water demand for future industrial uses on the project site has been accounted for in the 2020 UWMP because the UWMP reflects current land use and zoning, with which the proposed project is consistent. As such, the proposed project would not require new or expanded water supply entitlements that are not anticipated in the 2020 UWMP, which indicates that the City would have sufficient water supplies to meet all demands within its service boundary through 2045, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would additional wastewater conveyance or treatment capacity be required to serve project demand and existing commitments?

The City provides wastewater treatment services at the Oxnard Wastewater Treatment Plant, which has a rated capacity of 31.7 million gallons per day (MGD) and an average daily flow of 16 MGD (City of Oxnard 2022c). Existing uses on the project site currently discharge wastewater to existing City wastewater pipelines. The proposed project would involve construction of a parking area for trucks; removal of a perimeter chain link fence; construction of a perimeter wrought iron fence with landscaping and a detention basin for drainage; and restoration of part of the project site back to vacant undeveloped land. None of these proposed uses would generate wastewater. Three existing industrial buildings totaling 24,313 square feet, as well as accessory structures with truck parking areas, are present on the rest of the project site, but no changes to these three existing buildings or accessory structures are included in the proposed project. The proposed project would lead to five new truck drivers being employed by Pantoja (see Table 1), but because these employees would only pick up and drop off their vehicles at the project site rather than working from the project site, the proposed project would not generate a substantial increase in wastewater compared to existing conditions or conditions prior to the westernmost parcel of the project site being converted from a disked dirt field to a gravel lot by the applicant as part of the development included in the proposed project. As a result, additional wastewater conveyance or treatment capacity would not be required to serve proposed project demand and the City’s existing commitments, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project generate solid waste that would exceed the permitted capacity of a landfill serving the City?

Solid waste generated by the proposed project would be disposed of at the Toland Road Landfill and/or Simi Valley Landfill and Recycling Center. Toland Road Landfill has a remaining capacity of approximately 16,068,864 cubic yards and a maximum permitted throughput of 2,864 tons per day of solid waste (California Department of Resources, Recycling, and Recovery [CalRecycle] 2023a). Simi Valley Landfill and Recycling Center has a remaining capacity of approximately 82,954,873 cubic yards and a maximum permitted throughput of 9,250 tons per day of solid waste (CalRecycle 2023b).

Construction of the proposed project would be limited to paving and landscaping and would involve no demolition of buildings or other structures. Construction of the proposed project would therefore generate little to no solid waste, and only on a one-time basis during construction as opposed to throughout operation of the proposed project. Operation of the proposed project would involve an increase of five employees compared to existing conditions, and these employees would likely be drawn from the local workforce because Pantoja Trucking already operates in this location and because of the size of the local labor pool: Oxnard alone has a population of over 200,000 people (City of Oxnard, 2025). The proposed project would therefore generate little to no solid waste compared to existing conditions. As a result, the proposed project would not generate solid waste that would exceed the permitted capacity of a landfill serving the City, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project conflict with federal, state, or local statues or regulations related to solid waste?

In compliance with Assembly Bill 939, the proposed project would divert a minimum of 50 percent of its solid waste from landfills. The City’s Environmental Resources Division provides recycling and organics collection containers, reviews and adjusts the number and size of solid waste containers and/or collection frequency, and provides educational information to employees and facility users about recyclable and organic materials (City of Oxnard 2022d). Pursuant to the City’s Solid Waste Ordinance, the proposed project would utilize the City’s solid waste services. The proposed project is required to comply with these mandatory solid waste regulations. Therefore, the proposed project would not conflict with federal, state, or local statues or regulations related to solid waste, and no impact would occur.

NO IMPACT

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19 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	□	□	□	■
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	□	□	□	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	□	□	□	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	□	□	□	■

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

According to the California Department of Forestry and Fire Protection's (CAL FIRE) Fire Hazard Severity Zone Viewer, the project site is not within a State Responsibility Area or Very High Fire Hazard Severity Zone. The nearest State Responsibility Area and Very High Fire Hazard Severity Zone is located approximately 6.9 miles east of the project site (CAL FIRE 2023). Because the project site is not in or near an area subject to high wildfire risk, the proposed project would have no impact related to exposure of people or structures to significant risks related to wildfires.

NO IMPACT

20 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	□	■	□	□
b. 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. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	□	□	■	□

Significance Thresholds

The impact analysis below relies on the impact criteria listed immediately above, where applicable, in determining whether the proposed project would result in an impact, as well as the level of the impact being evaluated.

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this IS-MND. Throughout this IS-

MND, where impacts were determined to be potentially significant, mitigation measures have been required to reduce those impacts to less than significant levels. Accordingly, with incorporation of the mitigation measures required in this IS-MND, the proposed project would not substantially degrade the quality of the environment and impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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)?*

As discussed throughout Sections 1 through 19 of the *Environmental Checklist* sections of this IS-MND, implementation of the proposed project has the potential to result in effects to the environment that are individually limited but cumulatively considerable in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. In any instance where the proposed project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential effects to less than significant levels. A list of approved/pending (i.e., probable) future projects within 0.5 miles of the project site, obtained from the City of Oxnard during preparation of this IS-MND, is shown in Table 17. As shown in Table 17, the approved/pending project on the list that is closest to the project site is the Port of Hueneme Vehicle Storage Yard project directly adjacent to the project site. This property was recently developed with the intended use shown in this table (and as described in various sections of this IS-MND beginning with Section 9, *Surrounding Land Uses and Setting* of this Initial Study) as a vehicle storage yard.

Table 17 Approved/Pending Projects in City of Oxnard Near Project Site

Project Name	Address/Location	Land Use	Units/Size	Approximate Distance from Project Site (Miles)
Garden City	5600 and 5690 Cypress Road	Farmworker Residential	30 units	0.15
JBGR Investments	5849 Saviers Road	Townhomes	20 units	0.07
Daya Enterprises Gas Station	5587 Saviers Road	Gas Station	3,000 sf	0.08
Cypress Place at Garden City	5536 and 5582 Cypress Road	Multi-Family Residential	150 units	0.21
Cypress Court Tiny Homes	5208-5230 Cypress Road	Multi-Family Residential	30 units	0.43
Pleasant Valley Plaza	105 West Pleasant Valley Road	Commercial	11,392 sf	0.45
Port of Hueneme Vehicle Storage	Southeast corner of Hueneme Road and Perkins Road	Vehicle Storage	33.7 acres	Adjacent to project site

sf = square feet

Relative to each environmental topic below, the proposed project's incremental effects and whether they would be "cumulative considerable" were evaluated in conjunction with the projects listed on Table 17.

Aesthetics and Urban Design

The proposed project would not substantially change the existing character of the project site's viewshed (which is from a scenic roadway), because the proposed project would continue the existing use of the site as a truck storage yard. Also, no new buildings are being proposed as part of the proposed project; therefore, the proposed project would not substantially alter any existing views of the Ormond Beach coastline or nearest mountains.

This type of development would be consistent with surrounding uses and would not substantially block scenic views, in part because views of scenic resources such as the Ormond Beach coastline or the Santa Monica Mountains are available from nearby sections of Hueneme Road such as Hueneme Road east of its intersection with Edison Drive, which is located approximately 0.5 miles east of the project site. Additionally, while the proposed project would add development along a City designated scenic roadway, landscaping will be provided to screen the newly developed parking area from this scenic roadway, minimizing any impacts to the visual corridor.

All development in the immediate vicinity of the proposed project would be required to comply with the development regulations and design standards contained in the City's Development Code, which would ensure that minimum standards related to visual character and quality are met to preclude adverse aesthetic effects (e.g., size, scale, building materials, lighting). As discussed in Section 1(d) of this IS-MND, there are no scenic resources that would be affected by the proposed project. As discussed in Section 1(e), compliance with existing City regulations and review procedures relating to lighting would ensure the proposed project's light and glare impacts would be less than significant. These regulations would also apply to other potential future projects (cumulative development) in the area. Accordingly, the proposed project's aesthetic impacts would not be cumulatively considerable.

Agricultural Resources

As explained in Section 2, *Agricultural Resources* of this IS-MND, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use or conflict with an existing Williamson Act contract for the following reasons: the project site is not used for agriculture and is zoned M-1-PD (Light Manufacturing Planned Development); surrounding lands are not currently used for agriculture and are not (based on their land use designation and zoning, which represent both current and planned future land uses for the project site) planned for agricultural use in the future; and the project site is not under an existing Williamson Act contract (DOC 2022). For these reasons, the proposed project would not cause further land use compatibility issues with agricultural uses beyond existing conditions. The proposed project would have no impact related to changes in the existing environment that, due to their location or nature, could result in conversion of off-site farmland to non-agricultural use. Because the proposed project would have no impact on agricultural resources, there is no potential for the proposed project to contribute to a cumulatively considerable impact to agricultural resources. Accordingly, the proposed project's impacts on agricultural resources would not be cumulatively considerable.

Air Quality

Based on VCAPCD guidance, a project that is determined to be inconsistent with the AQMP is also determined to have a significant cumulative adverse air quality impact (VCAPCD 2003). As discussed in Section 3, *Air Quality*, the proposed project would not exceed VCAPCD's regional threshold for criteria pollutants during construction or operation of the proposed project, would have a less than significant impact related to federal or state air quality standards, and would not contribute substantially to an air quality violation. In addition, the proposed project would not expose sensitive receptors to a substantial amount of TACs during construction or operation of the proposed project. With the incorporation of fugitive dust reduction measures in compliance with VCAPD Rule 55, impacts associated with San Joaquin Valley Fever would be less than significant. Additionally, as discussed in Section 3(e), the proposed parking lot/trucking operation is not identified on CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) as a potential odor source and would thus have a less than significant impact related to odors. In summary, the proposed project would not make a substantial contribution to cumulatively considerable air quality impacts.

Biological Resources

The project site does not support any sensitive plant or wildlife species, riparian or sensitive natural habitat, or federally protected wetlands; therefore, there is no potential for the proposed project to contribute to a cumulatively considerable impact under these resources. Although the project site is occupied with a truck storage yard under existing conditions, there is the potential that nesting birds may nest on the existing infrastructure within the project site and on trees, shrubbery, under bridges, and on telephone poles adjacent to the project site prior to construction. The proposed project's potential impacts on nesting birds could be cumulatively considerable. Implementation of Mitigation Measure BIO-1 would ensure that the proposed project would not make a substantial contribution to any cumulative effects related to this impact by ensuring that no direct take of nesting birds occurs during construction.

As discussed in Section 4(d) of this IS-MND, the project site does not function as a wildlife movement corridor or habitat linkage, but the adjacent Ormond Lagoon Waterway may function as a nursery site or a wildlife corridor for common fish species. Because the bioswale included in the proposed project would filter pollutants before they reach off-site waterways, and through required compliance with regulations relating to water quality and lighting, the proposed project would not make a substantial contribution to cumulative impacts related to wildlife corridors or habitat linkages. The project site is not located within a Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan; therefore, no impact (either cumulative or otherwise) related to habitat plans would occur.

Climate Change and Greenhouse Gas Emissions

As described in Section 5, *Climate Change and Greenhouse Gas Emissions* of this IS-MND, global climate change (GCC) occurs as the result of global emissions of GHGs. An individual development project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The *CEQA Guidelines* also emphasize that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See *CEQA Guidelines* Section 15130[f]). Accordingly, the analysis in Section 5, *Climate Change and Greenhouse Gas Emissions* of this IS-MND reflects a cumulative impact analysis of the GHG emissions related to the proposed project and, as concluded in Section 5, *Climate Change and Greenhouse Gas Emissions* of this IS-MND, the proposed project would not result in a cumulatively considerable impact related to GHG emissions.

Cultural Resources

The proposed project would have no impact on historical resources or human remains, and less than significant impacts on paleontological resources; therefore, the proposed project would not make a substantial contribution to a cumulatively considerable impact related to these resources. Implementation of the proposed project has the potential to impact buried archaeological resources on the project site in the event any such resources were found on-site during construction, which could contribute to a significant cumulative impact to archaeological resources. Implementation of Mitigation Measure CUL-1 would provide a standard procedure following the unanticipated discovery of an archaeological resource, including evaluation, consultation with Native American tribal representatives, avoidance, and data recovery, if applicable. This would reduce the proposed project's potential impacts to archaeological resources to less than significant levels and ensure that the proposed project would not make a substantial contribution to cumulatively considerable impacts related to archaeological resources. Therefore, the proposed project would not result in a cumulatively considerable impact related to cultural resources.

Energy

The proposed project's construction and operation energy consumption would not be inefficient, wasteful, or otherwise unnecessary and would not obstruct a state or local plan for renewable energy or energy efficiency. In addition, all future projects (including the cumulative projects listed in Table 17) would also be required to comply with the California Energy Code and the California Green Building Standards Code, which establishes standards for energy efficiency and "green" construction. Therefore, the proposed project's energy impacts would be less than significant, and the proposed project would not make a substantial contribution to cumulatively considerable impacts related to energy.

Geology and Soils

As discussed in Section 8, *Geology and Soils* of this IS-MND, the proposed project would have no impact or a less than significant impact related to all geology and soils impact criteria. Because potential effects related to geology and soils are inherently site-specific, there is no potential for the proposed project to contribute to a cumulatively considerable impact under this topic because any impacts of the proposed project would not extend off-site to combine with impacts from other projects. Furthermore, all development proposals would be required to comply with applicable federal, state, and local regulations that are in place to preclude adverse geology and soils effects, including effects related to strong seismic ground shaking, fault rupture, soil erosion, and hazardous soil conditions (e.g., liquefaction, expansive soils, landslides). Therefore, the proposed project would not substantially contribute to a cumulatively considerable geology and soils impact.

Hazards and Hazardous Materials

As discussed in Section 9, *Hazards and Hazardous Materials* of this IS-MND, the proposed project would have no impact or a less than significant impact related to all hazards and hazardous materials impact criteria. In addition, all development proposals would be required to comply with applicable federal, state, and local regulations regarding the transport, storage, and disposal of hazardous materials and the Oxnard Fire Department's emergency access standards; therefore, the proposed project would not substantially contribute to a cumulatively considerable hazards and hazardous materials impact.

Hydrology and Water Quality

As discussed in Section 10, *Hydrology and Water Quality* of this IS-MND, the proposed project would have no impact or a less than significant impact related to all hydrology and water quality impact criteria. Furthermore, all development projects would be required to implement plans during construction and operation to minimize adverse effects to water quality, which would avoid a cumulatively considerable impact. As discussed in Section 10(b), the proposed project would not substantially change the groundwater level on the project site or interfere with groundwater recharge and would not substantially contribute to a cumulatively considerable impact related to groundwater.

The proposed project and other nearby projects would also be required to comply with federal, state, and local regulations in order to preclude flood hazards both on- and off-site. Compliance with federal, state, and local regulations would require on-site areas to be protected, at a minimum, from flooding during peak storm events (i.e., 100-year storm) and proposed development would not expose downstream properties to increased flooding risks during peak storm events. Therefore, the proposed project would not substantially contribute to a cumulatively considerable flooding impact.

Land Use and Planning

The proposed project would not physically divide an established community, or conflict with an applicable land use plan, airport land use compatibility plan, habitat conservation plan, or natural community conservation plan. Because the proposed project would have no impact regarding these thresholds, the proposed project would not substantially contribute to a cumulatively considerable land use and planning impact.

Mineral Resources

The proposed project would have no impact on mineral resources. Therefore, the proposed project would not contribute to a cumulatively considerable mineral resources impact.

Noise

Noise levels diminish rapidly with distance; therefore, for a development project to contribute to a noise-related cumulative impact, it must be near another development project or source of substantial noise. None of the cumulative projects listed in Table 17, all of which are within 0.5 miles of the project site, are expected to have periods of substantial construction noise (e.g., operation of heavy, off-road diesel equipment) that would overlap with substantial periods of proposed project-related construction noise. Accordingly, cumulatively considerable impacts related to periodic construction and construction-related vibration would not occur. Under long-term operating conditions the proposed project would comply with FTA guidelines and would not produce noticeable levels of vibration; therefore, cumulatively considerable impacts related to these issue areas would not occur.

The analysis provided under Section 13(d) of this IS-MND demonstrates that the proposed project would not result in a cumulatively considerable impact related to transportation noise under long-term conditions. Furthermore, the proposed project would not occur within two miles of NBVC Point Mugu and is not located within the airport land use plan for Oxnard Airport. Therefore, the proposed project would not create a cumulatively considerable impact by exposing people residing or working within the project site to excessive noise levels. The proposed project would implement buffer zones as described in Mitigation Measure BIO-1 in Section 4, *Biological Resources*, to minimize noise impacts to nesting birds during construction. Accordingly, cumulatively considerable noise impacts to nesting birds would be reduced to a level of less than significant. In summary, the proposed project would not substantially contribute to a cumulatively considerable noise impact.

Population, Education, and Housing

The proposed project would not implement a land use that generates new residents and would not require the construction of replacement housing. Accordingly, the proposed project would not substantially contribute to a cumulatively considerable effect related to population and housing.

Public Services and Recreation

The proposed project would generate five truck driver employees and would not directly result in the introduction of new residents to the city. Therefore, the proposed project would have no potential to contribute to a cumulatively considerable impact to resident-serving public facilities (such as fire protection, police protection, schools, parks, libraries, and other public facilities or services) or recreation facilities. Therefore, the proposed project would not substantially contribute to a cumulatively considerable impact related to public services and recreation.

Transportation and Circulation

As discussed in Section 16, *Transportation and Circulation* of this IS-MND, the proposed project would have no impact or a less than significant impact related to all transportation and circulation impact criteria. The proposed project would not conflict with any City policies addressing the circulation network and would not generate substantial VMT. In addition, the proposed project would not result in inadequate emergency access; does not include design features, such as sharp curves or dangerous intersections, or incompatible uses that would result in traffic safety hazards; and would not result in a change in air traffic patterns. Therefore, the proposed project would not substantially contribute to cumulatively considerable impacts related to transportation and circulation.

Tribal Cultural Resources

No tribal cultural resources have been found on the project site and the SLF search conducted for this IS-MND identified no tribal cultural resources within the project site or records search radius. Furthermore, no Native American tribal groups responded to the City’s AB 52 consultation outreach and no tribal cultural resources were identified. Therefore, the proposed project would not substantially contribute to a cumulatively considerable tribal cultural resources impact.

Utilities and Service Systems

As discussed in Section 18, *Utilities and Service Systems* of this IS-MND, the proposed project would have no impact or a less than significant impact related to all utilities and service systems impact criteria. The proposed project would require a negligible amount of water for landscaping and would not generate a substantial increase in wastewater compared to existing conditions or conditions prior to the westernmost parcel of the project site being converted from a disked dirt field to a gravel lot by the applicant as part of the development included in the proposed project. Construction of the proposed project would involve negligible solid waste generation because project construction activities would be limited to paving and landscaping and would involve no demolition of buildings or other structures. Operation of the proposed project would involve negligible solid waste generation because the five additional employees generated by the proposed project would be truck drivers who would only use the project site for pick-up and drop-off of their trucks. Furthermore, development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of infrastructure plans is intended to ensure that adequate public utility services and resources are available to serve both individual development projects and cumulative growth in the region. Each development project is subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with the utility providers would allow for the provision of utility services to the proposed project and other developments. The proposed project and other planned projects are subject to connection and service fees to offset increased demand and assist in facility expansion and service improvements (at the time of need). For the reasons discussed above, the proposed project would not substantially contribute to a cumulatively considerable utilities and service systems impact.

Wildfire

As discussed in Section 19, *Wildfire,* of this IS-MND, the project site is not within a State Responsibility Area or Very High Fire Hazard Severity Zone. Therefore, implementation of the proposed project would have no impact, either at the project level or cumulatively, related to the *CEQA Guidelines* wildfire impact criteria.

LESS THAN SIGNIFICANT IMPACT

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, and as analyzed in this IS-MND, impacts to human beings are associated with air quality contaminants, hazards related to adverse geologic conditions, exposure to hazards and hazardous materials, and excessive noise. As detailed in analyses in Section 3, *Air Quality*; Section 8, *Geology and Soils*; Section 9, *Hazards and Hazardous Materials*; Section 10, *Hydrology and Water Quality*; and Section 13, *Noise*, the proposed project would not result, either directly or indirectly, in substantial adverse effects related to these hazards. Compliance with applicable rules and regulations, as described throughout this IS-MND, would reduce potential impacts on human beings to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

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List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the City of Oxnard. Persons involved in preparation of the IS-MND are listed below.

City of Oxnard

Jay Dobrowalski, Planning Supervisor

Rincon Consultants, Inc.

Wendy Worthey, Principal in Charge
Greg Martin, Project Manager
Lauren Reese, Assistant Project Manager
Mabel Chan, Environmental Planner
Thea Benson, Senior Biologist
Shannon Morris, Biologist
Courtney Montgomery, Archaeologist
Aaron Rojas, Air Quality & GHG Specialist
Jesse McCandless, Noise Specialist

Associated Transportation Engineers

Darryl F. Nelson, PTP, Senior Transportation Planner

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1.1. Basic Project Information

Data Field	Value
Project Name	Pantoja Trucking Project
Construction Start Date	7/1/2024
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	16.0
Location	34.14698861518964, -119.1763920281675
County	Ventura
City	Oxnard
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3419
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Parking Lot	0.77	Acre	0.77	0.00	28,742	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	6.37	9.64	0.01	0.27	1.06	1.33	0.24	0.13	0.37	—	1,432	1,432	0.06	0.04	0.77	1,439
Mit.	0.27	6.37	9.64	0.01	0.27	0.50	0.76	0.24	0.07	0.31	—	1,432	1,432	0.06	0.04	0.77	1,439
% Reduced	—	—	—	—	—	53%	43%	—	46%	16%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.70	7.61	8.99	0.01	0.37	0.07	0.44	0.34	0.02	0.36	—	1,301	1,301	0.05	0.01	0.01	1,306
Mit.	0.70	7.61	8.99	0.01	0.37	0.07	0.44	0.34	0.02	0.36	—	1,301	1,301	0.05	0.01	0.01	1,306
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	1.43	1.78	< 0.005	0.07	0.06	0.13	0.06	0.01	0.07	—	277	277	0.01	< 0.005	0.03	278
Mit.	0.09	1.43	1.78	< 0.005	0.07	0.03	0.10	0.06	0.01	0.07	—	277	277	0.01	< 0.005	0.03	278
% Reduced	—	—	—	—	—	47%	22%	—	37%	4%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.26	0.33	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	45.8	45.8	< 0.005	< 0.005	0.01	46.0
Mit.	0.02	0.26	0.33	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	45.8	45.8	< 0.005	< 0.005	0.01	46.0
% Reduced	—	—	—	—	—	47%	22%	—	37%	4%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.27	6.37	9.64	0.01	0.27	1.06	1.33	0.24	0.13	0.37	—	1,432	1,432	0.06	0.04	0.77	1,439
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.70	7.61	8.99	0.01	0.37	0.07	0.44	0.34	0.02	0.36	—	1,301	1,301	0.05	0.01	0.01	1,306
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.09	1.43	1.78	< 0.005	0.07	0.06	0.13	0.06	0.01	0.07	—	277	277	0.01	< 0.005	0.03	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.26	0.33	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	45.8	45.8	< 0.005	< 0.005	0.01	46.0

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.27	6.37	9.64	0.01	0.27	0.50	0.76	0.24	0.07	0.31	—	1,432	1,432	0.06	0.04	0.77	1,439
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.70	7.61	8.99	0.01	0.37	0.07	0.44	0.34	0.02	0.36	—	1,301	1,301	0.05	0.01	0.01	1,306
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.09	1.43	1.78	< 0.005	0.07	0.03	0.10	0.06	0.01	0.07	—	277	277	0.01	< 0.005	0.03	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.26	0.33	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	45.8	45.8	< 0.005	< 0.005	0.01	46.0

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,426	2,426	0.07	0.38	5.19	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,427	2,427	0.07	0.38	0.13	2,542
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.05	2.78	0.80	0.02	0.02	0.43	0.45	0.02	0.12	0.14	0.00	1,741	1,741	0.05	0.27	1.60	1,825
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	0.00	288	288	0.01	0.05	0.27	302

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Area	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,426	2,426	0.07	0.38	5.19	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512
Area	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,427	2,427	0.07	0.38	0.13	2,542
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	2.78	0.80	0.02	0.02	0.43	0.45	0.02	0.12	0.14	—	1,711	1,711	0.05	0.27	1.60	1,795

Area	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	2.78	0.80	0.02	0.02	0.43	0.45	0.02	0.12	0.14	0.00	1,741	1,741	0.05	0.27	1.60	1,825
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297
Area	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	0.00	288	288	0.01	0.05	0.27	302

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Area	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,426	2,426	0.07	0.38	5.19	2,546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512

Area	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	0.00	2,427	2,427	0.07	0.38	0.13	2,542
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	2.78	0.80	0.02	0.02	0.43	0.45	0.02	0.12	0.14	—	1,711	1,711	0.05	0.27	1.60	1,795
Area	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Water	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	2.78	0.80	0.02	0.02	0.43	0.45	0.02	0.12	0.14	0.00	1,741	1,741	0.05	0.27	1.60	1,825
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297
Area	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	0.00	288	288	0.01	0.05	0.27	302

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	3.09	3.26	0.01	0.16	—	0.16	0.15	—	0.15	—	462	462	0.02	< 0.005	—	464
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.11	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	—	15.2
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.52	2.52	< 0.005	< 0.005	—	2.52
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.2	68.2	< 0.005	< 0.005	0.29	69.3
Vendor	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

Hauling	0.01	0.32	0.09	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	215	215	0.01	0.03	0.47	226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.08	7.08	< 0.005	< 0.005	0.01	7.43
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36
Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.17	1.17	< 0.005	< 0.005	< 0.005	1.23

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	3.09	3.26	0.01	0.16	—	0.16	0.15	—	0.15	—	462	462	0.02	< 0.005	—	464
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.11	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	—	15.2
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.52	2.52	< 0.005	< 0.005	—	2.52
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.2	68.2	< 0.005	< 0.005	0.29	69.3
Vendor	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
Hauling	0.01	0.32	0.09	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	215	215	0.01	0.03	0.47	226
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.08	7.08	< 0.005	< 0.005	0.01	7.43
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36

Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.17	1.17	< 0.005	< 0.005	< 0.005	1.23

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	3.00	4.06	0.01	0.12	—	0.12	0.11	—	0.11	—	581	581	0.02	< 0.005	—	583
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.55	9.55	< 0.005	< 0.005	—	9.58
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.58	1.58	< 0.005	< 0.005	—	1.59
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.2	68.2	< 0.005	< 0.005	0.29	69.3
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.08	1.08	< 0.005	< 0.005	< 0.005	1.09
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	3.00	4.06	0.01	0.12	—	0.12	0.11	—	0.11	—	581	581	0.02	< 0.005	—	583
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.55	9.55	< 0.005	< 0.005	—	9.58
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.58	1.58	< 0.005	< 0.005	—	1.59
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.2	68.2	< 0.005	< 0.005	0.29	69.3
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.08	1.08	< 0.005	< 0.005	< 0.005	1.09
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	6.30	8.96	0.01	0.27	—	0.27	0.24	—	0.24	—	1,283	1,283	0.05	0.01	—	1,287

Dust From Material Movement	—	—	—	—	—	0.93	0.93	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.31	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Dust From Material Movement	—	—	—	—	—	0.05	0.05	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	0.01	< 0.005	0.59	139
Vendor	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
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.9	12.9	< 0.005	< 0.005	0.03	13.5

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.57
Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	6.30	8.96	0.01	0.27	—	0.27	0.24	—	0.24	—	1,283	1,283	0.05	0.01	—	1,287
Dust From Material Movement	—	—	—	—	—	0.36	0.36	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.31	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	0.01	< 0.005	0.59	139
Vendor	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
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.9	12.9	< 0.005	< 0.005	0.03	13.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.57
Vendor	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

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.50	2.03	< 0.005	0.06	—	0.06	0.05	—	0.05	—	347	347	0.01	< 0.005	—	348
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.50	2.03	< 0.005	0.06	—	0.06	0.05	—	0.05	—	347	347	0.01	< 0.005	—	348
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.4	68.4	< 0.005	< 0.005	—	68.6
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.4
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.50	2.03	< 0.005	0.06	—	0.06	0.05	—	0.05	—	347	347	0.01	< 0.005	—	348
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.50	2.03	< 0.005	0.06	—	0.06	0.05	—	0.05	—	347	347	0.01	< 0.005	—	348
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.4	68.4	< 0.005	< 0.005	—	68.6
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.4
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	2.75	3.72	< 0.005	0.11	—	0.11	0.10	—	0.10	—	531	531	0.02	< 0.005	—	532
Paving	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.89	2.89	< 0.005	< 0.005	—	2.90
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.01	66.0
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36

Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	2.75	3.72	< 0.005	0.11	—	0.11	0.10	—	0.10	—	531	531	0.02	< 0.005	—	532
Paving	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.89	2.89	< 0.005	< 0.005	—	2.90
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.2	65.2	< 0.005	< 0.005	0.01	66.0
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.21	4.83	4.97	0.01	0.26	—	0.26	0.24	—	0.24	—	705	705	0.03	0.01	—	708
Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.57	0.59	< 0.005	0.03	—	0.03	0.03	—	0.03	—	83.1	83.1	< 0.005	< 0.005	—	83.4
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	13.8	13.8	< 0.005	< 0.005	—	13.8
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	4.83	4.97	0.01	0.26	—	0.26	0.24	—	0.24	—	705	705	0.03	0.01	—	708
Architectural Coatings	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.57	0.59	< 0.005	0.03	—	0.03	0.03	—	0.03	—	83.1	83.1	< 0.005	< 0.005	—	83.4

Architectu Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	13.8	13.8	< 0.005	< 0.005	—	13.8
Architectu ral Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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
Vendor	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
Hauling	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Total	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512
Total	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297
Total	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Total	0.07	3.75	1.10	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,396	2,396	0.07	0.38	5.19	2,516
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512
Total	0.06	3.89	1.13	0.02	0.03	0.61	0.64	0.03	0.16	0.20	—	2,397	2,397	0.07	0.38	0.13	2,512
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297
Total	0.01	0.51	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	283	283	0.01	0.04	0.27	297

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Total	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Total	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Total	—	—	—	—	—	—	—	—	—	—	—	4.65	4.65	< 0.005	< 0.005	—	4.67

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Total	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Total	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Total	—	—	—	—	—	—	—	—	—	—	—	4.65	4.65	< 0.005	< 0.005	—	4.67

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	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
Total	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

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	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

Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	0.01	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectu Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Total	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Total	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Total	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Total	—	—	—	—	—	—	—	—	—	—	0.00	1.88	1.88	< 0.005	< 0.005	—	1.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/1/2024	7/14/2024	6.00	12.0	—
Site Preparation	Site Preparation	7/15/2024	7/21/2024	6.00	6.00	—
Grading	Grading	7/22/2024	8/11/2024	6.00	18.0	—

Building Construction	Building Construction	8/12/2024	11/3/2024	6.00	72.0	—
Paving	Paving	11/4/2024	11/17/2024	6.00	12.0	—
Architectural Coating	Architectural Coating	11/2/2024	12/22/2024	6.00	43.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	0.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	0.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 3	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	0.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	2.00	7.00	84.0	0.37
Grading	Crawler Tractors	Diesel	Tier 3	1.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	0.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	0.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Building Construction	Cement and Mortar Mixers	Diesel	Tier 3	1.00	8.00	10.0	0.56
Paving	Cement and Mortar Mixers	Diesel	Average	0.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 3	1.00	7.00	81.0	0.42

Paving	Rollers	Diesel	Average	0.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	0.00	6.00	37.0	0.48
Architectural Coating	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Architectural Coating	Trenchers	Diesel	Tier 3	1.00	8.00	40.0	0.50
Architectural Coating	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	0.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	0.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 3	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	0.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	2.00	7.00	84.0	0.37
Grading	Crawler Tractors	Diesel	Tier 3	1.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	0.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	0.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Building Construction	Cement and Mortar Mixers	Diesel	Tier 3	1.00	8.00	10.0	0.56

Paving	Cement and Mortar Mixers	Diesel	Average	0.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 3	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	0.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	0.00	6.00	37.0	0.48
Architectural Coating	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Architectural Coating	Trenchers	Diesel	Tier 3	1.00	8.00	40.0	0.50
Architectural Coating	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	5.00	12.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.83	4.00	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	5.00	12.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.83	4.00	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	2,012

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	0.00	0.00	0.00	0.00	—
Grading	0.00	120	15.8	0.00	—
Paving	0.00	0.00	0.00	0.00	0.77

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	0.77	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	349	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	72.0	0.00	0.00	18,771	660	0.00	0.00	172,017

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	72.0	0.00	0.00	18,771	660	0.00	0.00	172,017

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	2,012

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	29,382	349	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	29,382	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	371,564

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	371,564

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.95	annual days of extreme heat
Extreme Precipitation	4.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	26.7
AQ-PM	24.8
AQ-DPM	47.4
Drinking Water	72.3
Lead Risk Housing	59.3
Pesticides	99.6
Toxic Releases	94.3
Traffic	22.6
Effect Indicators	—
CleanUp Sites	87.7
Groundwater	90.3
Haz Waste Facilities/Generators	28.3
Impaired Water Bodies	97.5
Solid Waste	80.0

Sensitive Population	—
Asthma	48.3
Cardio-vascular	63.3
Low Birth Weights	42.8
Socioeconomic Factor Indicators	—
Education	74.7
Housing	53.6
Linguistic	78.0
Poverty	66.9
Unemployment	74.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	29.05171308
Employed	59.69459772
Median HI	41.31913255
Education	—
Bachelor's or higher	15.47542666
High school enrollment	18.81175414
Preschool enrollment	83.10021814
Transportation	—
Auto Access	98.98626973
Active commuting	42.61516746
Social	—
2-parent households	48.81303734

Voting	48.7488772
Neighborhood	—
Alcohol availability	35.66020788
Park access	7.878865649
Retail density	14.47452842
Supermarket access	65.16104196
Tree canopy	9.534197357
Housing	—
Homeownership	59.66893366
Housing habitability	24.07288592
Low-inc homeowner severe housing cost burden	4.59386629
Low-inc renter severe housing cost burden	76.22225074
Uncrowded housing	7.35275247
Health Outcomes	—
Insured adults	16.16835622
Arthritis	68.4
Asthma ER Admissions	70.5
High Blood Pressure	45.3
Cancer (excluding skin)	71.8
Asthma	37.3
Coronary Heart Disease	54.4
Chronic Obstructive Pulmonary Disease	45.1
Diagnosed Diabetes	38.1
Life Expectancy at Birth	21.8
Cognitively Disabled	22.1
Physically Disabled	18.7
Heart Attack ER Admissions	73.9

Mental Health Not Good	33.4
Chronic Kidney Disease	35.4
Obesity	33.5
Pedestrian Injuries	19.6
Physical Health Not Good	34.4
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	40.3
Current Smoker	40.0
No Leisure Time for Physical Activity	26.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	49.8
Children	15.5
Elderly	77.3
English Speaking	27.3
Foreign-born	84.7
Outdoor Workers	8.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.3
Traffic Density	16.8
Traffic Access	23.0
Other Indices	—
Hardship	76.8
Other Decision Support	—
2016 Voting	41.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	40.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Based on applicant provided office and trucking operations.
Operations: Fleet Mix	Assumed operational truck trips would all be HHD
Construction: Construction Phases	Based on applicant provided information. Overlap architectural coating with building construction phase for conservative emissions estimates
Construction: Off-Road Equipment	Based on applicant provided information
Construction: Trips and VMT	Based on applicant provided information

Appendix B

Cultural Resources Assessment

RINCON CONSULTANTS, INC. SINCE 1994

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003
805-644-4455

February 28, 2024
Project No: 23-14438

Jay Dobrowalski, Planning Supervisor
City of Oxnard
Community Development Department
214 South C Street
Oxnard, California 93030
Via email: jay.dobrowalski@oxnard.org

Subject: Cultural Resources Assessment for the Pantoja Trucking Project, Oxnard, California

Dear Mr. Dobrowalski:

This letter report presents the findings of a cultural resources assessment completed in support of the Pantoja Trucking Project (proposed project) located in Oxnard, Ventura County, California. The City of Oxnard (City) retained Rincon Consultants, Inc. (Rincon) to identify cultural constraints associated with the proposed project. This letter report documents the results of the tasks performed by Rincon, specifically a cultural resources records search, archival and background research, a Sacred Lands File (SLF) search through the California Native American Heritage Commission (NAHC), and a pedestrian survey including shovel scrapes. All work was completed in consideration of the California Environmental Quality Act (CEQA). Rincon understands the City anticipates the preparation of an Initial Study-Mitigated Negative Declaration (IS-MND) for the proposed project. The City is the CEQA lead agency.

Project Site

The project site is in the city of Oxnard and encompasses portions of Section 27 of Township 01 North, Range 22 West on the *Oxnard*, *California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Attachment 1, Figure 1). Specifically, the project site is at 320 East Hueneme Road, encompassing Assessor's Parcel Numbers (APNs) 231-0-092-260, 231-0-092-270, and 231-0-092-280. The project site is bound by East Hueneme Road and residential neighborhoods to the north; a railroad, canal, and industrial complexes to the east; the continuation of the railroad and canal to the south; and undeveloped, fallow land to the west (Attachment 1, Figure 2).

Proposed Project Description

The proposed project involves the construction of an approximately 0.77-acre parking area for semi-trucks, removal of a perimeter chain link fence and construction of a perimeter wrought iron fence with landscaping, a detention basin for drainage, and restoration of the southwestern part of the project site back to vacant, undeveloped land. Approximately 28,742 square feet of landscaping would be installed around the northern and western sides of the project site and along the southeastern side of the parcel with APN 231-0-092-260, but with no additional landscaping proposed for the remainder of the southeastern side of the project site. Three existing industrial buildings totaling 24,313 square-feet, as well as accessory structures with truck parking areas, are present on two of the three parcels: APNs 231-0-092-270 and 231-0-092-280, both of which are addressed as 320 East Hueneme Road. No changes to the three buildings or accessory structures are proposed as part of the project. The project site has historically operated as a truck and freight transportation storage yard, and the applicant (Pantoja Trucking) intends to continue operating the site as such. The applicant intends to continue to perform services at this project site as necessary to move and transport business property in containers between the Port of Hueneme and various other businesses in California. The applicant engages subhaulers as necessary to provide freight and transportation services during their operation.

Methods

Background and Archival Research

Rincon completed background and archival research in support of this cultural resources assessment in September 2023. A variety of primary and secondary source materials including, but not limited to, historical maps, aerial photographs, and written histories of the area were consulted. The following sources were utilized to develop an understanding of the project site and its context:

- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Historical U.S. Geological Survey topographic maps

California Historical Resources Information System Records Search

On September 7, 2023, Rincon conducted a records search of the California Historical Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) (Attachment 2) located at California State University, Fullerton. The SCCIC is the official state repository for cultural resources records and reports for Ventura County. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places, the California Register of Historical Resources, the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File. Additionally, Rincon reviewed the Archaeological Determination of Eligibility list.

Sacred Lands File Search

Rincon contacted the Native American Heritage Commission (NAHC) on September 1, 2023, to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project area (Attachment 3). Attachment 3 provides the results of Rincon's outreach effort.

Cultural Resources Survey

Rincon Archaeologist Debbie Balam, BA conducted a pedestrian survey of the project site on February 13, 2024, using transect intervals spaced 15 meters apart and oriented generally from north to south. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), ecofacts (marine shell and bone), historical debris (e.g., metal, glass, ceramics), and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, foundations). Subsurface soil in rodent burrows were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning System unit and a georeferenced map of the project site. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at the Rincon Ventura office.

Findings

Historical Topographic Map and Aerial Imagery Review

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps from 1904 to 1940 depict the project site as sparsely developed with a single building (NETR Online 2023; USGS 2023). These maps also depict a watercourse, the present-day Ormond Lagoon Waterway, running through the center of the project site and south-southeast of the project site (NETR Online 2023; USGS 2023). Topographic maps from 1943 show the development of the Ventura County Railway, following the estuary immediately east and southeast of the project site (NETR Online 2023; USGS 2023). By 1943, the watercourse appears channelized and rerouted south-southeast of the project site, following the railroad alignment (NETR Online 2023; USGS 2023). In 1967, three large buildings are present within the project site and adjacent to the railroad (NETR Online 2023; USGS 2023). Aerial imagery from 1947 confirms the project site as sparsely developed land adjacent to the Ventura County Railway to the east and Hueneme Road to the north, with ploughed land in the western portion of the project site (NETR Online 2023). A truck yard and large buildings at 320 Hueneme Road appear in aerial imagery starting in 1959, along with the channelization of Ormond Lagoon north of the estuary (FrameFinder 2023; NETR Online 2023). Agricultural fields are north of Hueneme Road and residential development appears to the northeast of the project site (NETR Online 2023). The project site and its surrounding areas remain relatively unchanged until 2005, when further residential development to the north of Hueneme Road is depicted (NETR Online 2023). The western parcel of the project site remains as undeveloped land in imagery from 1947 to the present day (NETR Online 2023).

Known Cultural Resources Studies

The CHRIS records search and background research identified 21 cultural resources studies within 0.50 mile of the project site (Attachment 2). Of these studies, five include a portion of the project site but none include areas adjacent to the project site. Approximately 30 percent of the project site has been studied within the last 45 years. Known studies that occurred within the project site are discussed in further detail below.

Study VN-00236

Stephen Horne prepared study VN-00236, *Final Report, Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project, Federal Leases OCS P-202 and P-0216 Offshore Southern California*, in February 1980. The study included a records search, literature search, consultations with local historians, a field survey, and subsurface investigations involving 19 shovel tests and auger pits, and screening of soils. The subsurface testing identified seven prehistoric archaeological resources, one historic resource, and five landmark sites of local historic importance within the 1980 study area. The study identified a built environment resource outside of the current project site, 4-VEN-664H, which is described as the remains of a highly disturbed and deteriorated mid-20th century farm building. The study encompasses less than 10 percent of the current project site along its northern boundary with Hueneme Road and did not identify any cultural resources within the current project site.

Study VN-00380

Nancy Whitney-Desautels of Scientific Resource Surveys, Inc. prepared study VN-00380, *Archaeological Survey Report on the Proposed Oxnard Wastewater Reclamation Facilities and Pipeline Routes Located in the Oxnard Area of Ventura County*, in August 1978. The study included a records search, literature search, and field survey. Whitney-Desautels (1978) did not identify any previously recorded cultural resources within the 1978 study area. The study encompasses less than 10 percent of the current project site along its northern boundary with Hueneme Road and did not identify any previously recorded or new cultural resources within the current project site.

Study VN-01961

Mary Maki of Conejo Archaeological Consultants prepared study VN-01961, *Phase I Archaeological Survey of Approximately 18 Linear Miles for the CMWD Regional Salinity Management Program Ventura County, California*, in August 2001. The study included a records search, a field survey, and Native American consultation. The study identified four previously recorded prehistoric resources and one historic resource within a 0.25-mile radius of the 2001 study area, as well as one new historic resource, CMWD-1H, within the 2001 study area (Maki 2001). CMWD-1H is described as a large scatter of historic debris, possibly a dumping site. The study also identified structures over 50 years old within the 300-foot-wide survey corridor including single-family residences along Hueneme Road and some old greenhouses within the Southern California Edison power lines right-of-way. These structures were not evaluated for historical significance, and the study did not provide a count of how many structures were observed. Additionally, the field survey identified marine shell fragments, historic debris, and one recorded chert flake along Arnold Road. Maki (2001) noted the chert flake lacked stratigraphic integrity and, therefore, was not a significant archaeological resource. One previously recorded cultural resource was identified outside of the current project site, CA-VEN-664H, described as the remains of a 20th century farm building dating between 1949 and 1967. Maki (2001) identified that approximately 90 percent of the farm building had been destroyed by the expansion of the Willamette Industries Paper Group's Hueneme Paper Mill. The study encompasses less than 10 percent of the project site along its northern boundary with Hueneme Road and did not identify any cultural resources within the current project site.

Study VN-02433

David S. Whitley and Joseph M. Simon of W&S Consultants prepared study VN-02433, *Phase I Archaeological Survey for the Pacific Vehicle Processors Vehicle Distribution Center, City of Oxnard, Ventura County, California*, in February 2002. The study included a records search, literature review, and a field survey, which did not identify any previously recorded cultural resources within the 2002 study area (Whitley and Simon 2002). The study encompasses approximately 20 percent of the project site along its eastern boundary. The study did not identify any previously recorded or new cultural resources within the current project site.

Study VN-02572

Mary Maki of Conejo Archaeological Consultants prepared study VN-02572, *Phase I Cultural Resources Investigation of 2.2 Linear Miles (8-acres) for the Calleguas Regional Salinity Management Plan's Hueneme Outfall Replacement Project, Cities of Oxnard & Port Hueneme, Ventura County, California*, in May 2007. The study included a records search, Native American consultation, a consultation with local archaeologists, and a field survey. The study identified two previously recorded cultural resources within the 2007 study area, including CA-VEN-662, a prehistoric site consisting of an isolated burial along Hueneme Road, and a historic-period resource consisting of the Ventura

County Railway, built in 1905 (Maki 2007). The study recognized the area west and southwest of the current project site, incorporating Perkins Avenue, as culturally sensitive. The study encompasses less than 10 percent of the project site along its northern boundary with Hueneme Road. The study did not identify any cultural materials within the current project site.

Known Cultural Resources

The CHRIS records search and background research identified one cultural resource within 0.50 mile of the project site. The resource recorded in the search radius is listed in Table 1 below.

Table 1 Known Cultural Resources

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	Eligibility Status	Relationship to Project site
P-56-000664	CA-VEN-664H	Historic-Period Building	Farm buildings built in the early 20th century, consisting of building debris and habitation debris including cut bone, shell, glass, and dishware.	1979 (Horne and Craig)	Unknown	Outside

Source: SCCIC 2023

Sacred Land File Search

On September 8, 2023, the NAHC responded to Rincon's SLF request, stating that the results of the SLF search were negative. See Attachment 3 for the NAHC response, including Tribal contacts list(s).

Survey Results

No cultural resources were identified during the pedestrian survey. Ground visibility was poor (approximately 0 to 5 percent). The western portion of the project site, as identified by APN 231-0-092-260 in Attachment 1, Figure 2, is currently covered with gravel and is used as a parking area for semitrucks, trailers and employee vehicles which obscured surface visibility (Figure 3 and Figure 4). The eastern portion of the project site is covered in asphalt and developed with buildings and was not included in this survey. Modern debris was observed in the southwestern corner of the project site (Figure 5). To improve ground visibility and increase survey reliability within the western portion of the project site, Rincon removed the imported gravel and exposed the ground surface through a series of shovel scrapes, spaced approximately 30 meters apart and measuring 12 inches by 12 inches. A total of 21 shovel scrapes (Figure 6) were conducted across the project site. The ground surface beneath the imported gravel throughout the entire project site consisted of dark brown silty loam.

Conclusions and Recommendations

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form:

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, we have chosen to limit analysis under Threshold A to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

Historical Built Environment Resources

This cultural resources assessment did not identify any built environment resources that may be considered historical resources within the project site. The proposed project therefore does not have the potential to impact built environment historical resources and Rincon recommends a finding of ***no impact to historical resources*** pursuant to CEQA.

Historical and Unique Archaeological Resources

No archaeological resources were identified within the project site as a result of this assessment. Based on a review of historical aerials, the project site has been used intermittently for agricultural purposes that have disturbed the ground surface; however, the lack of surface evidence of archaeological materials does not preclude their subsurface existence. The proposed project has an increased potential to encounter buried archaeological deposits due to the presence of the present-day Ormond Lagoon Waterway, a watercourse that once traversed the project site and would have provided a variety of subsistence resources for prehistoric and historic-period occupants of the area. Additionally, the identification of burials within the surrounding area, as identified by Maki in 2007, suggests that the vicinity is sensitive for buried archaeological resources. Although resources have been identified within 0.5 mile of the project site, the existing level of disturbance in the project site and the limited nature of the proposed ground disturbances suggest that there is a low potential for encountering intact subsurface archaeological deposits. Adherence to the following mitigation measure for unanticipated discoveries during construction would result in a ***less than significant impact with mitigation for archaeological resources*** under CEQA.

Recommended Mitigation

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be necessary, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the SCCIC, per CCR Guidelines Section 15126.4(b)(3)(C).

Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are unexpectedly found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. Adherence to existing regulations would result in a ***less than significant impact to human remains*** under CEQA.

Should you have any questions concerning this study, please do not hesitate to contact the undersigned at phone 559-425-9670 or cmontgomery@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

Catherine Johnson, PhD, RPA
Archaeologist

Debbie Balam, BA
Archaeologist

Courtney Montgomery, MA
Archaeologist and Project Manager

Ken Victorino, MA, RPA
Cultural Resources Program Manager/
Senior Archaeologist

Attachments

Attachment 1 Figures

Attachment 2 SCCIC Results

Attachment 3 SLF Results

References

FrameFinder

2023 Historic topographic maps of the project site and surrounding area. https://mil.library.ucsb.edu/ap_indexes/FrameFinder/ (accessed September 2023).

Horne, Stephen

1980 *Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Leases OCS P-0202 and P-0216, Offshore Southern California*. Study VN-00236 on file at the South Central Coastal Information Center, California State University, Fullerton.

Horne, Stephen and Steven Craig

1979 *State of California Department of Parks and Recreation 523 Series Form for P-56-000664/4-VEN-664H. On file at the South Central Coastal Information Center, California State University, Fullerton*.

Maki, Mary

2001 *Phase I Archaeological Survey of Approximately 18 Linear Miles for the CMWD Regional Salinity Management Program Ventura County, California*. Study VN-01961 on file at the South Central Coastal Information Center, California State University, Fullerton.

2007 *Phase I Cultural Resources Investigation of 2.2 Linear Miles (8-acres) for the Calleguas Regional Salinity Management Plan's Hueneme Outfall Replacement Project, Cities of Oxnard & Port Hueneme, Ventura County, California*. Study VN-02572 on file at the South Central Coastal Information Center, California State University, Fullerton.

Nationwide Environmental Title Research, LLC (NETR) Online

2023 Historic aerials and topographic maps of the project site and surrounding area. https://www.historicaerials.com/viewer (accessed September 2023).

United States Geological Survey (USGS)

2023 Historical topographic maps of the project site and surrounding area. https://ngmdb.usgs.gov/topoview/viewer/#15/34.4452/-119.8422 (accessed September 2023).

Whitley, David S. and Joseph M. Simon

2002 *Phase I Archaeological Survey for the Pacific Vehicle Processors Vehicle Distribution Center, City of Oxnard, Ventura County, California*. Study VN-02433 on file at the South Central Coastal Information Center, California State University, Fullerton.

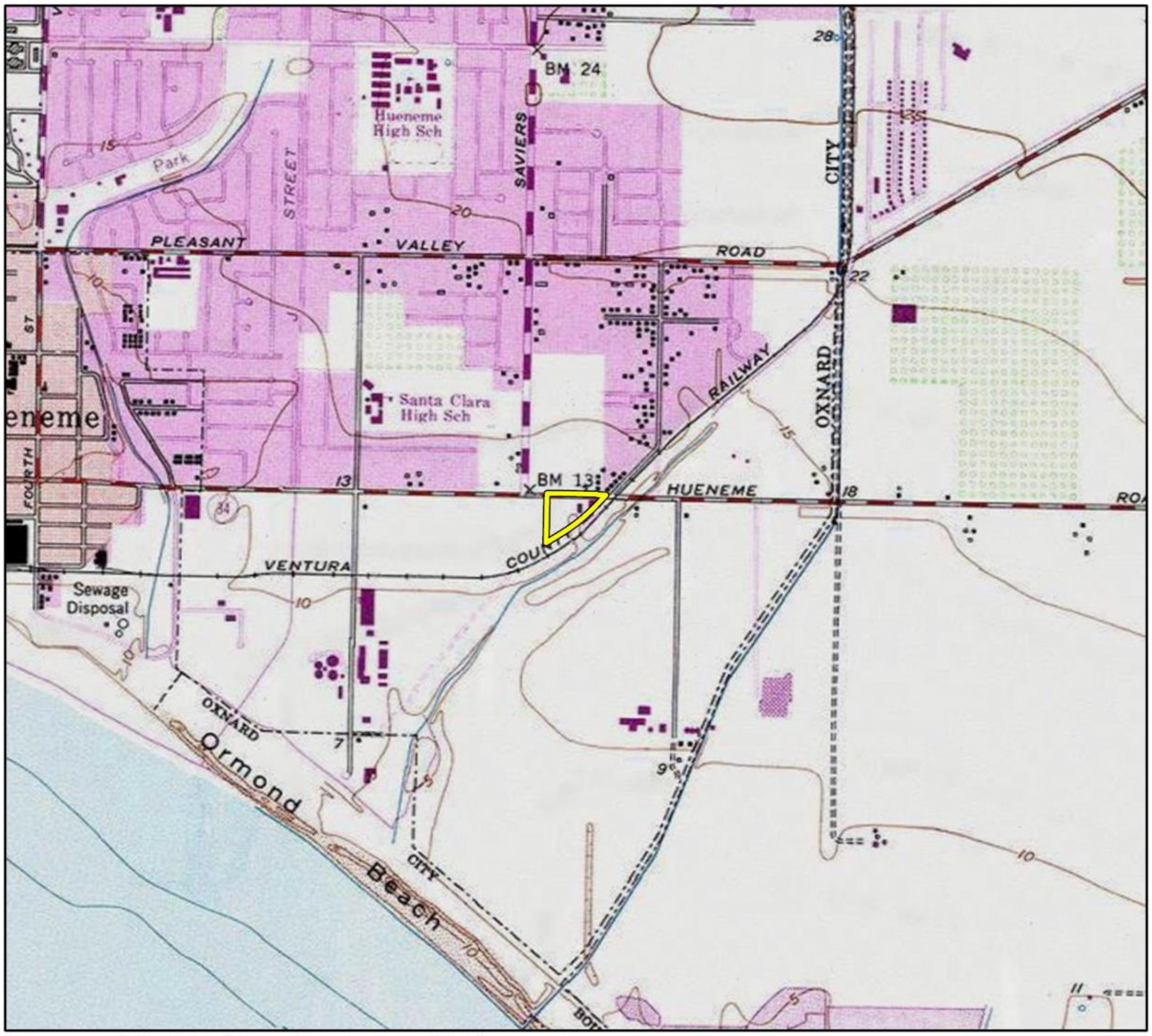
Whitney-Desautels, Nancy A.

1978 *Archaeological Survey Report on the Proposed Oxnard Wastewater Reclamation Facilities and Pipeline Routes Located in the Oxnard Area of Ventura County*. Study VN-00380 on file at the South Central Coastal Information Center, California State University, Fullerton.

Attachment 1

Figures

Figure 1 Regional Project Location Map



Basemap provided by National Geographic Society, Esri and their licensors © 2023. Oxnard Quadrangle. T01N R22W S27. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

23-14438 CR
CRFig 1 Regional Location

Project Location

0 1,000 2,000 Feet

N

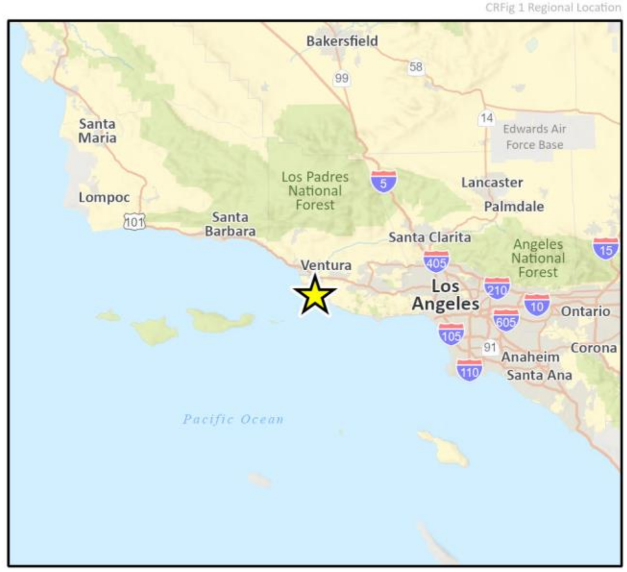


Figure 2 Project Location Map

Imagery provided by Microsoft Bing and its licensors © 2023.

Figure 3 Parked Trailers within Project site, Facing West

Figure 4 Parked Employee Vehicles within Project site, Facing South

Figure 5 Modern Debris Located in the Southwest Corner Project site, Facing South

Figure 6 Shovel Scrape to Improve Ground Visibility, Facing

Attachment 2

SCCIC Results

In-Person Record Search Data Request Form

Project Managers and Assistant Project Managers: Please complete this Record Search Request Form for each new In-Person record search request. Once complete, please email Andrea Ogaz(aogaz@rinconconsultants.com) and maintain a copy in the project RS folder.

CHRIS Location: SCCIC

Project Name: 23-14438 Pantoja Trucking Project

Date Added to Search Queue: 8/30/23

Project Address/County Location: Oxnard, Ventura County, California
Budget: $800

Search Radius: 0.5-mile

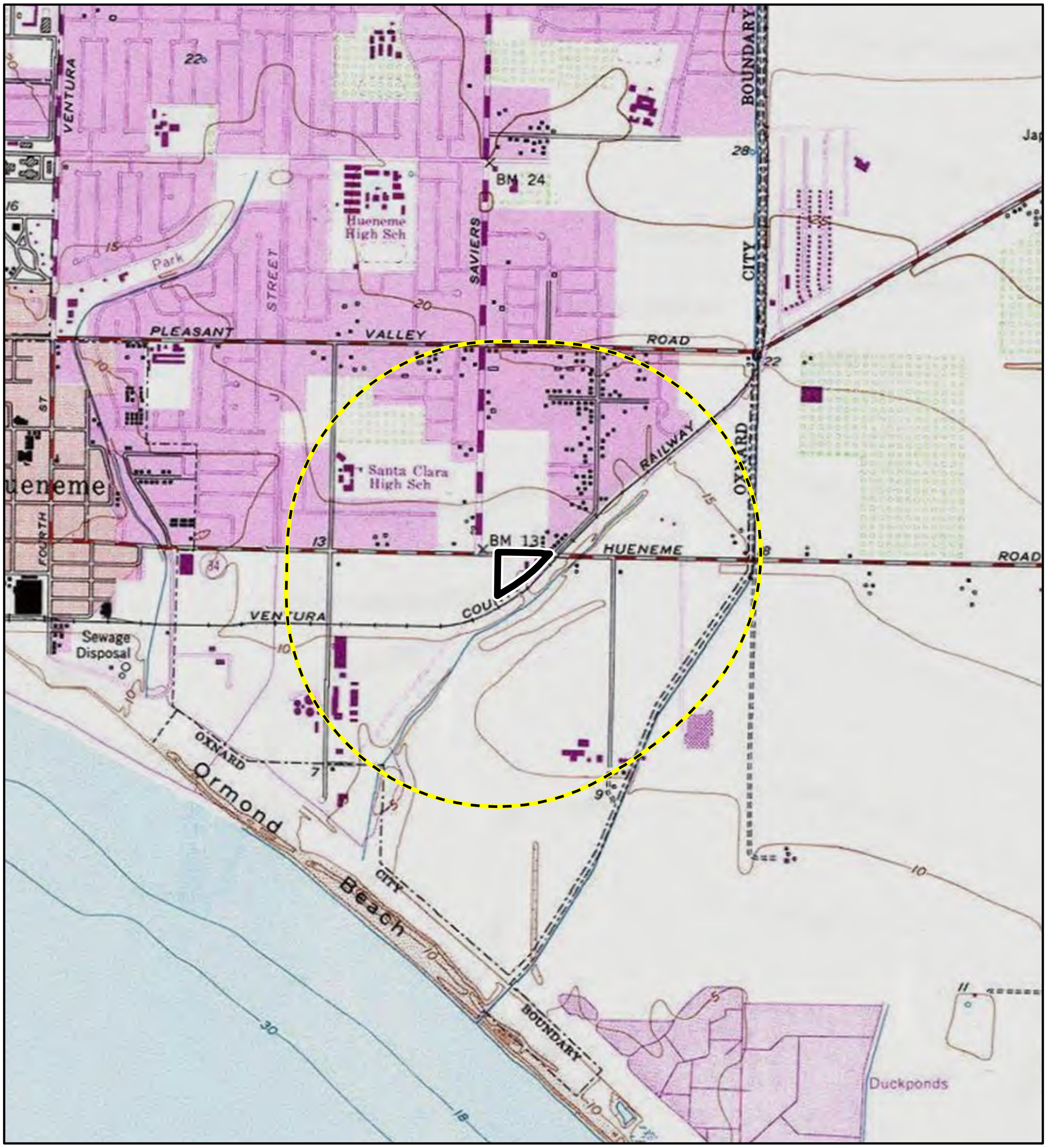
Copies of Resource Records:

Within Project Site ☒; Adjacent to Project Site ☒; Within Radius ☒

Copies of Reports:

Within Project Site ☒; Adjacent to Project Site ☒; Within Radius ☐

Additional Notes: Records Search Map attached. If there are any issues, please contact Courtney Montgomery (cmontgomery@rinconconsultants.com).



Imagery provided by National Geographic Society, Esri and its licensors © 2023. Oxnard Quadrangle. T01N R22W S21-23, 26-28. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Half-Mile Buffer

Area of Potential Effects

N

0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Records Search Map

CHRIS Records Search Checklist

Info. Center: SCCIC **Appt. Date & Time** 9/16@12:00 – 1:30
Project & Task #: 210 W. Hueneme Rd Truck & Shipping **Project Name:** 23-14438
County: Ventura **# of Hours allotted for search** ______________
Mileage allotted (if any): ____________ **Drive time allotted (if any):** ___________

- ❑ Make at least 2 copies of records search maps (one for sites, one for surveys)
- ❑ Map and label all previously recorded resources within project site and search radius
- ❑ List of all previously recorded resources on Data Sheet (using Primary Numbers or Trinomials)
- ❑ Map and label all previous studies within project site and search radius
- ❑ List all studies (using #s) on Data Sheet
- ❑ Use different colored pencils or pens to differentiate previous study areas
- ❑ Copy all site records (within project site and search radius)
- ❑ Copy all reports within project site only
- ❑ Obtain a reference list of reports within project site and search radius
- ❑ Check the following lists: National Register, California Register, Historical Resources Inventory, California Historical Landmarks, California Points of Historical Interest, Archaeological Determinations of Eligibility
- ❑ Photocopy all historic maps that include project site
- ❑ Record the full reference information for each historic map on the Data Sheet
- ❑ Keep track of the number of photocopies you make.
- ❑ Double check your maps, lists, copies to make sure you didn't forget anything.
- ❑ Get a letter from IC if possible, documenting your search
- ❑ Make sure to put everything back in it's proper place and clean up.
- ❑ Be nice and courteous, as we rely on IC staff.
- ❑ Bring back a checked, dated, and initialed copy of this checklist and keep with the records search results.

Completed by: Andrea Ogaz Date: 9/6/2023
# of Hours Billed for search (should match IC's records): 1.5
# of Hours Billed for Drive Time: .75 Mileage: 33
Supervisor's Initials: __________ Project Manager's Initials: _________

CHRIS Information Center Records Search Data Sheet

Project Name: 210 W. Hueneme Rd Truck Shipping Yard

Project Number: 23-14438 Date: 9/6/2023

Information Center: SCCIC

Search Radius: Half Mile: X One Mile: ____ Other: ____

USGS Quadrangle: OXNARD

Public Land Survey System (PLSS): Township: 01N ~~22W~~ Range: 22W Section: 21-23 26-28

County: Ventura

Previously Recorded Sites: 1 adjacent

Previous Studies: 5 within

National Register of Historic Places:	Copies:	Y	N
California Register of Historical Resources:	Copies:	Y	N
California Points of Historical Interest:	Copies:	Y	N
California Historical Landmarks List:	Copies:	Y	N
Archaeological Determinations of Eligibility:	Copies:	Y	X
~~California Historical Resources Inventory:~~ BERD	Copies:	Y	X

Historic Maps:

Notes:

Report List

23-14438

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00236		1980	Horne, Stephen	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease Ocs P-0202 and P-0216, Offshore Southern California	Dames & Moore/Stephen Horne	56-000553, 56-000662, 56-000663, 56-000664, 56-000665, 56-000666, 56-000667, 56-001234, 56-120002, 56-120003
VN-00380		1978	Whitney-Desautels, Nancy A.	Archaeological Survey Report on the Proposed Oxnard Wastewater Reclamation Facilities and Pipeline Routes Located in the Oxnard Area of Ventura County	Scientific Resource Surveys, Inc.	
VN-00431		1977	Cottrell, Marie G.	Archaeological Records Search and Field Survey for Tentative Tracts 2888 and 2787	Archaeological Research, Inc.	
VN-00825		1989	Peak, Melinda and Neal Neuenschwander	Cultural Resource Survey and Clearance Report for the Proposed Oxnard Terminal to Triunfo Pass Earth Station Fiber Optic Communication Route, Ventura and Los Angeles Counties	PEAK & Associates, INC.	56-000001, 56-000002, 56-000006, 56-000007, 56-000011, 56-000017, 56-000036, 56-000048, 56-000084, 56-000085, 56-000086, 56-000088, 56-000089, 56-000090, 56-000094, 56-000097, 56-000105, 56-000106, 56-000107, 56-000108, 56-000263, 56-000265, 56-000266, 56-000301, 56-000469
VN-01081		1991	Whitley, David S. and Joseph M. Simon	Phase I Archaeological Survey and Cultural Resources Assessment for the Ormand Beach Specific Plan, City of Oxnard, Ventura County, California	W & S Consultants	
VN-01960		2001	Wlodarski, Robert J.	A Phase 1 Archaeological Study: for 701 Arcturas Avenue City of Oxnard, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	
VN-01961		2001	Maki, Mary K.	Phase 1 Archaeological Survey of Approximately 18 Linear Miles for the Cmwd Regional Salinity Management Program Ventura County, California	Conejo Archaeological Consultants	56-000003, 56-000174, 56-000555, 56-000662, 56-000664, 56-000863, 56-001643, 56-100156
VN-02433		2002	Whitley, David S. and Joseph M. Simon	Phase I Archaeological Survey for the Pacific Vehicle Processors Vehicle Distribution Center, City of Oxnard, Ventura County, California	W & S Consultants	
VN-02435		2004	Wlodarski, Robert J.	A Phase I Archaeological Study for the Proposed John Laing Homes Project Within the Surfside Industrial Area, City of Port Hueneme, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	56-000662

Report List

23-14438

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-02452		2004	Wlodarski, Robert J.	A Phase 1 Archaeological Study for 720 Arcturus Avenue (lot 10 - APN#2230-044-035) and 710 Arcturus Avenue (lot 11 - APN#2230-044-045) Located Near the Northeast Corner of Hueneme Road and Arcturus Avenue, City of Oxnard, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	56-000662, 56-000664
VN-02453		2004	Wlodarski, Robert J.	A Phase 1 Archaeological Study for (APN#2230-044-035) Located on the Northeast Corner of Hueneme Road an Arcturus Avenue City of Oxnard, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	56-000662, 56-000664
VN-02459		2003	Toren, George A.	Negative Archaeological Survey Report: 5220 Saviers Road, Oxnard, California APN 222-0-012-205	Compass Rose Archaeological, Inc.	
VN-02572		2007	Maki, Mary K.	Phase I Cultural Resources Investigation of 2.2 Linear Miles (8-acres) for the Calleguas Regional Salinity Management Plan's Hueneme Outfall Replacement Project, Cities of Oxnard & Port Hueneme, Ventura County, California	Conejo Archaeological Consultants	56-000662
VN-02630		2002	MacFarlane, Heather	Archaeological Resources Survey Proposed Tract Saviers Road Near Hueneme Road Oxnard, California	MacFarlane Archaeological Consultants	
VN-02664		2007	Sutton, Mark Q., Amanda C. Cannon, Elizabeth Denniston, Tina Fulton, Jill K. Gardner, John D. Goodman II, John Elliot Jones, Wendy M. Jones, Polly A. Peterson, Patrick B. Stanton, and Sarah Van Galder	The Archaeology of CA-Ven-662, Testing, Data Recovery, and Monitoring of the Port Hueneme Site. Technical Report 07-45	Statistical Research, Inc.	56-000662
VN-02832		2009	Maki, Mary K.	Archaeological Survey Report of Approximately 44,000 Linear Feet for the Recycled Water Backbone System project, City of Oxnard, Ventura County, California *PLUS ADDENDUM REPORT	Conejo Archaeological Consultants	56-000662
VN-02892		2010	Toren, George and John Romani	Results of the Phase III/Data Recovery Program Conducted Below Hueneme Road within the recorded site boundaries of CA-Ven-662, City of Hueneme, California	Compass Rose Archaeological, Inc.	56-000662

Report List

23-14438

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-02933		2011	Toren, A. George	Phase I Archaeological Investigation for the City of Oxnard Recycled Water Project New Alignment	Compass Rose Archaelogical, Inc.	
VN-02962		2009	Toren, George	Results of the Extended Phase I Backhoe Trenching Test Program Conducted Below Hueneme Road within the Recorded Site Boundaries of CA-VEN-662, City of Port Hueneme, California	Compass Rose Archaeological, Inc.	56-000662
VN-02970		2006	Whitley, David	Intensive Phas I Archaeological Survey/Class II Inventory, 3400 Feet Pipeline Route, City of Port Hueneme, Ventura County, California	W&S Consultants	56-000662
VN-03027		2011	Maki, Mary	Results of Human Remains & Grave Goods Analysis, SMP Phase 1E, CA-VEN-662, Hueneme Road, Port Hueneme, Ventura County	Conejo Archaeological Consultants	56-000662
VN-03028		2012	Maki, Mary	REBURIAL REPORT - Calleguas Salinity Management Pipeline, Phase 1E, Hueneme Road, Ventura County	Conejo Archaeological Consultants	56-000662
VN-03041		2011	Loftus, Shannon	Cultural Resource Records Search and Site Survey AT&T Site VN0274-01 SCE-Pleasant Valley Road, Moorpark-Ormond Beach #3 and #4 ROW Pleasant Valley Road at South Rose Avenue Oxnard, Ventura County, CA	ACE Environmental	
VN-03269		2016	Szromba, Meagan, Shannon Carmack, and Christopher Duran	Cultural Resources Study for the Vista Pacifica Project, Oxnard, Ventura County, California	Rincon Consultants	
VN-03283		2016	Szromba, Meagan, Shannon Carmack, and Christopher Duran	Fire Station Generator Replacements Project, Cultural Resources Study	Rincon Consultants	56-153140, 56-153141

Attachment 3

SLF Results

Local Government Tribal Consultation List Request
Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52) –** ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18) -** ***Per Government Code § 65352.3.***
Local Action Type:
___ General Plan ___ General Plan Element ___ General Plan Amendment

___ Specific Plan ___ Specific Plan Amendment ___ Pre-planning Outreach Activity

Required Information

Project Title: Pantoja Trucking Project IS-MND

Local Government/Lead Agency: City of Oxnard

Contact Person: Catherine Johnson

Street Address: 1530 Monterey Street, Suite D
City: San Luis Obispo, California **Zip:** 93401

Phone: (805) 947-4824

Email: cjohnson@rinconconsultants.com

Specific Area Subject to Proposed Action
County/Community: Ventura County, Oxnard

Additional Request

■ **Sacred Lands File Search -** ***Required Information:***

USGS Quadrangle Name(s):___Oxnard________________________________

Township: 01N, Range: 22W, Sections: 21-23, 26-28

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 8, 2023

Catherine Johnson
Rincon Consultants, Inc.

Via Email to: cjohnson@rinconconsultants.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Pantoja Trucking Project, Ventura County

To Whom It May Concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Ventura County
9/8/2023

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Ventura	Barbareño/Ventureño Band of Mission Indians	N	Cultural Resource Committee,	P.O. Box 364 Ojai, CA, 93024	(805) 746-6685		CR@bvbmi.com	Chumash	Los Angeles,San Luis Obispo,Santa Barbara,Ventura	6/19/2023
	Chumash Council of Bakersfield	N	Julio Quair, Chairperson	729 Texas Street Bakersfield, CA, 93307	(661) 322-0121		chumashtribe@sbcglobal.net	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	
	Coastal Band of the Chumash Nation	N	Gabe Frausto, Chairman	P.O. Box 40653 Santa Barbara, CA, 93140	(805) 568-8063		fraustogabriel28@gmail.com	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	8/28/2023
	Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Ventura	
	Gabrielino /Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	3/28/2023
	Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	5/30/2023
	Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	5/30/2023
	Northern Chumash Tribal Council	N	Violet Walker, Chairperson	P.O. Box 6533 Los Osos, CA, 93412	(760) 549-3532		violetsagewalker@gmail.com	Chumash	Los Angeles,San Luis Obispo,Santa Barbara,Ventura	6/5/2023
	Santa Ynez Band of Chumash Indians	F	Sam Cohen, Government & Legal Affairs Director	100 Via Juana Road Santa Ynez, CA, 93460			scohen@chumash.gov	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	7/6/2023
	Santa Ynez Band of Chumash Indians	F	Nakia Zavalla, Tribal Historic Preservation Officer	100 Via Juana Road Santa Ynez, CA, 93460			nzavalla@chumash.gov	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	7/6/2023
	Santa Ynez Band of Chumash Indians	F	Kelsie Shroll, Elders' Council Administrative Assistant	100 Via Juana Road Santa Ynez, CA, 93460	(805) 245-5403		kshroll@chumash.gov	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	7/6/2023
	Santa Ynez Band of Chumash Indians	F	Wendy Teeter, Cultural Resources Archaeologist	100 Via Juana Road Santa Ynez, CA, 93460	(805) 325-8630		wteeter@chumash.gov	Chumash	Kern,Los Angeles,San Luis Obispo,Santa Barbara,Ventura	7/6/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Pantoja Trucking Project, Ventura County.

Record: PROJ-2023-004542
Report Type: AB52 GIS
Counties: Ventura
NAHC Group: All

Appendix C

Supplemental Stormwater Infiltration Test Report

WORKMAN GEOTECHNICAL
ENGINEERING & CONSULTING

1141 East Main Street *Ventura, CA 93001* *805.850.2025* *workmangeotechnical.com*

October 14, 2022
File No. WE18-030770

Pantoja Truckline, Inc.
320 East Hueneme Road,
Oxnard, CA 93033

Supplemental Stormwater Infiltration Test Report
Proposed Pantoja Truckline Terminal and Storage Facility
320 E. Hueneme Road, City of Oxnard.

In accordance with your authorization, we have prepared this supplemental infiltration test report for use in determining the absorption rate for design of the stormwater infiltration system for the proposed Pantoja Truckline terminal and storage on the subject property. This report presents the results of our field infiltration testing. Our scope of services included (1) manual excavation of three infiltration test pits, (2) perform field infiltration testing, (3) review the results of the field infiltration testing, and (4) prepare this report to document our efforts and conclusions.

Field Infiltration Testing
Supplemental field infiltration testing was performed by a representative of this firm on September 21, 2022 to determine the absorption rate of the subsurface soils for design of the proposed stormwater infiltration system, as shown on the Plot Plan, Plate 1. Three supplemental 12 inch by 12 inch wide test pits were excavated at a depth of 2 feet (see Test Pit Log, Plate 2) at the approximate location shown on Plate 1. The infiltration testing was performed in accordance with MS4 requirements and Appendix C of the Technical Guidance Manual for Stormwater Quality Control Measures. Readings were taken at 30-minute intervals for a period of 4 hours in the test pits. The test results are included below.

Test Pit Number	PT-1	PT-2	PT-3
Depth (Feet)	2	2	2
Stabilized Rate (Inches / Hour / Square Foot)	0.74	0.74	1.13

Groundwater
Groundwater was not encountered in the infiltration test pits. Mapping of historically shallowest groundwater included within the Seismic Hazard Zone Report of the Oxnard 7.5-Minute Quadrangle (CGS, 2002) indicates the depth to historical groundwater is approximately 5 feet below grade.

Conclusions
Based on the infiltration tests, a design absorption capacity of 0.74 inches per hour per square foot may be used for design of the subsurface stormwater infiltration system, as shown on Plate 1.

Remarks

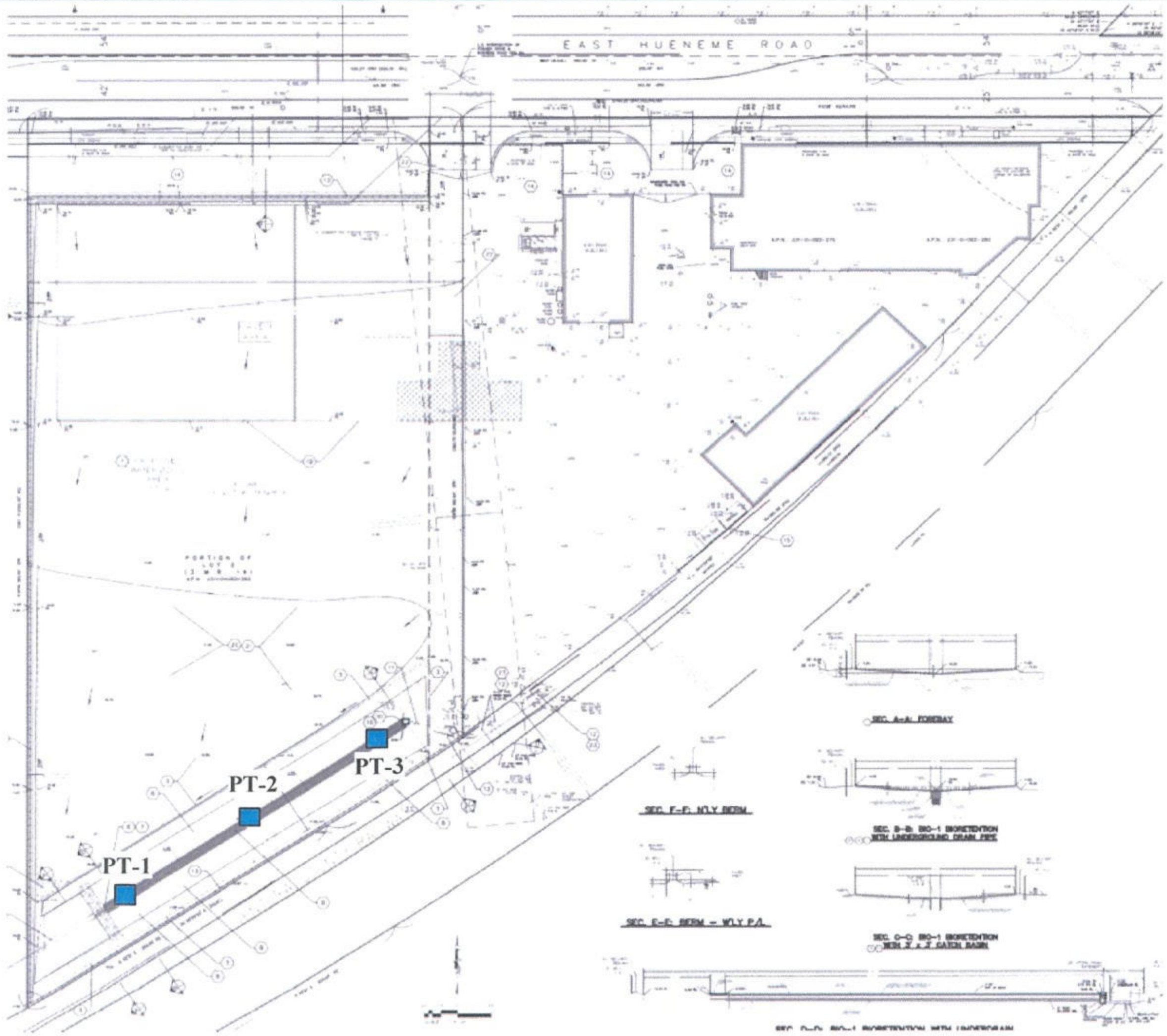
If you have any questions, or if we may be of any further assistance, please do *not* hesitate to call. Thank you for the opportunity to be of professional service. We look forward to being of continued service.

Respectfully submitted,
WORKMAN ENGINEERING & CONSULTING

R. Mark Workman Jr., RCE 68557
cc: addressee(3)

REFERENCES

Workman Geotechnical, Storm Water Detention Infiltration Test Report, Proposed Pantoja Truckline Facility, 320 East Hueneme Road, City of Oxnard, California, dated July 11, 2018.



Reference: Base Map Provided by R.W.C. LLC.

LEGEND

PT-3 Approximate Location of Infiltration Test Pit

NORTH
not to scale

WORKMAN GEOTECHNICAL
ENGINEERING & CONSULTING

PLOT PLAN	Pantoja 320 E. Hueneme Road, Oxnard	
	FILE NO. WE18-030770	Plate 1

PROJECT : Pantoja
FILE NO : WE18-030770
LOCATION : 320 E. Hueneme Road, Oxnard

TEST PIT LOG : PT-1 - PT-3
DATE : 9/21/22
LOGGED BY : KE

1. Artificial Fill (Af): Light yellowish brown silty sand with gravel, deleterious debris, moderately compacted, dry to slightly moist.

2. Alluvium (Qa): Medium to dark brown fine-grained silty sand, slightly porous, dense below 1 foot, slightly moist to moist.

SCALE: 1"=5'

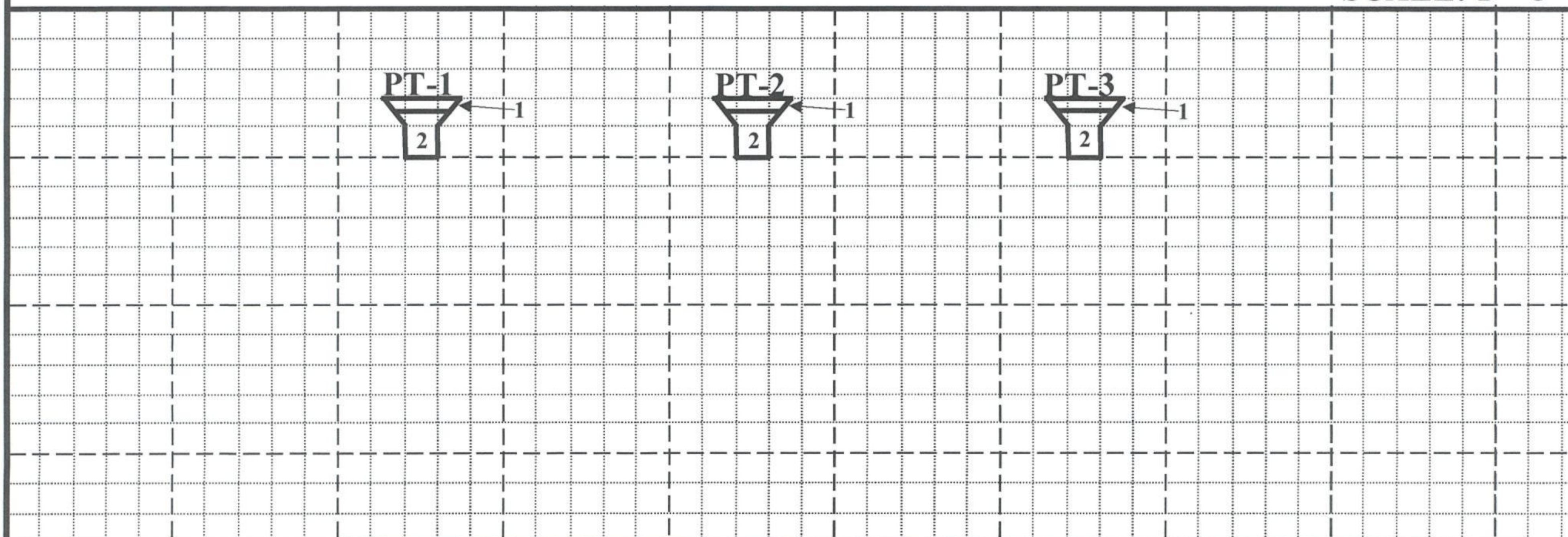


PLATE 2.1

WORKMAN ENGINEERING & CONSULTING

1145 East Main Street **Ventura, CA 93001** **805.850.2025** **markworkmanpe@yahoo.com**

PERFORMANCE TEST DATA WORKSHEET

PT-1 - PT-3

JOB ADDRESS: 320 East Hueneme Road, Oxnard, CA
CLIENT NAME: Pantoja Truckline, Inc.
DATE/TIME PRESATURATED: 9/20/22
DATE TESTED: 9/21/22

FILE NO.: WE18-030770
TEST CONDUCTED BY: AW,TB
TEMPERATURE: Warm
WEATHER CONDITIONS: Sunny

PT-1

Stabilized Rate (in/hr): 2.00

EXCAVATION DEPTH:	1.0'	DIAMETER OF TEST HOLE:	12"	TIME INTERVAL:	0:30
TESTED DEPTH:	2.0'	TEST HOLE NO.:	PT-1	INITIAL HEIGHT(IN.):	12.00

TIME	TIME INTERVAL	HEIGHT	DROP	PERC RATE	REMARKS
01:42 PM	****	12.000	****	****	INITIAL FILL
02:12 PM	30	10.000	2.000	4.00	
	****	12.000	****	****	REFILL
02:42 PM	30	10.250	1.750	3.50	
	****	12.000	****	****	REFILL
03:12 PM	30	10.500	1.500	3.00	
	****	12.000	****	****	REFILL
03:42 PM	30	10.750	1.250	2.50	
	****	12.000	****	****	REFILL
04:12 PM	30	11.000	1.000	2.00	
	****	12.000	****	****	REFILL
04:42 PM	30	11.000	1.000	2.00	
	****	12.000	****	****	REFILL
05:12 PM	30	11.000	1.000	2.00	

$$\mathrm{Rf} = \frac{(2*d1-\Delta d)}{13.5} + 1$$

$$\mathrm{Rf} = 2.7037$$

Design Infiltration Rate = Measured Percolation Rate / Rf

Design Infiltration Rate = 0.73973

PT-2

Stabilized Rate (in/hr): 2.00

EXCAVATION DEPTH: 1.0'		DIAMETER OF TEST HOLE:	12"	TIME INTERVAL:	0:30
TESTED DEPTH: 2.0'		TEST HOLE NO.: PT-2		INITIAL HEIGHT(IN.):	12.00

TIME	TIME INTERVAL	HEIGHT	DROP	PERC RATE	REMARKS
01:45 PM	****	12.000	****	****	INITIAL FILL
02:15 PM	30	10.000	2.000	4.00	
	****	12.000	****	****	REFILL
02:45 PM	30	10.250	1.750	3.50	
	****	12.000	****	****	REFILL
03:15 PM	30	10.500	1.500	3.00	
	****	12.000	****	****	REFILL
03:45 PM	30	10.750	1.250	2.50	
	****	12.000	****	****	REFILL
04:15 PM	30	11.000	1.000	2.00	
	****	12.000	****	****	REFILL
04:45 PM	30	11.000	1.000	2.00	
	****	12.000	****	****	REFILL
05:15 PM	30	11.000	1.000	2.00	

$$Rf = \frac{(2*d1-\Delta d)}{13.5} + 1$$

Rf = 2.7037

Design Infiltration Rate = Measured Percolation Rate / Rf

Design Infiltration Rate 0.73973

PT-3

Stabilized Rate (in/hr): 3.00

EXCAVATION DEPTH: 1.0'	DIAMETER OF TEST HOLE: 12"	TIME INTERVAL: 0:30
TESTED DEPTH: 2.0'	TEST HOLE NO.: PT-3	INITIAL HEIGHT(IN.): 12.00

TIME	TIME INTERVAL	HEIGHT	DROP	PERC RATE	REMARKS
01:47 PM	****	12.000	****	****	INITIAL FILL
02:17 PM	30	9.500	2.500	5.00	
	****	12.000	****	****	REFILL
02:47 PM	30	9.750	2.250	4.50	
	****	12.000	****	****	REFILL
03:17 PM	30	10.000	2.000	4.00	
	****	12.000	****	****	REFILL
03:47 PM	30	10.250	1.750	3.50	
	****	12.000	****	****	REFILL
04:17 PM	30	10.500	1.500	3.00	
	****	12.000	****	****	REFILL
04:47 PM	30	10.500	1.500	3.00	
	****	12.000	****	****	REFILL
05:17 PM	30	10.500	1.500	3.00	

$$Rf = \frac{(2*d1-\Delta d)}{13.5} + 1$$

$$Rf = 2.66667$$

Design Infiltration Rate = Measured Percolation Rate / Rf

Design Infiltration Rate 1.125

Appendix D

Preliminary Drainage Report and Post-Construction Storm Water Quality Report

COVER SHEET

Title of Report:
PRELIMINARY DRAINAGE REPORT AND
POST-CONSTRUCTION STORM WATER
QUALITY REPORT
FOR REDEVELOPEMENT

Location:
320 East Hueneme Road
(500'East of Saviers Rd.)
Oxnard, California

Seal and Signature of Registered Civil Engineer:

Wade E. Lewis

Wade E. Lewis, RCE 36775
Expiration Date: 06/30/2024

REGISTERED PROFESSIONAL ENGINEER
WADE E. LEWIS
C 36775
EXP.
CIVIL
STATE OF CALIFORNIA

Client:
Pantoja Truck Line Inc.
320 East Hueneme Road.
Oxnard, CA 93060

Date of Report:
December 19, 2022
(Rev12/19/2022)

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	Appendix E. City of Oxnard master Drainage Plan for Proj. Area		
	Appendix F. Manning Formula Calculations for Pipes & Trap. Channel		

3. INTRODUCTION:

3.a Introduction:

This report will evaluate the required treatment and storage for the redevelopment of a portion of the site located at 320 East Hueneme Road, Oxnard, CA. The redevelopment will consist of paving a portion of the westerly parcel, a previously unpaved portion of the site. The additional impervious area is less than 50% of the existing impervious area. Thus, treatment of the existing impervious area, previously not treated, is not required per the Ventura County TGM. 2018

This report will evaluate the retention requirements for the VCWPD facilities, the flow limitations for the existing City drain line and the MS4 post construction BMP requirements.

A Bio-3 Vegetated Bioswale is proposed to provide the necessary treatment and retention facilities to meet all the requirements of the proposed redevelopment area.

Location:

The site is located at 320 East Hueneme Road, (APN# 231-0-092-260, 270, 280), approximately 500 feet east of Saviers Road. (Vicinity Map and Location Map on following pages). The parcel extends an average of 477 feet south from Hueneme Road to the North side of the Ventura County Railroad right of way. Located to the south and adjacent to the Ventura County Railroad Right of Way is a county channel that drains to the Pacific Ocean at Ormand Beach. The parcel has no surface run on from adjacent parcels or Hueneme Road. Hueneme Road, north of the site, has three catch basins located on the south curb along the site. The site is bounded by the railroad on the east and south, Hueneme Road to the north and vacant land to the west. The property to the west is undeveloped M-1 that sheet flows to the railroad right of way on the south.

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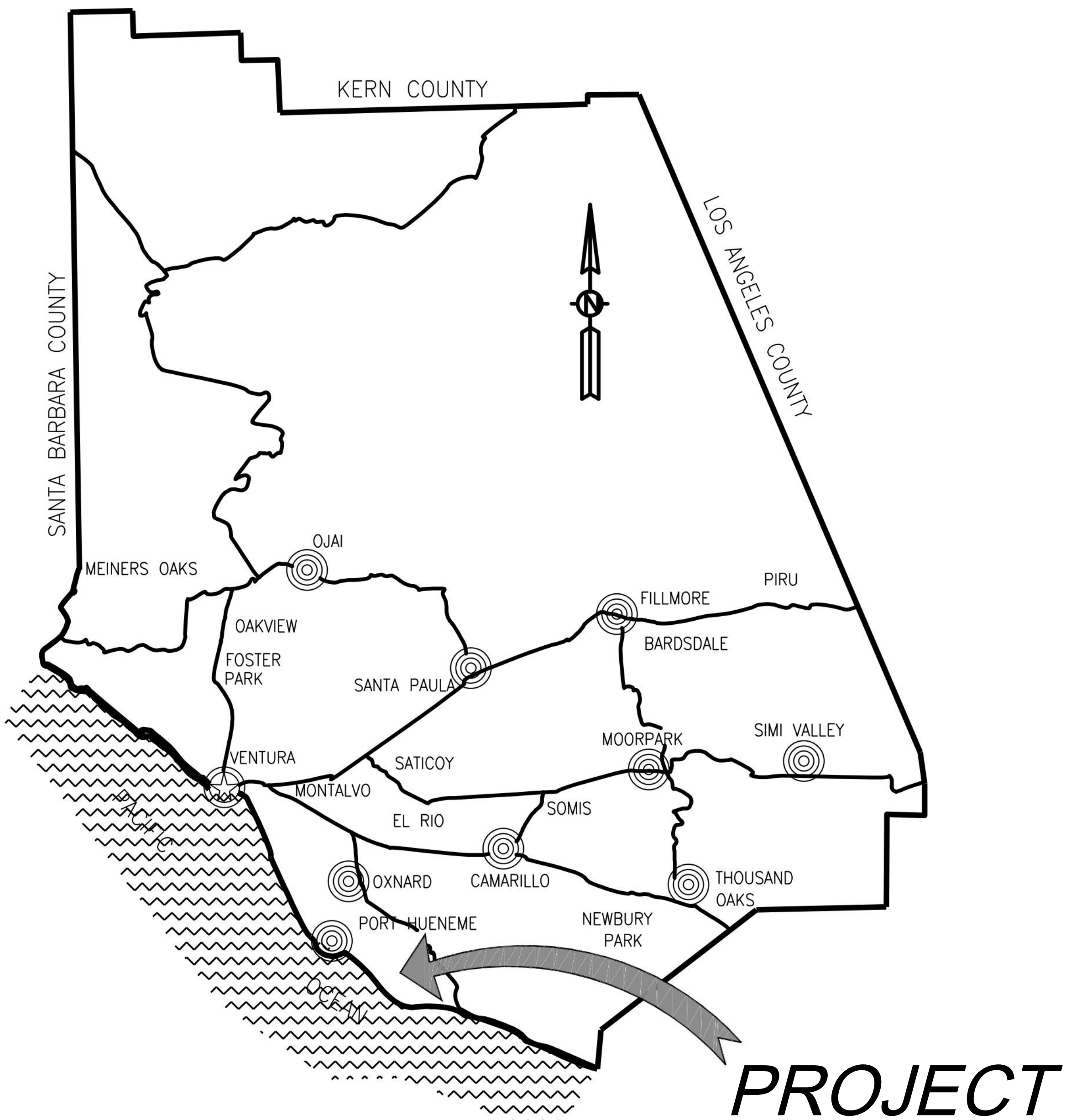


VICINITY MAP

N.T.S.

County View

Legend

Streets
Parcels
State Routes
- Freeway
- Highway

County
- Kern County
- Los Angeles County
- Pacific Ocean
- San Luis Obispo County
- Santa Barbara County
- Ventura County

CAVENT010030.sid
- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT030011.sid
- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT032047.sid
- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT033036.sid
- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 300.00 Distance Feet

1: 3,600

3.b. Existing Conditions:

The total area of the site is 4.76 acres. The site consists of two distinct drainage areas, the previously developed easterly 1.95 acres (APN 231-0-092-270 & 280) sheet flows to the south to an existing 24" CMP culvert under the railroad to an outfall into the County channel and 2-12" PVC culverts under the railroad. This area was not previously required to be treated. The other distinct drainage area is the westerly parcel, of 2.81 acres (APN 231-0-092-260) which sheets flows to the south and is proposed to drain to an existing plugged 24" RCP lateral to the City's 54" RCP Storm Drain Line that bisects the site and outfalls to the County drain channel. Currently the water ponds along the railroad until it reaches sufficient depth to overflow to the previously mentioned 24"CMP culvert and 2-12" PVC culverts under the railroad.

The City of Oxnard's 54" RCP drain line bisects the site running south from Hueneme Road, under the railroad, to outfall into the County channel. "The 54" drain line has a 24" RCP lateral located adjacent to the south property line. The lateral extends 4 feet westerly from the 54" main and is currently plugged. Per the City of Oxnard Storm Drain Plan, 89-71A, Sheet 20, which shows an anticipated capacity, for the lateral, of Q_{10} = 2.2 cfs. The flow line elevation at the inlet of the lateral is 3.74 per the City's plan and the Hydraulic Grade Line (HGL) is 8.3 per same City plan.

The adjacent parcels current use consists of: On the East and south the Ventura Railroad, on the west an undeveloped parcel zoned light manufacturing and to the North is Hueneme Road and beyond a newer residential development.

The parcel has a 0.5 % slope to the south.

The site demonstrates technical infeasibility based on the Workman Geotechnical Report Dated July 11, 2019, (Appendix D) the runoff for the BMP calculation is increased a factor of 1.5.

3.c. Proposed Redevelopment: Will consist of adding truck trailer parking on the north portion of the westerly undeveloped parcel. The additional paving will add 0.77 acres of impervious area which is less than 50% of the existing impervious area of total site. The runoff will sheet flow to the south where it will be directed to the Bio-3 Vegetated Bioswale. The Vegetated Bioswale flows in a northeast direction, along the south easterly property line, to a proposed 3'x3' C.B, with an 8" PVC low flow drainpipe designed to restrict flow to the City's predevelopment Q_{10} = 0.96 cfs and a 3'x3' grated overflow. If the City's 54" drain fails, then the flow will follow the historical flow path to two existing 12" PVC pipes and existing 24" culvert north east of the proposed 3'x'3 CB. The proposed 3'x3' C.B discharges to a proposed 15" RCP connector, sized to restrict flow to the City's max of Q_{10} = 2.2 cfs. The 3' x 3' C.B. will have a Bio-Clean CPS screen, model CPS U 3.7 with a CPS height of 36"with a bypass lid located 4' above the top of CPS.

3.d. Not used

4.e. Description of noteworthy hydrologic or hydraulic Consideration

The Ventura County Drain Channel is located about 100' south of the site and runs parallel with the southerly boundary to the southwest.

3.f. Note used

4. References:

a. Modified Cook's Method for Storm water Runoff Calculations City of Oxnard PWD, Standard Plate #59.
b. Ventura County Hydrology Manual ,2010 and 2017
c. Ventura County Technical Guidance Manual (TGM) June 29, 2018
d. City of Oxnard As-Built Storm Drain _ Huneme Road Plan, 89-71A,20/20

5. Objectives:

The purpose of this report is to evaluate the following three mitigations for the proposed additional impervious area.

1. To determine if the proposed Q_{10} exceeds the capacity of the City Storm Drain, Modify Cooks Method was used for this determination. (Appendix A)
2. The detention Volume required by VCWPD for the discharge from the proposed project. The VCWPD spread sheet Calculations for Detention Volume for Attenuating Peak Run-Off from a Small Developed Area was used for this purpose. (Appendix B)
3. The required Post Construction MS4 BMP to mitigate the additional impervious area. The Ventura County Technical Guidance Manual (TGM) June 29, 2018. (Appendix C)

6. Procedure:

Calculation Method/Results:

1. Proposed Hydrology from Site to address City's Storm Drain Capacity:

   The Modified Cooks method was used for the hydrological calculations (**Appendix A**) which determined that the developed site would generate a **discharge of 2.9 cfs** for a 10-year storm event. The drainage will sheet flow to the southwest corner of the parcel where it will discharge to a Bio-3 Vegetated Bioswale, sized per the Ventura County Technical Guidance Manual, 2018 (included in Appendix C). The Bio-3 Vegetated Bioswale will flow to the east along the southerly property line to an 8" PVC low flow pipe into a 3'x3' C.B. which will be connect to the City's 24" RCP lateral by a new 15" RCP, sized to restrict flow to the City's allotted flow of Q_{10} = 2.2 cfs. Overflow is provided to the north, to the existing 24" CMP culvert and 2-12" PVC that flow under the railroad and into the County Channel.

   Engineering comments requested a Hydrological calculation to show that Q_{10} predevelopment is $\leq$= 2.2 cfs. A Modified Cooks Hydrologic Calculation for a Q10 predevelopment storm is provided in Appendix A. The Q_{10} predevelopment = 0.96 cfs, well below the Q2.2 cfs

Both Mod Cooks calculations are provided in Appendix A.

2. Ventura required detention:

   The Ventura County Watershed Protection District is requiring the site to detain the greatest attenuating peak run-off for a 10, 25, 50 and 100-year storm event. A Drainage Study per VCWPD standard format is included in **Appendix B**. The method used is the VCWPD spread sheet Calculations for Detention Volume for Attenuating Peak Run-Off from a Small Developed Area is included in the VCWPD Drainage Study (Appendix B). The 100-year storm event generated the largest **retention volume, 2,866** cubic feet. Included in the report are the required figures and plans.

   The design is presented in Appendix B.

3. Ventura Countywide Storm Water Quality Program, Post Construction Stormwater Management Plan (PCSMP). The County's TGM Tool was used to evaluate the site and the BMP work sheet for a Bio-3 Vegetated Bioswale was used to design the BMP. A hydraulic residence time of 33 minutes was used exceeding the 7-minute minimum. This resulted in swale length of 257 feet. The design has a swale length of 262 feet exceeding the calculated minimum of 257 feet. The length is increased over required to provide detention storage for Ventura County Watershed Protection District requirements.

   The design is presented in Appendix C.

7. Hydrology

7.a. Drainage Basin Map. The site has no run on from off site. Plate 1 and 2 at the end of the report shows the drainage for the parcel addressed in this study.

7. b. and c. not used

8. Detention/Retention:

8.a. Site Plan see Plate 2 at end of report.

8.b. Description of detention /retention.

The Bio-3 Vegetated Bioswale will act as the retention basin. The BIO-3 is 1.25 feet deep with an additional 1'of freeboard. The bottom is 4' wide with 22(H): 2.5(V) side slopes resulting in a total width of 48 feet with a flow line depth of 1.25 ft. below the top of grate outlet and 20.2 cu ft of storage per lineal foot. The Bio-3 Vegetated Bioswale is 262 feet long with 5,292 cu. ft. of storage.

APPENDICES:

A. **Hydrology Modified Cooks method for**
   a. **Post Development for Q_{10}**
   b. **Pre-Development for Q_{10}**

B. **VCWPD Drainage Study for Detention Volume for Attenuating Peak Run-Off from a Small Developed Area is included in the VCWPD Drainage Study.**

C. **Ventura Countywide Storm Water Quality Program, Post Construction Stormwater Management.**

D. **City of Oxnard, Storm Drain Plan, 89-71A, Sheet 20 of 20.**

E. **Master Plan of Drainage City of Oxnard**

APPENDIX A

Hydrology Modified Cooks Calculations for Q10 developed and predevelopment.

MODIFIED COOKS - HYDROLOGIC CALCULATIONS

Project________ Job No.________ Sheet______ Of______

Watershed________ Designed________ Date________

Concentration Point________ Checked________ Date________

Watershed Constants :

Drainage Area 2.81 Acres

Length 440 feet Fall 2 feet Slope 0.5 %

Width = $\frac{\text{Area} \times 43560}{\text{Length}}$ = 278 feet

$\frac{\text{Length}}{\text{Width}}$ = 1.6 Shape Correc. Factor = 1.11

Soil Type (3) C RI-Correc. Factor 1.23

Computation of "C"

Type of Development	"C" Factor	Present	Future
Undeveloped	40-45	2.81	2.04
Residential	60		
Commercial & Industrial	70		0.77

= [(2.04 × 40) + (0.77 × 70)] / 2.81 = 48

Composite "C" Factor

Runoff : Q from curve = 2.0 × $\frac{L}{W}$ Factor 1.11 × RI-Corr. Factor 1.23

Corrected Q_{10} = 2.73 cfs

Frequency	Frequency Factor	Q
20%	65%	1.77 cfs
10%	100%	2.73 cfs
4%	135%	3.69 cfs
2%	170%	4.61 cfs
1%	200%	5.46 cfs

REV. APPR. BY DATE

CITY OF Oxnard

GENERAL REQUIREMENTS - DRAINAGE

DRAWN: SOHER CKD. Jay Patel APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN

PLATE 59

SHEET OF

MODIFIED RATIONAL FORMULA

" C " FACTORS*

ITEMS	RUNOFF PRODUCING CHARACTERISTICS			
RELIEF	40 Steep, slopes exceed 30%	30 Hilly, slopes 10% to 30%	20 Rolling, slopes 5% to 10%	10 Flat, slopes 0 to 5%
SURFACE STORAGE	20 Negligible, surface depressions few and shallow. Drainageways steep & small, no ponds or marshes.	15 Low, well defined system of small drainageways, no ponds or marshes.	10 Normal, considerable surface depression storage, lakes and ponds less than 2% of drainage area.	5 High, surface depression storage high, drainage system not sharply defined.
SOIL SCS CLASS	20 Rock or thin soil mantle. Negligible infiltration capacity. D	15 Clay or other soil of low infiltration capacity. C	10 Normal, deep permeable soils. B	5 High, sands, loamy sands & other loose open soils. A
VEGETAL COVER	20 No effective soil cover, bare or very sparse cover.	15 Clean cultivated crops or poor natural cover, less than 10% of drainage area under good cover.	10 50% of drainage area in good grassland or woodland, 50% of area in clean cultivated crops.	5 About 90% of drainage area in good grassland woodland or equivalent cover.

" C " FACTOR
(FOR CITY OF OXNARD)

C =40 - 45	FOR UNDEVELOPED
C = 60	FOR RESIDENTIAL
C = 70	FOR COMMERCIAL AND INDUSTRIAL

NOTE:

In hydrologic Calculations, use values of "C" given in lower table.
Use of values of "C" given in upper table have to be approved by the City Engineer.

REV.	APPR. BY	DATE

CITY OF Oxnard	GENERAL REQUIREMENTS – DRAINAGE	STANDARD PLAN
	DRAWN: SOHER CKD. Jay Patel APPR. BY Benjamin Y. Wong	PLATE 60
	Public Works Department	SHEET OF

FREQUENCY FACTORS – %

RETURN FREQUENCY	RETURN PERIOD	FACTOR
50%	2	25
20%	5	65
10%	10	100
4%	25	135
2%	50	170
1%	100	200
0.1%	1,000	400

RAINFALL INTENSITY CORRECTION FACTOR

OXNARD AREA	=	123%

SHAPE CORRECTION FACTORS – %

L/W \ AREA	0.01 S.M.	0.1 S.M.	1 S.M.	10 S.M.	100 S.M.	1,000 S.M.
1	115	125	132	141	154	172
1.5	112	115	119	124	131	141
1.6	111					
2	108	110	110	113	117	122
3	100	100	100	100	100	100
4	98	95	94	91	89	86
5 or greater	95	91	88	85	82	78

1 S.M. = 1 Square Mile = 640 Acres

Just for information only

REV. | APPR BY | DATE

CITY OF Oxnard

Public Works Department

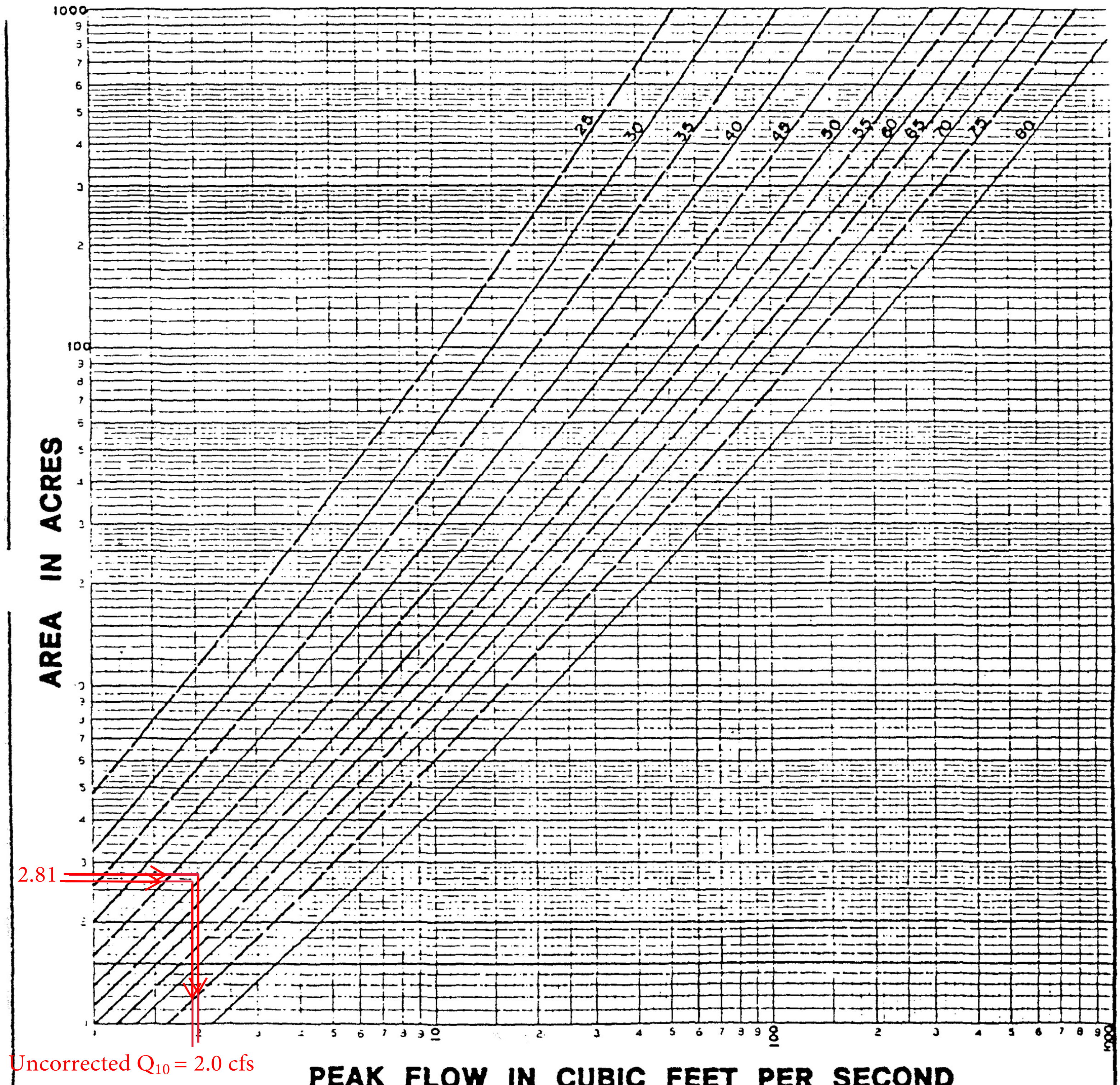
GENERAL REQUIREMENTS – DRAINAGE

DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

STANDARD PLAN

PLATE 61

SHEET OF



CITY OF Oxnard

GENERAL REQUIREMENTS – DRAINAGE

DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN
PLATE 62
SHEET OF

Pre development Q_{10} = 0.96 cfs

320 E. Hueneme Rd, Westerly 2.81 ac Undeveloped Parcel

53 **MODIFIED COOKS - HYDROLOGIC CALCULATIONS**

Project ______ Job No. ______ Sheet ______ Of ______

Watershed ______ Designed ______ Date ______

Concentration Point ______ Checked ______ Date ______

Watershed Constants:

Drainage Area 2.81 Acres

Length 440 feet Fall 2 feet Slope 0.5 %

Width = Area × 43560 / Length = 278 feet

Length / Width = 1.6 Shape Correc. Factor = 1.11

Soil Type (3) C RI-Correc. Factor 1.23

Computation of "C"

Type of Development	"C" Factor	Present	Future
Undeveloped	40-45	2.81	2.81
Residential	60		
Commercial & Industrial	70		

C = 40

Composite "C" Factor

Runoff: Q from curve = 0.7 × L/W Factor 1.11 × RI-Corr. Factor 1.23

Corrected Q_{10} = 0.96 cfs

Frequency	Frequency Factor	Q
20%	65%	0.62 cfs
10%	100%	.96 cfs
4%	135%	1.3 cfs
2%	170%	1.6 cfs
1%	200%	3.4 cfs

REV.	APPR. BY	DATE

CITY OF Oxnard

GENERAL REQUIREMENTS - DRAINAGE

DRAWN: SOHER CKD. Jay Patel APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN PLATE 59 SHEET OF

MODIFIED RATIONAL FORMULA

" C " FACTORS*

ITEMS	RUNOFF PRODUCING CHARACTERISTICS			
RELIEF	40 Steep, slopes exceed 30%	30 Hilly, slopes 10% to 30%	20 Rolling, slopes 5% to 10%	10 Flat, slopes 0 to 5%
SURFACE STORAGE	20 Negligible, surface depressions few and shallow. Drainageways steep & small, no ponds or marshes.	15 Low, well defined system of small drainageways, no ponds or marshes.	10 Normal, considerable surface depression storage, lakes and ponds less than 2% of drainage area.	5 High, surface depression storage high, drainage system not sharply defined.
SOIL	20 Rock or thin soil mantle. Negligible infiltration capacity.	15 Clay or other soil of low infiltration capacity.	10 Normal, deep permeable soils.	5 High, sands, loamy sands & other loose open soils.
SCS CLASS	D	C	B	A
VEGETAL COVER	20 No effective soil cover, bare or very sparse cover.	15 Clean cultivated crops or poor natural cover, less than 10% of drainage area under good cover.	10 50% of drainage area in good grassland or woodland, 50% of area in clean cultivated crops.	5 About 90% of drainage area in good grassland woodland or equivalent cover.

" C " FACTOR
(FOR CITY OF OXNARD)

C =40 - 45	FOR UNDEVELOPED
C = 60	FOR RESIDENTIAL
C = 70	FOR COMMERCIAL AND INDUSTRIAL

NOTE:

In hydrologic Calculations, use values of "C" given in lower table.
Use of values of "C" given in upper table have to be approved by the City Engineer.

REV. | APPR. BY | DATE

CITY OF Oxnard

Public Works Department

GENERAL REQUIREMENTS – DRAINAGE

DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

STANDARD PLAN

PLATE 60

SHEET OF

FREQUENCY FACTORS – %

RETURN FREQUENCY	RETURN PERIOD	FACTOR
50%	2	25
20%	5	65
10%	10	100
4%	25	135
2%	50	170
1%	100	200
0.1%	1,000	400

RAINFALL INTENSITY CORRECTION FACTOR

OXNARD AREA	=	123%

SHAPE CORRECTION FACTORS – %

L/W \ AREA	0.01 S.M.	0.1 S.M.	1 S.M.	10 S.M.	100 S.M.	1,000 S.M.
1	115	125	132	141	154	172
1.5	112	115	119	124	131	141
2	108	110	110	113	117	122
3	100	100	100	100	100	100
4	98	95	94	91	89	86
5 or greater	95	91	88	85	82	78

1.6 → 111

1 S.M. = 1 Square Mile = 640 Acres

Just for information only

REV. | APPR BY | DATE

CITY OF Oxnard

GENERAL REQUIREMENTS – DRAINAGE

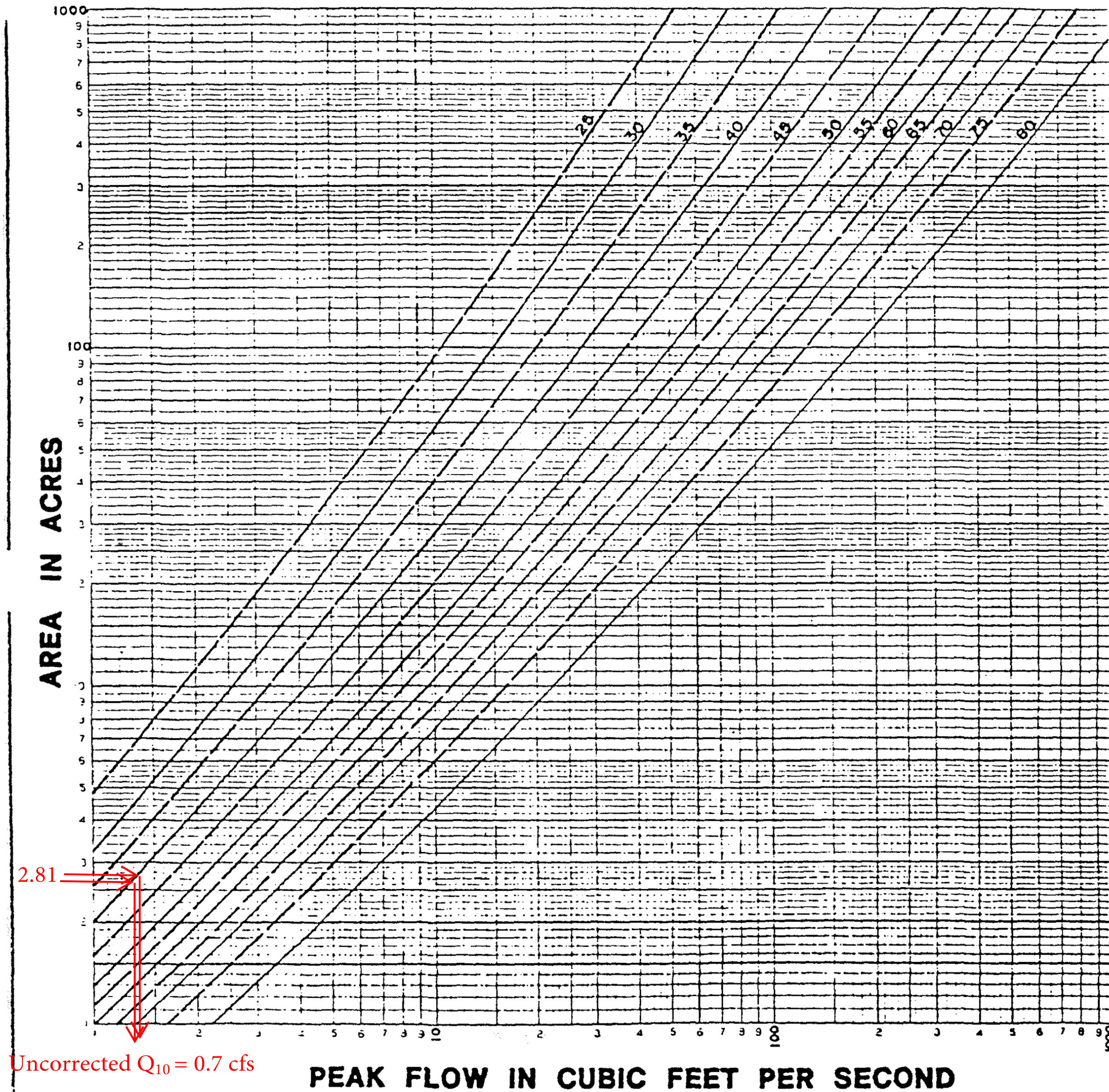
DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN

PLATE 61

SHEET OF



CITY OF Oxnard

GENERAL REQUIREMENTS – DRAINAGE

DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN
PLATE 62
SHEET OF

APPENDIX B

VCWPD Drainage Study for Detention Volume for Attenuating Peak Run-Off from a Small Developed Area is included in the VCWPD Drainage Study.

COVER SHEET

Title of Report:
DRAINAGE STUDY TO MITIGATE
FOR PROPOSED PAVED TRUCK TRAILER
STORAGE ADDITIOAL RUN-OFF PER VCWPD REQUIRMENTS

Location:
320 East Hueneme Road
Oxnard, California

Seal and Signature of Registered Civil Engineer:

REGISTERED PROFESSIONAL ENGINEER
WADE E. LEWIS
C 36775
EXP.
CIVIL
STATE OF CALIFORNIA

Wade E. Lewis

Wade E. Lewis, RCE 36775
Expiration Date: 06/30/2024

Client:
Pantoja Truck Line Inc.
320 East Hueneme Road
Oxnard, Ca 93033

October 26, 2021
(Rev 4/06/2022)
(Rev 7/18/2022)
(Rev 12/20/2022)

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SECTION 1 INTRODUCTION /PROJECT DISCRIPTION

Presented herein are the results of our Hydrology study to assess if the proposed Bio-3 Vegetated Bioswale structure will be sufficient to mitigate the proposed impervious area of the planned redevelopment located at 320 East Hueneme Road, Oxnard California.

This drainage report will follow the Ventra County Watershed Protection District E15,

The overall site and existing improvements are shown on the 1” = 20’ scale field Survey, 320 East Hueneme Road, Oxnard CA 93033 by Accurate Surveying & Engineering. This plan serves as the bases for the existing and proposed impervious areas, Site Map (Plate 1 and Plate 2).

The total site of 4.76 acres, is roughly a triangular property and comprises two distinct drainage areas. The easterly 1.93 acres is an existing trucking company with most of the site being impervious. The runoff from the easterly 1.95 acres sheet flows to the south westerly corner where the flow is intercepted by a 24’ CMP culvert under the railroad to the County Channel and 2-12” PVC culverts under the railroad.

The westerly 2.81 acres is currently undeveloped grass land and sheet flows to the south and along the railroad tracts to northeast where it flows to the existing 24” CMP under the tracts to the channel.

This study will evaluate the required storage using the VCWPD Design Hydrology Manual -2017, Section 6.15 Simplified Basin Design Procedures for Small Projects, 6.15.1, for 100-yr, 50-yr, 25-yr and 10-yr storm event Undeveloped Condition Peak Mitigation and determine if the storage of the proposed Bio-3 Vegetated Bioswale structure will provide sufficient detention storage.

Summary, the proposed Bio-3 provides 5,292 cu. ft. of storage, the largest required storage for 10-, 25-, 50- and 100-year storm frequency was the 100-yr storm event at 2,866 cu. feet. The provided storage of 5,292 cu. ft. exceeds the required 2,866 cu, ft storage for the 100-year storm, to mitigate the additional 0.77 ac of impervious area.

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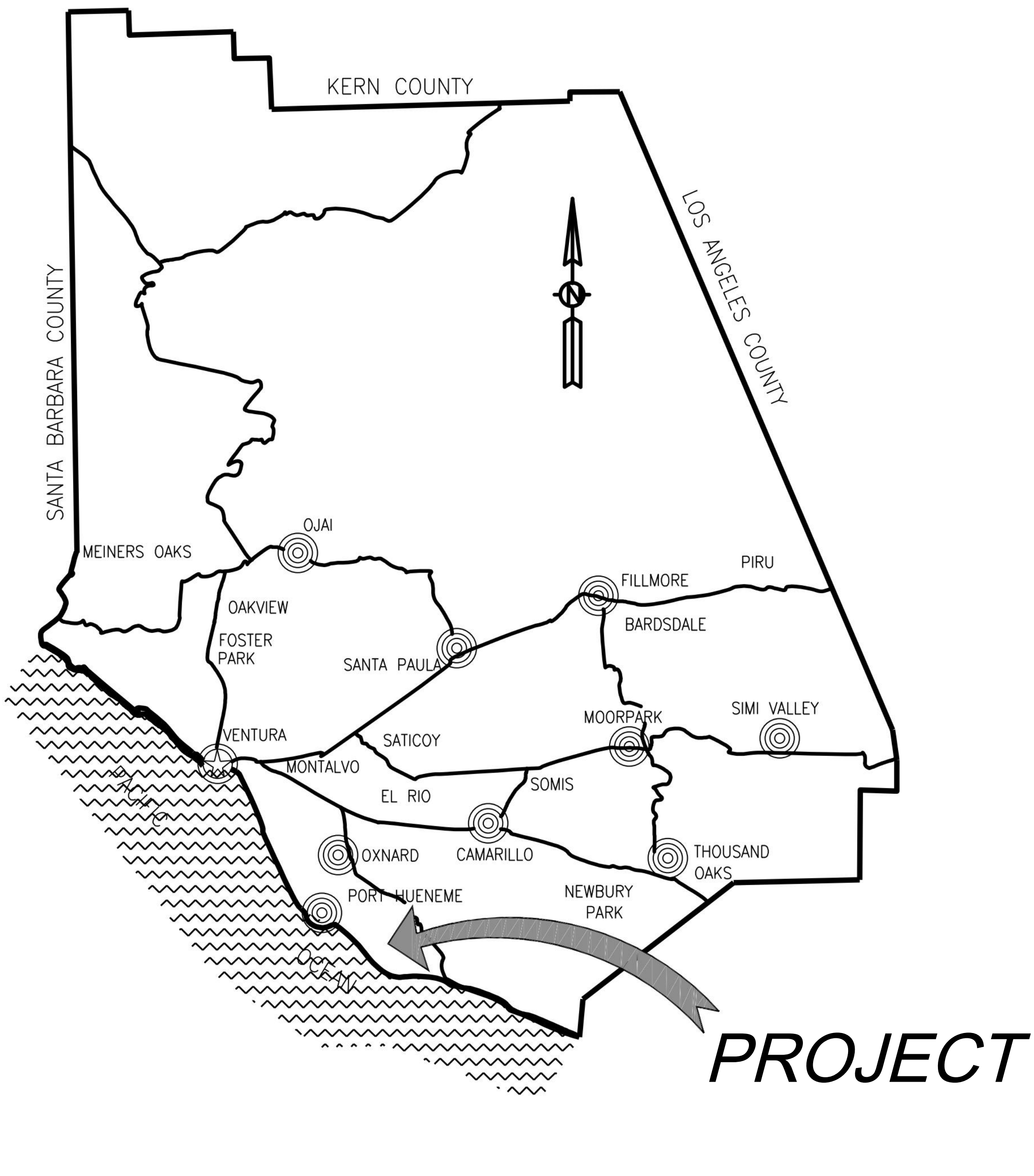

VICINITY MAP

N.T.S.

County View

Legend

Streets

Parcels

State Routes

- Freeway
- Highway

County

- Kern County
- Los Angeles County
- Pacific Ocean
- San Luis Obispo County
- Santa Barbara County
- Ventura County

CAVENT010030.sid

- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT030011.sid

- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT032047.sid

- Red: Band_1
- Green: Band_2
- Blue: Band_3

CAVENT033036.sid

- Red: Band_1
- Green: Band_2
- Blue: Band_3

0 300.00 Distance Feet

1: 3,600

1.1 DISCRIPTION OF EXISTING CONDITIONS

This study addresses the westerly, 2.81 acres, of which the northly 0.77 acres will be paved to provide additional truck trailer storage. The 2.81 acres is undeveloped natural grass land. The drainage sheet flows from the north property line in a southerly direction to the southeasterly property line and then along the railroad in a north easterly direction to the existing 24" CMP culvert under the railroad tracks then into the County Channel.

The City's existing 54" RCP storm drain runs along the easterly side of the 2.81 acres in a 20' wide storm drain easement with a 24" RCP plugged lateral extending 4' into the 2.81-acre undeveloped portion of the site. The City of Oxnard Strom Drain Plan, 89-71A, Sheet 20, shows the anticipated capacity for the plugged lateral as Q10 = 2.2 cfs. The inlet invert for the 24 RCP is 3.74 per the City's plan with HGL of 8.3.

The parcel has no surface run on from adjacent parcels or Hueneme Road. Hueneme Road has 3 catch basins located on the south curb in the vicinity of the site.

The site has a total relief on the order of 2 feet in elevation. (Plate 1)

1. The soils classification is No. 3 per 2010 Ventura County Hydrology Manual (Figure 1.)

2. Rain Fall Zone is k per the per 2010 County Hydrology manual (Figure 1.)

3. The land use is light manufacturing (M-1).

4. Existing Impervious area is 1.93 ac. for the total site of 4.76 acres. (Plate 1)

1.2 DESCRITPION OF PROPOSED DEVELOPMENT / MITIGATION

The proposed redevelopment will include additional truck trailer storge provided by paving the north westerly 0.77 acres of the site. The redevelopment will also include perimeter security fencing, screening landscape and a Bio-3 vegetated bioswale structure (Plate 3). The proposed improvements will have a total impervious area of 0.77 acres (does not include existing 1.93 acres comprising the buildings and paving on the easterly portion of the site (Plate 2). The proposed mitigation for the additional peak flow will consist of the storage volume provided by the Bio-3, vegetated bio swale.

1.3 Previous Hydrology Studies.
Master Plan of Drainage City of Oxnard

1.4 Vicinity Map and Location Map (page 4 and 5)

2.0 MITIGATION CRITERIA

2.1 Reviewing Agency.

The reviewing agency will be City of Oxnard and Ventura County Watershed Protection District.

2.2 Mitigation Criteria

The project will mitigate the increase in the highest calculated peak runoff between the existing and proposed impervious areas, for the 10-yr 25-yr,50-yr and 100-yr storm event.

3.0 PEAK RUNOFF ANALYSIS

3.1 Existing Condition Peak Runoff

Methodology, Sources and Assumptions used:
The methodology used is the VCWPD Design Hydrology Manual -2017, Section 6.15 Simplified Basin Design Procedures for Small Projects, 6.15.1. The 10-yr, , 25-yr, 50-yr and 100-yr storm events for undeveloped vs developed Conditions were analyzed to determine the peak required mitigation detention volume.

Assumptions: 1. The drainage pattern for the proposed and the existing conditions are similar.
2. Only the Westerly 2.81 acres of the site was considered in the calculations since there is no run on from the easterly 1.95 acers which drains to an existing 24” CMP culvert that drains to the County Drain channel.

3.1.1 Soils Type

The soils classification is No. 3 per 2010 Ventura County Hydrology Manual (Figure 1.)

3.1.2 Rainfall zone,

The legacy is zone K (Figure 1)

3.1.3 Source of Contours used for Elevations.

1” = 40’ scale field Survey, 320 East Hueneme Road, Oxnard CA 93033 by Accurate Surveying & Engineering, Dated March 2, 2021, used as bases for Plates 1 and 2.

3.1.4 Subarea delineation and effective impervious areas.

The Undeveloped condition has a 1.93 ac. of impervious area. (Plate1)

Total area of project considered for this report = 2.81 ac. of which 0.77 ac. is being developed.

.

3.1.5 NRCS Curve Number for Existing Condition. Per VCWPD, Exhibit 14b. (Figure 3a)

For Undeveloped Land Use = Grassland (annual Grass, Poor).
for Hydrological Soil Group = 3

The NRCS Curve Number = 68

3.2 PROPOSED CONDITION OF PEAK RUNOFF

Methodology, Sources and Assumptions used:
Same as 3.1 Existing condition

3.2.1 Associated effective impervious area delineation:
The proposed impervious area:
Additional Paved area = (0.77 ac.) (Plate 2)

Total area of project considered for this report = 2.81 ac. of which 0.77 ac. is proposed to be developed as impervious paving.

SECTION 4 RUNOFF VOLUME INCREASE

4.1 Through 4.4 of Drainage Study Example not used.

4.5 The largest estimate of detention volume required to mitigate a storm was found to be the 100-yr storm event using the VCWPD Design Hydrology Manual -2017, Section 6.15 Simplified Basin Design Procedures for Small Projects, 6.15.1,

The NRCS Curves and the SCS yield Spread Sheet for Detention Volume for Attenuating Peak Runoff from Small Developed Areas was used to estimate the detention volume required for the proposed project to mitigate 100 -yr developed to the 100-yr undeveloped peak runoff.

4.5.a. 100-yr 1-day rainfall per Appendix E4 NOAA 100-yr = 6 in (Figure 2a).
50-yr 1-day rainfall per Appendix E4 NOAA 50-yr = 5.5 in (Figure 2b).
25-yr 1-day rainfall per Appendix E4 NOAA 25-yr = 5 in (Figure 2c).
10-yr 1-day rainfall per Appendix E4 NOAA 10-yr = 4 in (Figure 2d).

4.5.b. The CN's for the undeveloped and developed conditions were determined using VC Hyd. Manual, Exhibit 14 A & B AMC ll NRCS Curve Numbers for Un developed and Developed Land, Soil Number 3. (Figure 3a and 3b)

The Existing CN = 68 for Grassland (Annual Grass, Poor, less than 50% cover) (Figure 3a.)

The CN for the proposed condition = 77.02. It was determined by a proportional calculation using the existing CN of 68 (undeveloped) and 98 (developed) for the additional impervious area (roof, driveways) (Figure 3a & 3b)
Proportional Calculation:

Subarea A = 2.81 ac. (Existing condition, total drainage area)
Subarea A1 = 2.04 ac. (Existing condition, without the additional new paving)
Subarea A2 = 0.77 ac. (Proposed area of the paving)

A. CN = 68 for Existing condition w/o the additional paving. (Figure 3a).

B. The CN = 98 was used for additional developed areas (paving) (Figure 3b).

C. Proportion calculation to determine the CN for the developed condition = **76.22**

[(A1) (CN Existing) +(A2.) (CN for Additional Impervious Area)]/A. = composite CN for developed condition

[(2.04 ac.) (68) +(0.77ac.) (98)]/2.81ac. = **76.22 (Composite CN for Developed site)**

4.5.c through e. The Detention Volume was estimated using the SCS yield Spread Sheet for Detention Volume for Attenuating Peak Runoff from Small Developed Areas. (Figure 4a – 4d)

Input data used for the SCS yield spread sheet:

100-yr 1-day Rain in = **6** (Figure2)
Soil Type = **3** (Figure 1)
CN undeveloped = **68** (Figure 3a)
CN developed = **76.22** (from proportion calculation above)
Developed Impervious Area ac. = **2.81ac**. Drainage Area

SCS yield calculations Results:

The runoff volume increase (required basin volume) = 2,866 cubic feet for the 100-yr storm event. (Figure 4a)

The spread sheet calculations for 50-yr, 25-yr, and 10-yr storm events are included as Fig 4b, 4c and 4d, respectively.

4.6 Detention Volume is Provided by BMP, Bio-3, Bioretention w/ underdrain. (Plate 3, BMP Plan)

The Bio-3 vegetated bioswale with a water depth of 1.25, cross sectional area of 20.2 sq. ft. and a length of 262 feet provides 5,292 cu.ft. of storage.

4.7 Determine Post Development Capital Storm flow using the VCWPD Rational method to determine the Bioswale velocity. The velocity was calculated using Manning's equation, the calculation is attached to the Bio-3 BMP Worksheets.

Calculations:

1. Rainfall Zone k (Per Figure 1)
2. Soil Type 3 (Per Figure 1)
3. Rainfall Frequency considered
4. Composite CN for the developed site =76.22 (Previously calculated in 4.5.b of this report)
5. Tc =5 min. (assumed)
6. $I_{100\ yr}$ = 5.10 in/hr (Figure 5 this report)
7. $C_{100YRu/d}$ = 0.840 (Per 2010 WPD Hydro. Manual, Appendix A Exhibit 6C) Figure 6 This report
8. $C^{*}_{100\ YR\ dev}$ = (.95)(0.7622) + (1-0.7622)(0.840) =0.9238
    a. C^{*}=0.95P +(1-P)C (Equation for proposed post-development condition with added impervious area)WDP Hydro. Manual, Appendix A-Exhibit 6C) Figure 6 this report
9. $Q_{100\ dev\ w} = C^{*}_{dev\ 100\ yr}$ IA= (0.9238)(5.10)(2.81) = 13.24 cfs

SECTION 5 MITIGASTION

The increase of peak runoff between the existing and proposed is to be mitigated using the detention volume provided by the Bio-3 Bioswale BMP.

SECTION 6 SUMMARY & CONCLUSIONS

The required mitigation is satisfied.

The provided detention volume of 5,292 cubic feet exceeds the required detention volume of 2,866 cubic feet (for the 100-yr storm event).

Summary: The flow from the additional impervious area created by the development is totally mitigated for all storm events, the 100-year storm event being the largest.

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References:

a. Ventura County Hydrology Manual ,2010 and 2017
b. Master Plan of Drainage City of Oxnard
c. The City of Oxnard Strom Drain Plan, 89-71A, Sheet 20

FIGURES:

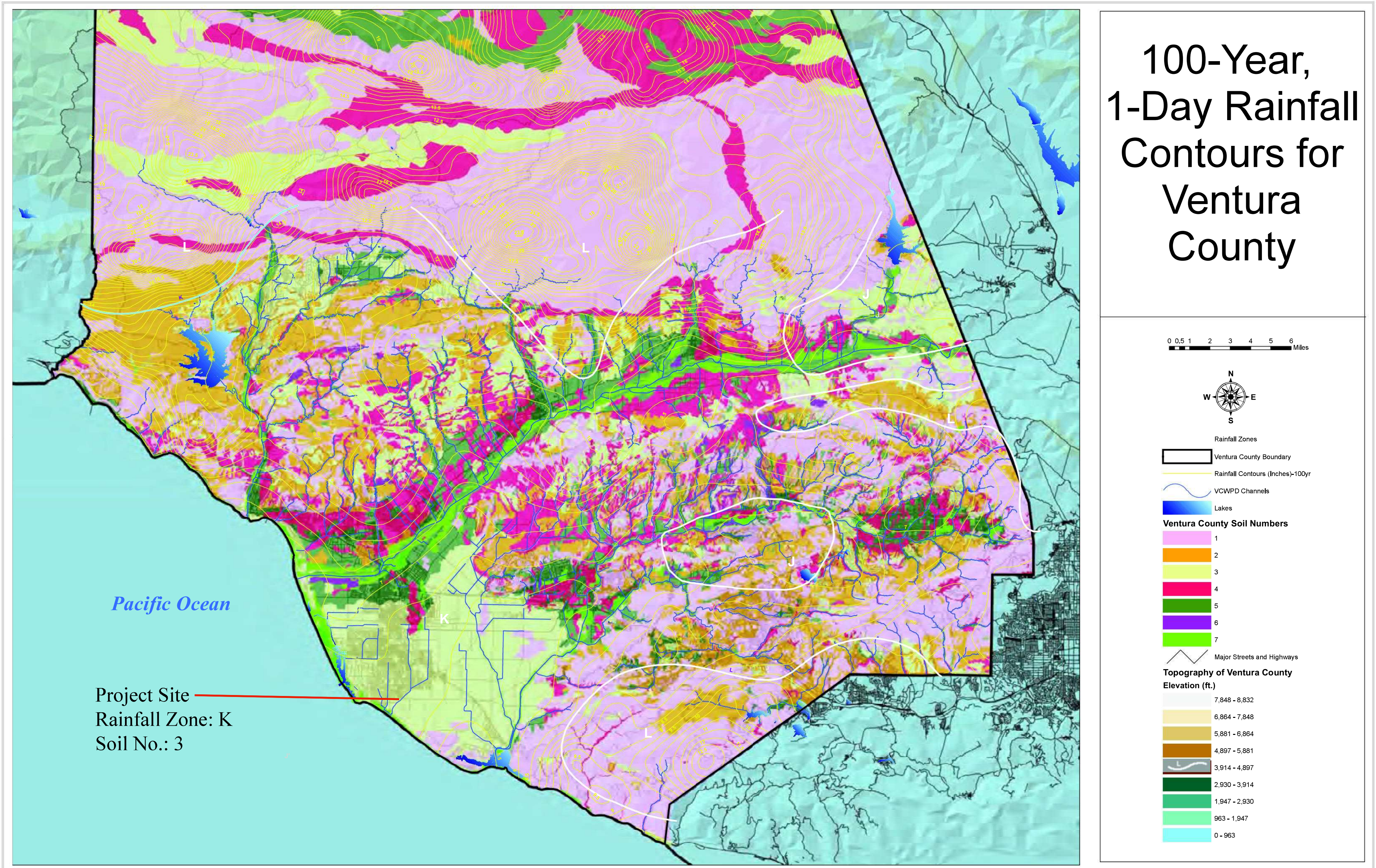

100-Year,
1-Day Rainfall
Contours for
Ventura
County
Pacific Ocean
Project Site
Rainfall Zone: K
Soil No.: 3
0 0.5 1 2 3 4 5 6
Miles
N
W
E
S
Rainfall Zones
Ventura County Boundary
Rainfall Contours (Inches)-100yr
VCWPD Channels
Lakes
Ventura County Soil Numbers
1
2
3
4
5
6
7
Major Streets and Highways
Topography of Ventura County
Elevation (ft.)
7,848 - 8,832
6,864 - 7,848
5,881 - 6,864
4,897 - 5,881
3,914 - 4,897
2,930 - 3,914
1,947 - 2,930
963 - 1,947
0 - 963

FIGURE 1


Legend
NOAA 100-Yr
VCWPD Channel
City
Project Site
100 yr 1-day
Rainfall Contour: 6 in

FIGURE 2a


Legend
NOAA_50yr
VCWPD Channel
City
Project Site
50yr 1-day
Rainfall Contour: 5.5 in

FIGURE 2b


Legend
NOAA_25yr
VCWPD Channel
City
Project Site
25 yr 1-day
Rainfall Contour: 5 in

FIGURE 2c

Legend
NOAA_10-Yr
VCWPD Channel
City
Project Site
10 yr 1-day
Rainfall Contour: 6 in

FIGURE 2d

EXHIBIT 14A. AMC II NRCS CURVE NUMBERS FOR UNDEVELOPED LAND

UNDEVELOPED LAND USE AND CONDITION		% Impervious		HYDROLOGIC SOIL GROUP AND VCWPD NUMBERS						
Poor: Less than 50% Cover Fair: From 50% to 75% Cover				A (1), (2)		B		C		D (3)
Good: More Than 75% Cover		Effective	Average	7	6	5	4	3	2	1
Grassland (Annual Grass)	Poor	0	0	46	57	60	63	68	72	76
"	Fair	0	0	21	42	47	53	60	66	70
"	Good	0	0	-	-	41	47	54	59	64
Open Brush (Sagebrush, Flattop Buckwheat)	Poor	0	0	31	51	55	60	66	70	75
"	Fair	0	0	22	40	44	49	54	58	61
"	Good	0	0	-	-	33	39	46	51	56
Big Brush (Scrub Oak, Manzanita, Ceanothis)	Fair	0	0	23	39	42	46	51	54	59
"	Good	0	0	-	-	29	34	41	46	51
Chamise (Narrow Leaf Chaparral)	Fair	0	0	21	43	48	55	63	68	75
"	Good	0	0	-	-	44	49	55	60	64
Oak Savannah (Sparse Oaks & Annual Grass)	Poor	0	0	34	53	57	62	67	71	-
"	Fair	0	0	22	41	45	51	57	61	-
Orchard	Poor	0	0	42	56	59	62	65	67	71
Woodland	Fair	0	0	-	-	35	39	43	47	-
Pinon & Juniper	Fair	0	0	-	-	43	48	54	58	62
Forest	Fair	0	0	22	41	45	50	56	60	64
Pasture or Range	Poor	0	0	61	76	78	81	84	87	89
"	Fair	0	0	40	61	65	71	77	81	84
"	Good	0	0	29	52	57	64	71	76	80

	NOTE: WPD MODIFIED RATIONAL METHOD USES SOIL TYPES 1-7 AND EFFECTIVE IMPERVIOUS PERCENTAGE IN VCRat MODEL
Note (1)	Curve numbers for soil types 6 and 7 not all available
Note (2)	For CNs<30, ensure that P-0.2*S > 0
Note (3)	Curve numbers for soil type 1 not all available
Reference:	Boyle, 1967. Revised Hydrologic Analysis, Zone II except Pasture from NRCS TR-55 Table 2-2c. For other land use types see TR-55

FIGURE 3a

Exhibit 14b. AMC II NRCS Curve Numbers for Developed Land

DEVELOPED LAND USE	Condition (1)	% IMPERVIOUS EFFEC-TIVE	% IMPERVIOUS AVER-AGE	HYDROLOGIC SOIL GROUP (5) A 7	A 6	B 5	B 4	C 3	C 2	D 1
Open Spaces, Lawns, Parks, Golf Courses, Cemeteries, etc.	Good	0	0	29	52	57	64	71	76	80
"	Fair	0	0	42	61	65	71	77	81	84
Residential 1 ac. Lot	-	10	20	45	62	66	71	76	80	84
Residential 1/2 ac. Lot	-	13	25	45	65	68	73	78	81	85
Residential 1/3 ac. Lot	-	15	30	48	67	70	75	79	82	86
Residential 1/4 ac. Lot	-	19	38	53	70	73	77	81	84	87
Residential 1/5 ac. Lot	-	23	47	59	74	77	80	84	86	89
Residential 1/6 ac. Lot	-	28	56	66	79	81	84	86	88	90
Residential 1/8 ac. Lot	-	32	65	72	83	84	87	89	90	92
Residential - Condos	-	37	69	74	84	86	88	90	92	93
Industrial Unpaved Yards, etc.	-	36	72	77	86	87	89	91	92	93
Commercial & Business	-	50	85	88	90	91	93	93	95	95
Industrial Parks, Paved Parking, etc.	-	70	93	93	94	95	96	96	97	97
Parking Lots, Roofs, Driveways, Paved Streets with Curbs & Drains	-	90	100	98	98	98	98	98	98	98
Public Facilities & Institutions; Includes Schools, Government CenterS, Military Bases, etc. (2)	-	23	47	59	74	77	80	84	86	89
Transportation and utilities (3)	-	70	93	79	87	88	90	91	92	93
Newly graded/under construction - No veg.	-	0	0	71	83	85	88	90	92	94
Paved Streets with open ditches including right-of-way (3)	-	70	93	79	87	88	90	91	92	93
Gravel streets including right-of-way	-	0	0	71	82	84	86	88	90	91
Dirt street including right-of-way	-	0	0	66	79	81	83	86	88	89
Natural desert landscaping- native vegetation	-	0	0	55	72	75	79	83	86	88
Farmsteads- buildings, lanes, driveways, and surrounding lots (2)	-	23	47	51	69	72	76	80	83	86
Agriculture- Straight Row + Crop Residue Cover on >5% of surface	Good	0	0	57	72	74	77	80	83	85
Agriculture- Straight Row + Crop Residue Cover on <5% of surface	Poor	0	0	64	78	80	83	86	88	90

FIGURE 3b

Detention Volume for Attenuating Peak Runoff from Small Developed Areas

	Undeveloped	Developed
100-yr 1-d Rain in	6	6
Soil Type	3	3
Land Use	Grassland	W/Parking Lot
CN Exhibit 14	68	76.22
S = 1000/CN-10	4.71	3.12
Yield in	2.62	3.40
Volume Calculation		
Yield Difference in		0.78
Surface Storage		0.50
Net Yield		0.28
Impervious Area ac		2.810
Vol Increase CF- Max Basin Size Req'd		2866.02
Basin Vol / acre		1,020

FIGURE 4a

Detention Volume for Attenuating Peak Runoff from Small Developed Areas

	Undeveloped	Developed
50-yr 1-d Rain in	5.5	5.5
Soil Type	3	3
Land Use	Grassland	W/Parking Lot
CN Exhibit 14	68	76.22
S = 1000/CN-10	4.71	3.12
Yield in	2.24	2.97
Volume Calculation		
Yield Difference in		0.73
Surface Storage		0.50
Net Yield		0.23
Impervious Area ac		2.810
Vol Increase CF- Max Basin Size Req'd		2348.35
Basin Vol / acre		836

FIGURE 4b

Detention Volume for Attenuating Peak Runoff from Small Developed Areas

	Undeveloped	Developed
25-yr 1-d Rain in	5	5
Soil Type	3	3
Land Use	Grassland	W/Parking Lot
CN Exhibit 14	68	76.22
S = 1000/CN-10	4.71	3.12
Yield in	1.88	2.55
Volume Calculation		
Yield Difference in		0.68
Surface Storage		0.50
Net Yield		0.18
Impervious Area ac		2.810
Vol Increase CF- Max Basin Size Req'd		1785.72
Basin Vol / acre		635

FIGURE 4c

Detention Volume for Attenuating Peak Runoff from Small Developed Areas

	Undeveloped	Developed
100-yr 1-d Rain in	4	4
Soil Type	3	3
Land Use	Grassland	W/Parking Lot
CN Exhibit 14	68	76.22
S = 1000/CN-10	4.71	3.12
Yield in	1.20	1.75
Volume Calculation		
Yield Difference in		0.55
Surface Storage		0.50
Net Yield		0.05
Impervious Area ac		2.810
Vol Increase CF- Max Basin Size Req'd		505.59
Basin Vol / acre		180

F:\LOCAL DRIVE DRAWINGS\BILL LINDSAY\HUENEME RD\CIVIL\Hydrology\NEW\SCSYeild Tool Small Basin\SCSyield_100-50-25-10_yr

10/26/2021

FIGURE 4d

EXHIBIT 2. MAXIMUM RAINFALL INTENSITIES

Zone	J	Jp	K	L	J	Jp	K	L	J	Jp	K	L	J	Jp	K	L
Year	10	10	10	10	25	25	25	25	50	50	50	50	100	100	100	100
Cum. Rain (in.)	3.17	4.38	5.53	7.21	3.91	5.28	6.41	8.81	5.0	6.0	8.0	11.0	7.0	6.66	10.6	15.0
Tc (min)	Maximum Rainfall Intensity (in/hr)															
5	2.16	2.16	3.72	4.31	2.64	3.34	4.27	4.94	2.94	3.79	4.55	5.58	3.23	4.06	5.10	6.11
6	2.02	2.01	3.40	3.90	2.52	2.94	3.80	4.39	2.80	3.34	4.10	5.05	2.90	3.55	4.59	5.43
7	1.86	1.90	3.09	3.56	2.30	2.65	3.45	3.99	2.55	3.01	3.77	4.63	2.67	3.19	4.23	4.95
8	1.74	1.82	2.86	3.30	2.14	2.58	3.19	3.69	2.36	2.93	3.52	4.28	2.50	2.99	3.95	4.58
9	1.63	1.76	2.68	3.07	1.99	2.44	2.99	3.45	2.21	2.77	3.33	4.00	2.36	2.87	3.74	4.30
10	1.53	1.70	2.52	2.86	1.87	2.29	2.81	3.24	2.08	2.60	3.16	3.76	2.25	2.78	3.57	4.07
11	1.45	1.64	2.40	2.70	1.76	2.17	2.66	3.07	1.95	2.46	3.02	3.56	2.13	2.67	3.39	3.88
12	1.38	1.59	2.29	2.56	1.66	2.07	2.53	2.92	1.85	2.35	2.90	3.39	2.02	2.58	3.23	3.72
13	1.33	1.55	2.20	2.44	1.58	1.98	2.43	2.80	1.76	2.25	2.80	3.25	1.94	2.49	3.10	3.59
14	1.28	1.51	2.12	2.34	1.52	1.90	2.34	2.70	1.68	2.16	2.72	3.13	1.86	2.42	2.99	3.47
15	1.23	1.47	2.04	2.25	1.46	1.84	2.26	2.60	1.62	2.09	2.62	3.02	1.80	2.36	2.89	3.37
16	1.18	1.43	1.98	2.18	1.40	1.78	2.18	2.50	1.56	2.02	2.54	2.92	1.73	2.29	2.79	3.25
17	1.14	1.39	1.92	2.11	1.36	1.73	2.12	2.42	1.50	1.96	2.47	2.83	1.67	2.22	2.70	3.14
18	1.11	1.35	1.86	2.04	1.31	1.68	2.06	2.34	1.45	1.90	2.41	2.75	1.61	2.16	2.62	3.05
19	1.07	1.32	1.82	1.99	1.27	1.63	2.01	2.28	1.41	1.86	2.35	2.68	1.56	2.11	2.55	2.96
20	1.04	1.29	1.77	1.94	1.24	1.60	1.96	2.22	1.37	1.81	2.29	2.62	1.52	2.07	2.49	2.88
21	1.02	1.26	1.73	1.90	1.20	1.55	1.91	2.17	1.33	1.76	2.23	2.55	1.48	2.03	2.43	2.82
22	0.99	1.23	1.68	1.85	1.17	1.51	1.87	2.12	1.30	1.72	2.17	2.49	1.44	1.99	2.36	2.76
23	0.97	1.21	1.65	1.82	1.14	1.48	1.83	2.07	1.27	1.68	2.12	2.44	1.41	1.95	2.31	2.70
24	0.95	1.19	1.62	1.78	1.12	1.44	1.79	2.03	1.24	1.64	2.07	2.39	1.38	1.92	2.26	2.65
25	0.93	1.16	1.58	1.75	1.09	1.41	1.76	1.99	1.21	1.61	2.03	2.34	1.35	1.89	2.22	2.60
26	0.90	1.14	1.56	1.72	1.07	1.39	1.73	1.96	1.18	1.57	1.98	2.29	1.32	1.86	2.17	2.56
27	0.88	1.13	1.53	1.68	1.05	1.36	1.70	1.92	1.16	1.54	1.94	2.25	1.29	1.83	2.13	2.51
28	0.87	1.11	1.50	1.66	1.03	1.34	1.67	1.89	1.14	1.52	1.90	2.21	1.27	1.80	2.09	2.46
29	0.85	1.09	1.48	1.63	1.01	1.31	1.64	1.87	1.12	1.49	1.87	2.17	1.24	1.77	2.05	2.42
30	0.83	1.08	1.46	1.61	0.99	1.29	1.61	1.84	1.10	1.47	1.84	2.13	1.22	1.74	2.02	2.38

FIGURE 5

EXHIBIT 6C. RUNOFF COEFFICIENT CURVE- SOIL NUMBER 3 (NRCS TYPE C)

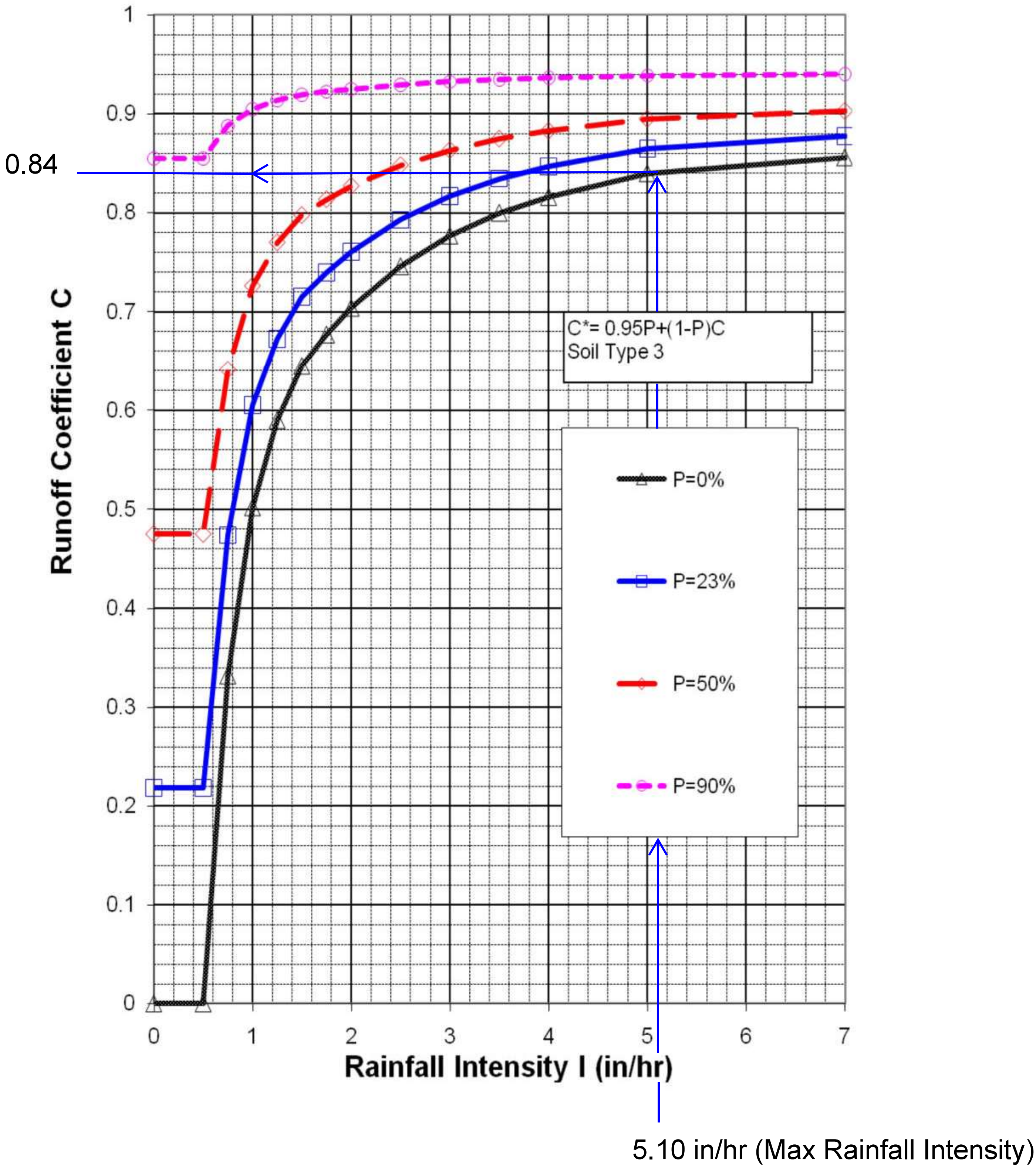
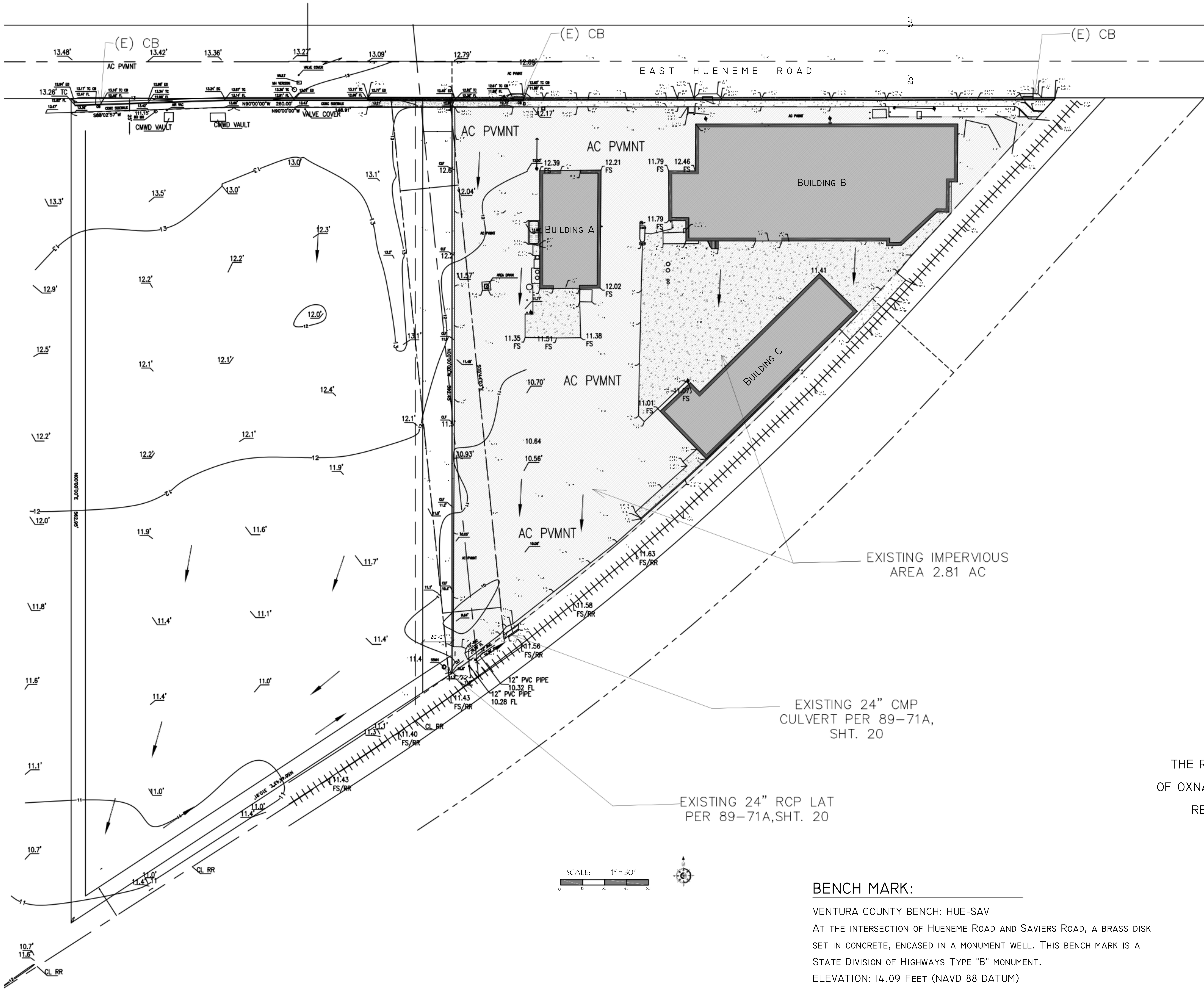


FIGURE 6

PLATES

PLATE 1 EXISTING IMPERVIOUS AREA



LEGEND:

CENTERLINE	
CMU WALL	
EASEMENT LINE	
PRODUCED LINE	
PROPERTY LINE	
TRACT BOUNDARY LIN	
W.I. FENCE	
WOOD FENCE	
EXISTING BUILDING	
DENOTES FD. MON. AS NOTED	●
RECORD	R
R1	52 R.S. 84/89
R2	20 R.S. 14/15
R3	PRELIMINARY TITLE REPORT NO. 132010762KJ
R4	105 DDS. 106
R5	105 DDS. 186
R6	617 O.R. 118
R7	86-25510 O.R.
R8	86-25511 O.R.
R8	INST. NO. 20100219-00022984 O.R.
ASPHALT	ASPH
ASSESSORS PARCEL NUMBER	A.P.N.
BASIS OF BEARINGS	B.O.B.
BLOW-OFF VALVE	B.O.V.
CABLE BOX	C.B.
CALCULATED FROM	CF
CENTER LINE	C/L
CONCRETE	CONC
CONCRETE MASONRY UNIT	CMU
DEEDS	DDS
DRAIN INLET	D.I.
DRIVEWAY	DRWY
EDGE OF PAVEMENT	EP
FIRE HYFRANT	F.H.
FOUND	FD.
GALLON	GAL.
GUY WIRE ANCHOR	G.W.A.
INSTRUMENT	INST.
IRRIGATION CONTROL VALVE	I.C.V.
MONUMENT	MON.
NUMBER	NO.
OFFICAL RECORDS	O.R.
POWER POLE	P.P.
PULL BOX	P.B.
RAILROAD	RR
RECORD OF SURVEY	R.S.
SANITARY SEWER CLEAN OUT	SSCO
SQUARE	SQ.
TOP OF CURB	TC
TOP OF GRATE	TG
TOP OF WALL	TW
WATER METER	W.M.

SITE PLAN

OF

A PORTION OF LOTS 3 AND 4 OF SUBDIVISION 84 OF THE RANCHO EL RIO DE SANTA CLARA O'LA COLONIA, IN THE CITY OF OXNARD, COUNTY OF VENTURA, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 3, PAGE 14 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY,

BENCH MARK:

VENTURA COUNTY BENCH: HUE-SAV
At the intersection of Hueneme Road and Saviers Road, a brass disk set in concrete, encased in a monument well. This bench mark is a State Division of Highways Type "B" monument.
ELEVATION: 14.09 Feet (NAVD 88 DATUM)

BASIS OF BEARINGS:

THE BEARING OF WEST ALONG THE CENTERLINE OF HUENEME ROAD AS RECORDED IN PARCEL MAP BOOK 115, PAGE 74/75, WAS USED AS THE BASIS OF BEARINGS FOR THIS SITE PLAN.

SITE ADDRESS:

320 EAST HUENEME ROAD
OXNARD, CA 93033
A.P.N.: 231-0-092-260, 270, 280 (VENTURA COUNTY)

ACCURATE SURVEYING & ENGINEERING
119 KATHERINE DRIVE
San Buenaventura
California 93001
PH: (805) 207-5181
March 2, 2021

Planning Services
General Engineering
& Building Contractors
R.W.C. LLC
Santa Paula CA Lic# 716695
TEL: 805-525-6400

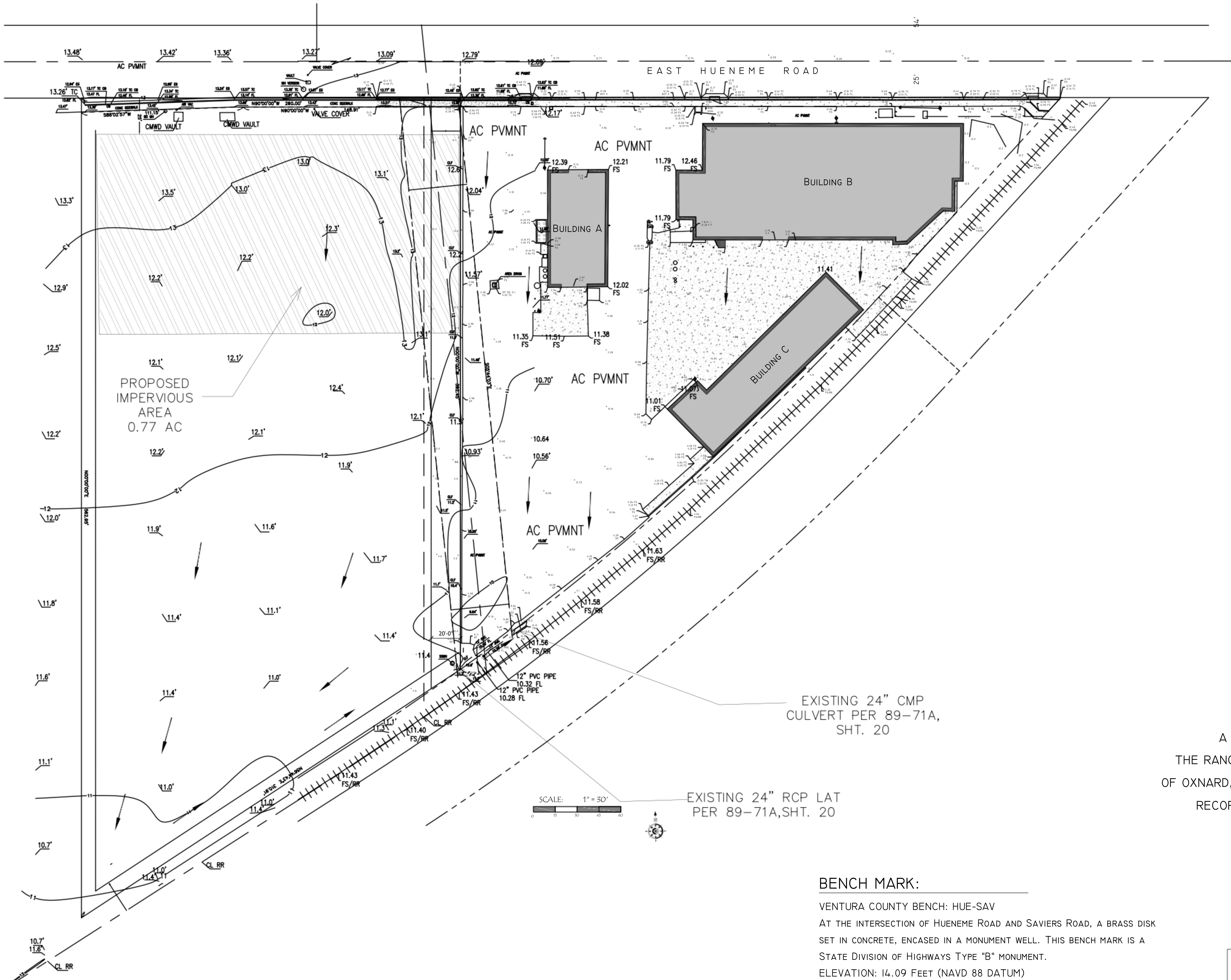
REVISIONS	BY

PANTOJA
320 EAST HUENEME ROAD
OXNARD, CA 93033

PLATE 1
EXISTING
IMPERVIOUS AREA
PRE- DEVELOPMENT

DRAWN	W.LEWIS
CHECKED	
DATE	NOV.9TH 2021
SCALE	AS NOTED
SHEET	PLATE 1

PLATE 2 PROPOSED IMPERVIOUS AREA



LEGEND:

CENTERLINE	
CMU WALL	
EASEMENT LINE	
PRODUCED LINE	
PROPERTY LINE	
TRACT BOUNDARY LIN	
W.I. FENCE	
WOOD FENCE	
EXISTING BUILDING	
DENOTES FD. MON. AS NOTED	●
RECORD	R
R1	52 R.S. 84/89
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ASPHALT	ASPH
ASSESSORS PARCEL NUMBER	A.P.N.
BASIS OF BEARINGS	B.O.B.
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CABLE BOX	C.B.
CALCULATED FROM	CF
CENTER LINE	C/L
CONCRETE	CONC
CONCRETE MASONRY UNIT	CMU
DEEDS	DDS
DRAIN INLET	D.I.
DRIVEWAY	DRWY
EDGE OF PAVEMENT	EP
FIRE HYFRANT	F.H.
FOUND	FD.
GALLON	GAL.
GUY WIRE ANCHOR	G.W.A.
INSTRUMENT	INST.
IRRIGATION CONTROL VALVE	I.C.V.
MONUMENT	MON.
NUMBER	NO.
OFFICAL RECORDS	O.R.
POWER POLE	P.P.
PULL BOX	P.B.
RAILROAD	RR
RECORD OF SURVEY	R.S.
SANITARY SEWER CLEAN OUT	SSCO
SQUARE	SQ.
TOP OF CURB	TC
TOP OF GRATE	TG
TOP OF WALL	TW
WATER METER	W.M.

SITE PLAN

OF

A PORTION OF LOTS 3 AND 4 OF SUBDIVISION 84 OF THE RANCHO EL RIO DE SANTA CLARA O'LA COLONIA, IN THE CITY OF OXNARD, COUNTY OF VENTURA, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 3, PAGE 14 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY,

SITE ADDRESS:

320 EAST HUENEME ROAD
OXNARD, CA 93033
A.P.N.: 231-0-092-260, 270, 280 (VENTURA COUNTY)

BENCH MARK:

VENTURA COUNTY BENCH: HUE-SAV
At the intersection of Hueneme Road and Saviers Road, a brass disk set in concrete, encased in a monument well. This bench mark is a State Division of Highways Type "B" monument.
ELEVATION: 14.09 Feet (NAVD 88 DATUM)

BASIS OF BEARINGS:

THE BEARING OF WEST ALONG THE CENTERLINE OF HUENEME ROAD AS RECORDED IN PARCEL MAP BOOK 115, PAGE 74/75, WAS USED AS THE BASIS OF BEARINGS FOR THIS SITE PLAN.

ACCURATE SURVEYING & ENGINEERING
119 KATHERINE DRIVE
San Buenaventura
California 93001
PH: (805) 207-5181
March 2, 2021

Planning Services
General Engineering
& Building Contractors
R.W.C. LLC
Santa Paula CA Lic# 716695
TEL: 805-525-6400

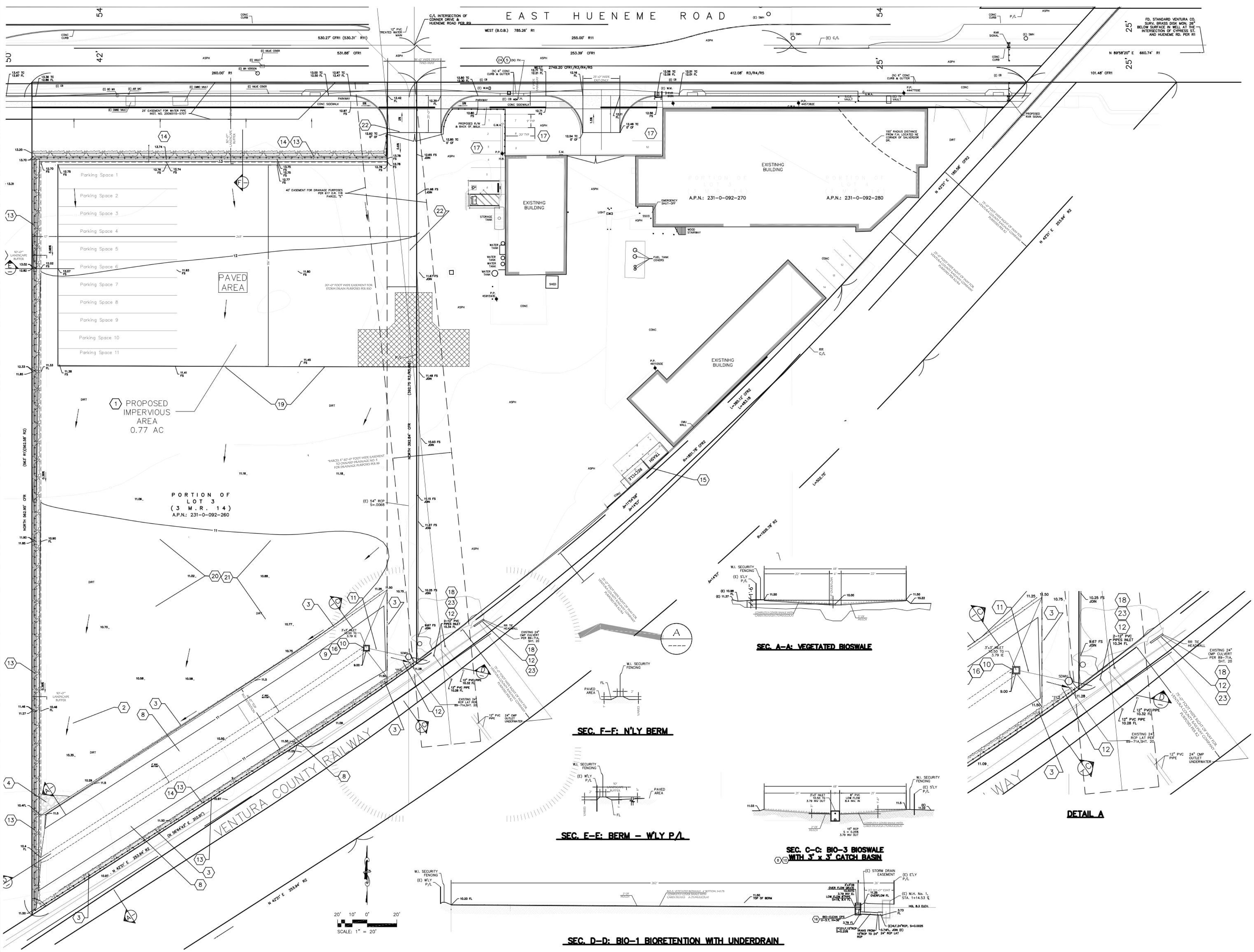
REVISIONS	BY

PANTOJA
320 EAST HUENEME ROAD
OXNARD, CA 93033

PLATE 2 PROPOSED IMPERVIOUS AREA POST - DEVELOPMENT

DRAWN W.LEWIS
CHECKED
DATE NOV.9TH 2021
SCALE AS NOTED
SHEET
PLATE 2

PLATE 3 (P) BMP BIO-3 VEGETATED BIOSWALE



PLANNING SERVICES
GENERAL ENGINEERING
& BUILDING CONTRACTORS
R.W.C. LLC
SANTA PAULA CA LIC# 716695
TEL: 805-525-6400

REVISIONS	BY

PANTOJA
320 EAST HUENEME ROAD
OXNARD, CA 93033

BMP SITE PLAN

DRAWN W.LEWIS

CHECKED

DATE JULY 26TH 2022

SCALE 1" = 20'

SHEET BMP

APPENDIX C,

Ventura Countywide Storm Water Quality Program, Post Construction Stormwater Management.

VENTURA COUNTYWIDE STORMWATER QUALITY PROGRAM
POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN (PCSMP)
FOR
Pantoja Truck Parking Bio-3 Vegetated Swale
PARCEL #: 231-0-092-260, 270, 280

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

Preparation/Revision Date: **12/14/2022**

Prepared for:
Name of Owner/Developer: Pantoja Truck Line Inc.
Stress Address: 320 E. Hueneme Road
City, State, Zip Code: Oxnard, Ca 93033
Telephone: 805-525-6400

Prepared by:
Name and Title of Preparer: Wade Lewis, P.E., QSD
Company Name: Robert William Inc.
Stress Address: 917 Railroad Ave.
City, State, Zip Code: Santa Paula, CA 93060
Telephone: 805-402-0533

I hereby certify that the information provided in this Application is correct.

Application Prepared by: Wade Lewis, P.E., Robert William Company, Inc.
Print Name and Firm

Signed ______________________________
Signature of Project Engineer in the Firm Named Above

Title Project Engineer
Affix Professional registration stamp of the person named above with signature and expiration date

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swa

STEP 1: DETERMINE PROJECT APPLICABILITY

Instructions:
For new development projects, answer yes, no, or NA to questions (1) - (10) below.
For redevelopment projects, answer yes, no, or NA to questions (11) - (13) below.

NEW DEVELOPMENT PROJECTS	
Does the new development project fall within categories (1) - (10) below?	
Project Type and/or Characteristics	**Y/N/NA**
1) Development projects equal to 1 acre or greater of disturbed area that adds more than 10,000 square feet of impervious surface area **→go to Step 2**	
2) Industrial parks with 10,000 square feet or more of total altered surface area **→go to Step 2**	
3) Commercial strip malls with 10,000 square feet or more of impervious surface area **→go to Step 2**	
4) Retail gasoline outlets with 5,000 square feet or more of total altered surface area **→go to Step 2**	
5) Restaurants (Standard Industrial Classification (SIC) of 5812) with 5,000 square feet or more of total altered surface area **→go to Step 2**	
6) Parking lots with 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces **→go to Step 2**	Y
7) Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area **→ go to Roadway Projects**	
8) Automotive service facilities (Standard Industrial Classification (SIC) of 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) of 5,000 square feet or more of total altered surface area **→go to Step 2**	
9) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will: a. Discharge stormwater runoff that is likely to impact a sensitive biological species or habitat; and b. Create 2,500 square feet or more of impervious surface area **→go to Step 2**	
10) Single-family hillside homes (see Section 2 of the TGM for specific requirements) **→go to SF Hillside**	

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swa

PROJECT APPLICABILITY, CONT.

REDEVELOPMENT PROJECTS	
For redevelopment projects that fall within categories (1) through (9) above, and that conduct land-disturbing activities that result in the creation, or addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site, answer questions 11-13 below.Existing single-family dwelling and accessory structures are exempt from redevelopment projects unless such projects create, add, or replace 10,000 square feet of impervious surface area.	
Project Type and/or Characteristics	**Y/N/NA**
11) Projects where redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to the post development stormwater quality control requirements of Board Order 00-108, these projects must mitigate the entire redevelopment project area **→go to Step 2**	N
12) Projects where redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was subject to the post development stormwater quality control requirements of Board Order 00-108, the project must mitigate only the altered portion of the redevelopment project area and not the entire project area **→go to Step 2**	N/A
13) Projects where redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development these projects must mitigate only the altered portion of the redevelopment project area and not the entire project area **→go to Step 2**	Y

Project Name: Pantoja Truck Parking Bio-3 Vegetated S

STEP 2: ASSESS SITE CONDITIONS

Provide an assessment of the project site using the following tables

New Development Project General Characteristics

General Project Characteristics	Area (acres)
Total Project Site Area	2.81
Total Disturbed Area	0.77
Total Existing (Pre-Project) Impervious Area	0.00
Post-Project Impervious Area [1]	0.77
Area of Green Roof (ET-1) [1]	0.00
Area Draining to Hydrologic Source Controls (ET-2) [1]	
Revised Post-Project Impervious Area	0.77
Project Imperviousness (%)	27.40%

Redevelopment Project General Characteristics

General Project Characteristics	Area (acres)
Total Project Site Area	0.00
Total Altered Area [6]	0.00
Total Existing (Pre-Project) Impervious Area	0.00
Was existing (pre-project) impervious area subject to post-development stormwater quality control requirements? [2]	
Amount of Existing Impervious Area Altered [3]	0.00
Amount of Impervious Area Added	0.00
% Alteration of Existing Impervious Area [4]	N/A
Post-Project Impervious Area (Impervious Area to be Mitigated) [1], [4]	0.00
Area of Green Roof (ET-1) [1]	0.00
Area Draining to Hydrologic Source Controls (ET-2) [1]	0.00
Revised Post-Project Impervious Area	0.00
Project Imperviousness (%) [5]	

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

Project Description

Briefly describe project:
Redevelopment will consist of paving 0.77 acreas for storage of truck trailers with chip seal over base material.

Describe current and proposed zoning and land use designation:
Current zoning is M-1, light manafacturing. No change is proposed to the zoning or land use designation.

Describe topography of project area. Identify low and high points and the location of steep slopes (provide a range of grades):
The property slopes from Hueneme Road on the north to the southwest with an average slope of 0.5%. The property is accessed by a driveway extending from East Hueneme Road through the existing improvements on the easterly portion of the site. The eastern developed portion of the site drains to the culvert under the railroad tracks to the County Channel. The west portion will drain to an existing 24" plugged lateral from the 54" City RCP Storm Drain line then into the County Channel..

Describe the site's soil types (A, B, C, D) and geological conditions:
Hydrological Soil Group C. The property was found to be underlain by alluvium to the depth of exploration of approximately 50 feet. The al
Attach soil type information

Project Name: Pantoja Truck Parking Bio-3 Vegetated S

Project Description, cont'd

Describe the site's groundwater conditions (e.g. depth to seasonal high groundwater):
Ground water was encountered in the exploratory boring at a depth of 7.5 feet and stabilized at a depth of 10 feet below the existing ground surface. Mapping of historically shallowest groundwater included within the Seismic Hazard Zone Report of the Oxnard 7.5-Minute Quadrangle (CGS, 2002) indicates the depth to groundwater is approximately 5 feet below grade.

Is there offsite drainage on the site? If so, identify the location(s) and source(s) of offsite drainage and the volume of water running onto the site:
None are apparent
Describe any existing utilities within the project area that would limit the possible locations of certain BMPs:
None are apparent
Describe any environmentally sensitive areas (e.g. riparian areas, wetlands) within the project area:
None are apparent

Geotechnical considerations:	
Does the site contain any of the following characteristics:	**Y/N/NA**
Collapsible Soil	N
Expansion Soil	N
Potential for seismically-inducted soil liquefaction	N
Additional considerations:	
No other apparent. *Attach relevant geotechnical information*	

Project Name: Pantoja Truck Parking Bio-3 Vegetated S

STEP 2: POLLUTANTS OF CONCERN

Pollutants of Concern (See Section 3.3 of TGM)

Activity / Potential Land Uses	Potential Pollutant*								
	Sediment	Nutrients	Metals	Pesticides	Oxygen Demanding Substances	Toxic Organics	Oil & Grease	Bacteria	Trash and Debris
Parking Lots	X		X		X	X			X
Single - Family residence									
Other [fill in if necessary]									

*Denote potential pollutant with "x"

Receiving Waterbody Listings (see Section 3.3. of TGM)

Receiving Waterbody (watershed indicated in parentheses)	Constituent Group [7]	Distance to Project (ft)
Oxnard Drain	DDD	200.00

[1] Applicant should enter post-project impervious cover prior to accounting for green roof and hydrologic source control (HSC) credits. Volume reduction provided by green roofs and HSCs are accounted for implicitly in the sizing calcuations for BMPs by assuming the roof area covered by a green roof or the area draining to a HSC is pervious rather than impervious when caluclating the runoff coefficient for the site. Green roofs and HSCs are not required to be considered for all project locations and types. In order to obtain credit, Green Roofs and HSCs must be designed as specified in the TGM. Additional detail on Green Roofs (ET-1) and HSCs (ET-2) can be found in Section 6 of the TGM.

[2] Land-disturbing activity that results in the creation or addition or replacement of less than 5,000 square feet of impervious surface area on an already developed site, or that results in a decrease in impervious area which was subject to the post development stormwater quality control requirements of Board Order 00-108, is not subject to mitigation unless so directed by the local permitting agency

[3] Redevelopment does not include routine maintenance activities that are conducted to maintain the original line and grade, hydraulic capacity, or original purpose of the facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways, that does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Agencies' flood control, drainage, and wet utilities projects that maintain original line and grade or hydraulic capacity are considered routine maintenance. Redevelopment also does not include the repaving of existing roads to maintain original line and grade.

[4] "% Alteration of Existing Impervious Area" determines the 50% threshold which is key in determining portion of site that must comply with post-construction requirements - see Step 1 redevelopment categories for more detail. The amount of "Post Project Impervious Area" that must adhere to post-construction requirements is dependant on 50% threshold

[5] "Project Imperviousness" is calculated using the "Total Project Area" except when redevelopment projects that must mitigate only the altered portion of the redevelopment project area. In this case, the "Total Disturbed Area" is used to calculate "Project Imperviousness"

[6] For the purposes of this calculation, Total Altered Area shall mean any area that is altered as a result of land disturbance, such as clearing, grading, grubbing, and excavation. This excludes areas used exclusively for temporary stockpiling.

[7] If a waterbody is listed for "toxicity" and the cause and/or contribution to toxicity is known, then the consituent group known to contribute to toxicity are listed here (in lieu of listing "toxicity")

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 3: APPLY SITE DESIGN PRINCIPLES AND TECHNIQUES

Provide a brief description of site design principles and techniques included within the proposed project site.

Site Design Measures [1]	Included? Y/N/NA	Brief Description of the Site Design Measure
Site Planning	Y	A multidisciplinary approach that included the Landscape Architect and Civil Engineer was used in the initial planning of the site to minimize hard surfaces, concentration of water discharge from the site.
Protect and Restore Natural Areas	Y	The redevelopment is being located in the least sensitive areas of the site. Drainage devices area incorporated into the design to protect enviroment.
Minimize Land Disturbance	Y	The existing area is being utilized to its fullist extent and the redevelpment area was minimized to reduce the footprint and land disturbance.
Minimize Impervious Cover	N/A	no new building proposed
Apply LID at Various Scales	Y	The new development utilized the areas of existing development as much as feasible.
Implement Integrated Water Resource Management Practices	Y	The Site redevelopment was planned to protect and restore any natural areas, provide and maintain setbacks from streams and maintain open areas on the site.

[1] Refer to Section 4.2 - 4.7 of the TGM for applicable Design Criteria.

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 4: APPLY SOURCE CONTROL MEASURES

Provide a brief description of the source control measures included in the proposed project site.

Site-Specific Source Control Measures[1]	Included? Y/N/NA	Brief Description of the Source Control Measure
S-1: Storm Drain Message and Signage	N/A	
S-2: Outdoor Material Storage Area Design	N/A	
S-3: Outdoor Trash Storage and Waste Handling Area Design	N/A	
S-4: Outdoor Loading/Unloading Dock Area Design	N/A	
S-5: Outdoor Repair/Maintenance Bay Design	N/A	
S-6: Outdoor Vehicle /Equipment/ Accessory Washing Area Design	N/A	
S-7: Fueling Area Design	N/A	
S-8: Proof of Control Measure Maintenance	N/A	

[1] Refer to Fact Sheets in Section 5 of the TGM for detailed information and design criteria

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 5: APPLY BMPS TO REDUCE EIA TO <=5%

New development and redevelopment projects (Categories 1-6, 8, and 9) must reduce EIA to <=5%

Step 5a: Calculate Allowable EIA

EIA is defined as impervious area that is hydrologically connected via sheet flow over a hardened conveyance or impervious surface without any intervening medium to mitigate flow volume.

The allowable "EIA" for a project is calculated as:

$$EIA_{allowable} = (A_{project})*(\%_{allowable}) \qquad \text{Equation 2-1}$$

Where:

$EIA_{allowable}$ = The maximum impervious area from which runoff can be treated and discharged offsite (and not retained onsite) [acres]

$A_{project}$ = The total project area [acres] [1]

$\%_{allowable}$ = 0 percent

Input:		Units
$A_{project}$ [1]	2.81	Acres
$\%_{allowable}$	0.00%	Percent
$EIA_{allowable}$	**0.00**	Acres

Step 5b: Calculate Impervious Area to be Retained

The impervious area from which runoff must be retained onsite is the total impervious area minus the EIA allowable, which should be calculated as follows:

$$A_{retain} = TIA - EIA_{allowable} = (IMP*A_{project}) - EIA_{allowable} \qquad \text{Equation 2-2}$$

Where:

A_{retain} = the drainage area from which runoff must be retained [acres]

TIA = total impervious area [acres]

IMP = imperviousness of project area (%)

Input:		Units
Imperviousness	27.40%	
$A_{project}$ [1]	2.81	Acres
$EIA_{allowable}$	0.00	Acres
A_{retain}	**0.77**	Acres

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

BMPS TO REDUCE EIA TO <=5%, CONT.

Step 5c: Calculate the Volume to be Retained (SQDV)

The runoff volume that is to be retained onsite should be calculated using Equation 2-3 below:

$$V_{retain} = C*(0.75/12)*A_{retain} \qquad \text{Equation 2-3}$$

Where:

V_{retain} = The stormwater quality design volume (SQDV) that must be retained onsite [ac-ft]

C = runoff coefficient (equals 0.95 for impervious surfaces)

Input:		Units
C	0.95	
A_{retain}	0.77	Acres
V_{retain}	0.046	ac-ft
	14,897.6	gallons
	1,991.5	cu.ft.

Continue to Step 5d

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 5d: SELECT RETENTION BMPs

Select and size Retention BMPs to meet the 5% EIA Requirement. Retention BMPs include INF1-6, RWH-1, and ET 1 and 2. See TGM, Section 6 for more information.

Retention BMPs	Included? Y/N	Drainage Area Retained (acres) [2]	Drainage Area Runoff Coefficient	Volume Retained (SQDV) (ac-ft) [1],[2]	If not applicable, state brief reason
Infiltration BMPs					
INF-1: Infiltration Basin			0.95		
INF-2: Infiltration Trench			0.95		
INF-3: Bioretention			0.95		
INF-4: Drywell			0.95		
INF-5: Permeable Pavement			0.95		
INF-6: Proprietary Infiltration			0.95		
INF-7: Bioinfiltration			0.95		
Rainwater Harvesting BMPs					
RWH-1: Rainwater Harvesting			2		
			TOTAL Volume Retained	0.000	ac-ft
				0.0	gallons
				0.0	cu.ft.
			REMAINING Volume to meet 5% EIA requirement	0.0	ac-ft
				14,898	gallons
				1,992	cu.ft.

[1] SQDV Methodology #3 used here.
[2] If a Retention BMP is used more than once on a site (i.e., 2 Infiltration Trenches implemented on one site) then drainage area and volume retained shown here should be additive. A separate BMP sizing worksheet (see Appendix E of the TGM) should be submitted for each BMP.

ADDITIONAL INSTRUCTIONS: Retention BMPs must be used onsite to the maximum extent practicable. If the remaining volume to meet 5% EIA cannot be met, then project applicants must demonstrate technical infeasibilty. Consult Section 3.2 of the 2011 TGM for infeasability criteria. A technical infeasability site-specific analysis must be submitted. Projects that cannot prove technical infeasibility must reduce EIA to <=5% using Retention BMPs.

If onsite Retention BMPs cannot feasibly be used to meet the 5% EIA Requirement, move onto Step 5e; if 5%EIA Requirement is met go to Step 7

(N) Infiltration infeasible	Y/N/NA

A completed copy of the applicable "BMP Sizing Worksheet(s)" for the project's Retention BMPs from Appendix E of the TGM is included as an attachment. BMPs must be sized to meet the SQDV or SQDF (See Section 2 Step 7 of the TGM).	Y

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 5e: SELECT AND SIZE BIOFILTRATION BMPS TO REDUCE EIA TO <=5%

New development and redevelopment projects that demonstrate technical infeasibility (see Section 3.2 of TGM) for reducing EIA to <= 5% using Retention BMPs are eligible to use Biofiltration BMPs to achieve the 5% EIA Requirement.

	Y/N
Is it technically infeasible for Retention BMPs to meet the 5% EIA Requirement?	Y
If yes, volume-based biofiltration BMPs shall be sized to treat 1.5 times the volume not retained using Retention BMPs.	

ADDITIONAL INSTRUCTIONS: Submit Technical Infeasabillity documentation.

The onsite biofiltered volume ($V_{biofilter}$), should be calculated as follows:

$$V_{biofilter} = (V_{retain} - V_{achieved}) * 1.5 \qquad \text{Equation 2-4}$$

Where:

$V_{biofilter}$ = the volume that must be captured and treated in a Biofiltration BMP [ac-ft]

V_{retain} = the stormwater quality design volume (SQDV) that must be retained [ac-ft]

$V_{achieved}$ = the volume retained onsite using Retention BMPs [ac-ft]

Input		Units
$V_{achieved}$	0.000	ac-ft
V_{retain}	0.046	ac-ft
$V_{biofilter}$	**0.07**	ac-ft
	22,346	gallons
	2,987	cu.ft.

BIOFILTRATION BMPs, CONT.

Biofiltration BMPs	Included? Y/N	Drainage Area Biofiltered (acres) [3]	Drainage Area Runoff Coefficient	Volume Biofiltered (1.5xSQDV) (ac-ft) [2],[3]	If not applicable, state brief reason
BIO-1: Bioretention with Underdrain			0.95		
BIO-2: Planter Box			0.95		
BIO-3: Vegetated Swale [1]	Y	0.77	0.95	0.069	
BIO-4: Vegetated Filter Strip [1]			0.95		
BIO-5: Proprietary Biotreatment [1]			0.95		
			TOTAL Volume Biofiltered	0.07	ac-ft
				22,346.4	gallons
				2,987.3	cu.ft
			REMAINING Volume to be addressed by Alternative Compliance	0.00	ac-ft
				0.0	gallons
				0.0	cu.ft

[1] BIO-3 and BIO-4 are flow-based and should be calculated using SQDF for sizing (see Table 2-1 of the TGM for the applicable design criteria for sizing). The SQDV is shown here for 5% EIA Requirement compliance purposes only.

[2] SQDV Methodology #3 used here.

[3] If a Biofiltration BMP is used more than once on a site (e.g., 2 Planter Boxes implemented on one site) then drainage area and volume biofiltered shown here be additive. A separate BMP sizing worksheet (see Appendix E of the TGM) should be submitted for each BMP.

If onsite Retention BMPs and/or Biofiltration BMPs cannot feasibly be used to meet the 5% EIA standard, move onto Step 6, otherwise, skip Step 6.

	Y/N/NA
A completed a copy of the applicable "BMP Sizing Worksheet(s)" for the project's Biofiltration BMPs from Appendix E of the TGM is included as an attachment.. BMPs must be sized to meet the 1.5 times SQDV or SQDF (see Section 2, Step 7 of the TGM) requirement. Guidance on flow based design for 150% sizing provided in Table 2-1 of the TGM.	Y

Project Name: Pantoja Truck Parking Bio-3 Vegetated Swale

STEP 7: APPLY TREATMENT CONTRL MEASURES

► *Stormwater runoff from EIA and developed pervious surfaces must be mitigated using Retention BMPs, Biofiltration BMPs, or Treatment Control Measures (See Chapter 6 of TGM).*
► *Treatment Control Measures should be selected per the BMP selection process outlined in Section 3.3 of the TGM.*
► *BMPs must be sized to meet the SQDV or SQDF. See Section 2, Step 7 of the for guidance on calculating the SQDV and SQDF.*

	Y/N
Completed copy of the applicable "BMP Sizing Worksheet(s)" for the project's stormwater BMP(s) from Appendix E of the Technical Guidance Manual is included.	Y

Sizing Worksheet

Designer: Wade Lewis, RCE, QSD Project Proponent: Pantoja Truck Line Inc. Date: 12/14/2022 Project: Redevelopment of 320 E Hueneme Rd., Add 0.77 acres of truck trailer parking Location: 320 E. Hueneme Rd., Oxnard CA, Westerly 2.81 acres	
Type of Vegetation: (describe)	Completely cover BIO-3 with Corex Dilulsa (Tumulicola) or equal.
Outflow Collection: (Check type used or describe "Other")	✓ Grated Inlet ____ Infiltration Trench ____ Underdrain Used ✓ Other With Low flow 8" PVC , with slope = 1% to restrict flow to Pre Development Q_{10}=0.96 cfs per Cooks Mod

Step 1: Determine water quality design flow			
1-1. Enter Project area (acres), $A_{project}$	A_{design} =	2.81	acres
1-2. Enter impervious fraction, *Imp* (e.g. 60% = 0.60)	Imp =	0.27	
1-3. Determine pervious runoff coefficient using Table E-1, C_p	C_p	0.10	
1-4. Calculate runoff coefficient, $C = 0.95*imp + C_p (1\text{-}imp)$	C =	0.33	
1-5. Enter design rainfall intensity (in/hr), *i* Increase 150%, Table 2-1, Tc=5 min. assumed	i =	0.35	in/hr
1-6. Calculate water quality design flow (cfs), *SQDF= CiA*	SQDF =	0.32	cfs

Step 2: Calculate swale bottom width	
2-1. Enter water quality design flow (cfs), *SQDF*	SQDF = 0.32 cfs
2-2. Enter Manning's roughness coefficient for shallow flow conditions, $n_{wq} = 0.2$	n_{wq} = 0.2
2-3. Calculate design flow depth (ft), *y*	y = 0.29 ft
2-4. Enter longitudinal slope (ft/ft) (along direction of flow), *s*	s = .007 ft/ft
2-5. Calculate bottom width of swale (ft), $b = (SQDF*n_{wq})/(1.49y^{1.67}s^{0.5})$	b = 4.06 ft
2-6. If *b* is between 2 and 10 feet, go to Step 3	
2-7. If b is less than 2 ft, assume b = 2 ft and recalculate flow depth, $y = ((SQDF*n_{wq})/(2.98\ s^{0.5}))^{0.6}$	y = ft
2-8. If b is greater than 10 ft, one of the following design adjustments must be made (recalculate variables as necessary): • Increase the longitudinal slope to a maximum of 0.06 ft/ft. • Increase the design flow depth to a maximum of 4 in (0.33 ft). • Place a divider lengthwise along the swale bottom (Figure 3-1) at least three-quarters of the swale length (beginning at the inlet). Swale width can be increased to an absolute maximum of 16 feet if a divider is provided.	
Step 3: Determine design flow velocity	
3-1. Enter side slope length per unit height (H:V) (e.g. 3 if side slopes are 3H :1V), *Z*	Z = 14.6
3-2. Enter bottom width of swale (ft), *b*	b = 4 ft
3-3. Enter design flow depth (ft), *y*	y = 0.29 ft

3-4. Calculate the cross-sectional area of flow at design depth (ft²), $A_{wq} = by + Zy^2$	A_{wq} = 2.39 ft²
3-5. Calculate design flow velocity (ft/s), $V_{wq} = SQDF/ A_{wq}$	V_{wq} = 0.13 ft/s
3-6. If the design flow velocity exceeds 1 ft/s, go back to Step 2 and change one or more of the design parameters to reduce the design flow velocity. If design flow velocity is less than 1 ft/s, proceed to Step 4.	
Step 4: Calculate swale length	
4-1. Enter hydraulic residence time (minutes, minimum 7 min), t_{hr}	t_{hr} = 33 min
4-2. Calculate swale length (ft), $L = 60t_{hr}V_{wq}$	L = 257 ft
Step 4: Calculate swale length	
4-3. If *L* is too long for the site, proceed to Step 5 to adjust the swale layout If *L* is greater than 100 ft and will fit within the constraints of the site, skip to Step 6 If *L* is less than 100 ft, increase the length to a minimum of 100 ft, leaving the bottom width unchanged, and skip to Step 6	
Step 5: Adjust swale layout to fit within site constraints	
5-1. Enter the bottom width calculated in Step 2 (ft), $b_i = b$	b_i = ft
5-2. Enter design flow depth (ft), y	y= ft
5-3. Enter the swale side slope ratio (H:V), Z	Z = ft:ft
5-4. Enter the additional top width above the side slope for the design water depth (ft), $b_{slope} = 2Zy$	b_{slope} = ft
5-5. Enter the initial length calculated in Step 4 (ft), $Li = L$	L_i = ft

5-6. Calculate the top area at the design treatment depth (ft²), $A_{top} = (b_i + b_{slope}) \times L_i$	A_{top} =	ft²
5-7. Choose a reduced swale length based on site constraints (ft), L_f	L_f =	ft
5-8. Calculate the increased bottom width (ft), $b_f = (A_{top}/L_f) - b_{slope}$	b_f =	ft
5-9. Recalculate the cross-sectional area of flow at design depth (ft2), $A_{wq,f} = b_f y + Zy^2$	$A_{wq,f}$ =	ft²
5-10. Recalculate design flow velocity (ft/s), $V_{wq} = SQDF/A_{wq}$ Revise design as necessary if design flow velocity exceeds 1 ft/s.	V_{wq} =	ft/s
5-11. Recalculate the hydraulic residence time (min), $t_{hr} = L_f/(60V_{wq})$ Ensure that t_{hr} is greater or equal to 10 minutes.	t_{hr} =	min
5-12. When V_{wq} and t_{hr} are recalculated to meet requirements, proceed to Step 6.		
Step 6: Provide conveyance capacity for flows higher than SQDF (if swale is on-line)		
6-1. If the swale already includes a high-flow bypass to convey flows higher than the water quality design flow rate, skip this step and verify that all parameters meet design requirements to complete sizing	No	
6-2. If swale does not include a high-flow bypass, determine that the swale can convey flood control design storm peak flows. Calculate the capital peak flow velocity per Ventura County requirements (ft/s), V_p	V_p = 2.92	ft/s

Manning Formula Uniform Trapezoidal Channel Flow at Given Slope and Depth

320 E Hueneme Rd., 2.81 Ac Post Dev., Velocity Check Bio-3, Veg Swale

Q-100=13.24 cfs, S=0.7%, Side Slope=9(H):1(V), Vp=2.22 fps,3 fps max.

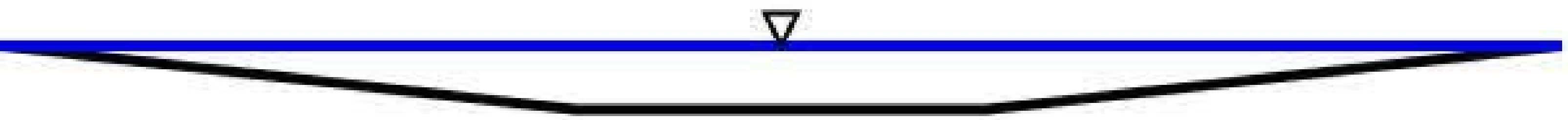
Inputs

Bottom width	4	ft	X
Side slope 1 (horiz./vert.)	9		X
Side slope 2 (horiz./vert.)	9		X
Manning roughness, n ? ○Strickler ○B/B (See notes)	0.03		X
Channel slope	0.007	rise/run	X
Flow depth	7.5	in	X

Results

Flow area	6.0157	ft^2	X
Wetted perimeter	15.3191	ft	X
Hydraulic radius	0.3927	ft	X
Velocity, v	2.2222	ft/sec	X
Flow, Q (See notes)	13.3675	cfs	X
Velocity head, h_v	0.0767	ft	X
Top width, T	15.2499	ft	X

Printable version (reload/refresh to restore)



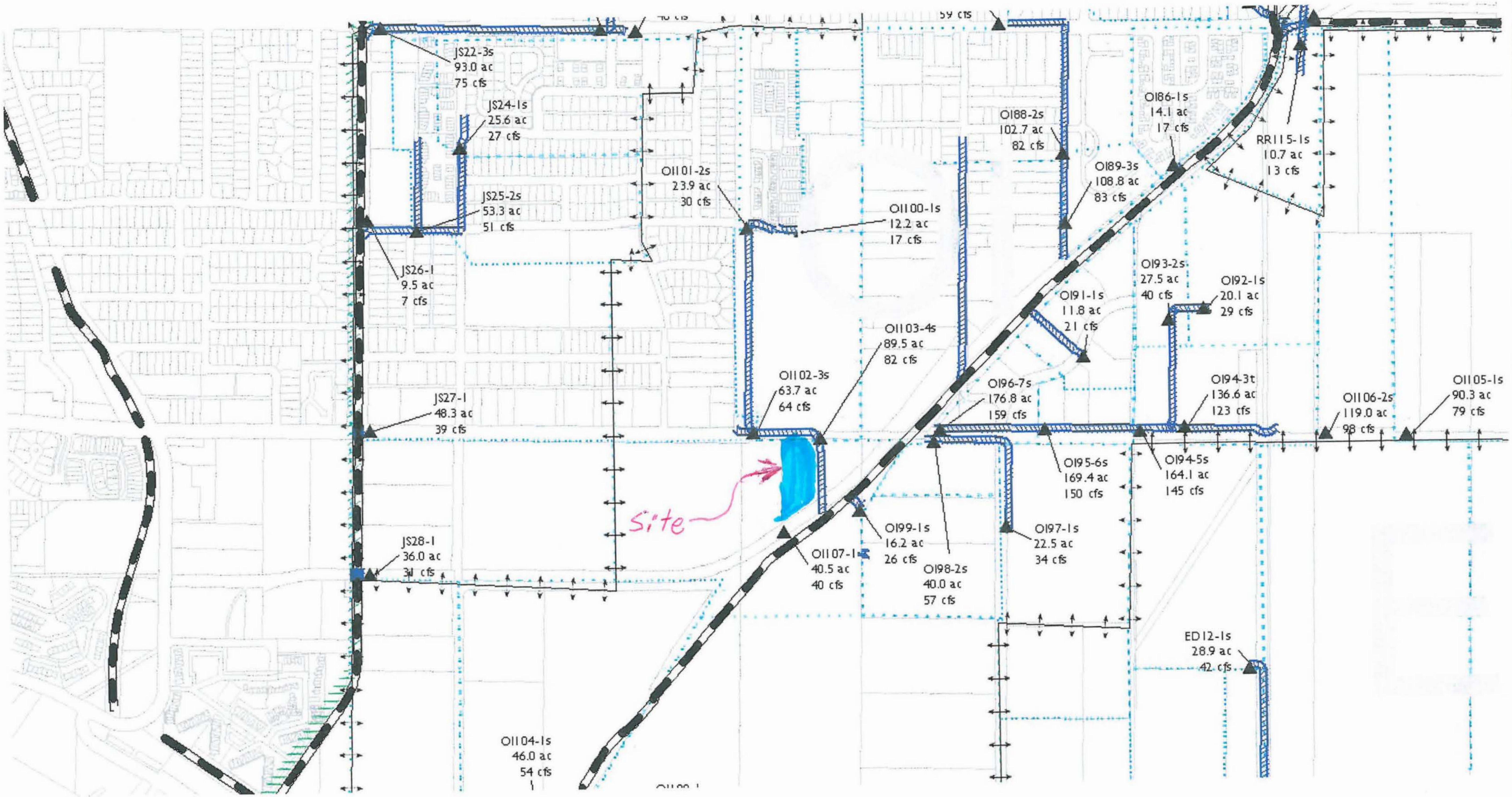
APPENDIX D,

City of Oxnard, Storm Drain Plan, 89-71A, Sheet 20 of 20**.**


DRAWING NUMBER 89-71A 20/20
REFERENCE NOTE:
SHOULD FULL IMPROVEMENT OF THE OXNARD INDUSTRIAL DRAIN BE UNDERTAKEN BY THE V.C.F.C.D., THE OUTLET OF THE 8'x1.5' R.C.B. WILL BE BELOW PROPOSED CHANNEL GRADE (APPROXIMATELY 2.5 ELEV.) AT THAT TIME THE TRANSITION STRUCTURE & R.C.B. SHALL BE ABANDONED OR REMOVED, AND A DRAINAGE LIFT STATION WILL BE CONSTRUCTED BY CITY TO CONVEY STORM DRAINAGE TO THE INDUSTRIAL DRAIN.
CONSTRUCTION NOTES:
1. CONTRACTOR SHALL FULLY SUPPORT & PROTECT IN PLACE THE EXISTING 36" SEWER (CLAY 4' JOINTS) DURING CONSTRUCTION OF BOX CULVERT. BOTTOM OF V.C.P. WILL REST UPON TOP OF BOX. A CONCRETE CRADLE, 1' WIDER THAN THE OUTSIDE DIA OF THE V.C.P. SHALL BE CAST WITH THE TOP OF THE BOX TO SUPPORT THE SEWER.
2. DE-WATERING DURING CONSTRUCTION IS THE CONTRACTORS RESPONSIBILITY. A COFFER DAM OR OTHER MEANS OF DE-WATERING IS EXPECTED TO BE NEEDED FOR R.C.B. & OUTLET CONSTRUCTION.
CONTRACTOR TO RETAMP RAIL BEDDING DURING & AFTER JACKING OPERATION
FINISHED SURFACE TO MATCH EXIST. TOP OF BANK
RESTORE VCFCD ACCESS ROAD COMPACTED TO 90% FINISH WITH 6" CMB, STERILIZED PER VCFCD STD. SPEC.
JACKED RCP UNDER RAILS
CONCRETE CRADLE, SEE CONSTRUCTION NOTE 1
EL. 10
EL. 5
EL. 0
HGL 8.3
EX. DITCH
54" Ø RCP
CONST. 2'x1.5' DROP INLET WITH SAFETY CAGE. SEE DETAILS HEREON
5.0 L.F. 18" R.C.P. CL 2000
JUNCTION PER CITY STD PLATE 523
JUNCTION STR. NO. 3 STA. 1+25
N.T.S.
HEAD WALL MODIFIED BY V.C.F.C.D. INSPECTOR IN FIELD
6+00
5+00
4+00
3+00
2+00
1+00
0+00
5+44.50
℄ JUNC. STRUCT. PER CITY STD. PLT. 521 (D=24", D=48", D=54" ∠=90°)
CONST. TEMP. INLET PER DETAIL @ RIGHT
EXISTING TELEPHONE CONDUIT TO BE LOWERED BY OTHERS
℄ HUENEME RD.
EXISTING 12" WATER TO BE LOWERED TO CLEAR S.D. PER CITY STD PLATE NO. 313 SEE NOTE 3.
MATCH 4+33.00 LINE
SEE RIGHT HEREON
REMOVE EXIST. 4'x2.5' CONC. CULVERT. REPLACE STRUCTURAL BACKFILL & PAVEMENT PER CITY STANDARD SPECS.
CURVE DATA
BACKFILL TO 95% WITH AGG. BASE. SEE V.C.R.R. PERMIT FOR ADDITIONAL REQUIREMENTS.
20' PROPOSED EASEMENT
BACKFILL TO EXIST GRADE @ 90% MIN. RELATIVE COMPACTION SEE NOTE BELOW
NOTE: WATER SURFACE SUBJECT TO TIDE ACTION W.S.=6.7± @ M.H.W.
RESTORE VCFCD ACCESS ROAD COMPACTED TO 90% FINISH WITH 6" CMB, STERILIZED PER VCFCD STD. SPEC.
ROCK DELETED BY V.C.F.C.D. INSPECTOR
TEMPORARY INLET DETAIL
N.T.S.
NOTE: DITCH ALONG HUENEME ROAD SHALL BE BACKFILLED & THEN GRADED FOR DITCH DRAINAGE TOWARD THE INLET @ 1% MIN. DITCH EXTENDS APPROX. 150' E/O TEMP. INLET.
"AS BUILT"
PLAN
SCALE OF FEET
JACKED 54" RCP CL. V (3000 D) MIN. LENGTH = 38' (CENTER ON RAILS).
CONCRETE ENCASEMENT UNDER RAILROAD
N.T.S.
DELETE
NOTE:
1. CONTRACTOR SHALL LOCATE & POT-HOLE EXISTING UTILITIES PRIOR TO START OF STORM DRAIN CONSTRUCTION & NOTIFY ENGINEER TO ALLOW VERIFICATION OF DESIGN. LOCATION & DEPTH SHOWN ARE APPROXIMATE ONLY. SHOULD THE UTILITIES VARY SIGNIFICANTLY FROM LOCATION SHOWN, THE CONTRACTOR SHALL ALLOW THE ENGINEER TIME TO MAKE NECESSARY MODIFICATIONS IN DESIGN.
2. PAVEMENT SECTION FOR HUENEME RD. SHALL BE, AT A MIN., EQUAL TO EXISTING; STRUCTURAL SECTION TO BE DETERMINED BY R-VALUE TEST PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL POT-HOLE & EXPOSE 12" WATER MAIN & SEWER FORCE MAIN PRIOR TO S.D. CONSTRUCTION.
NOTE: AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR CONSTRUCTION WITHIN RAIL ROAD RIGHT OF WAY.
APPROVED: VENTURA COUNTY FLOOD CONTROL DISTRICT W.C. PERMIT NO. EP 90068
DATE
PREPARED BY: DICKERSON & ASSOCIATES
280 MAPLE COURT SUITE 221 VENTURA, CALIF. 93003 (805) 644-7232
R.C.E. NO. 32127 EXP. DATE 12-31-92
REVISIONS
CITY OF OXNARD, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
STORM DRAIN-HUENEME ROAD
SUP-1335
TRACT 4588
SHEET NO. 20 OF 20
DRAWING NUMBER 89-71A

APPENDIX E:

Master Plan of Drainage City of Oxnard



JS22-3s
93.0 ac
75 cfs
JS24-1s
25.6 ac
27 cfs
JS25-2s
53.3 ac
51 cfs
JS26-1
9.5 ac
7 cfs
JS27-1
48.3 ac
39 cfs
JS28-1
36.0 ac
OI101-2s
23.9 ac
30 cfs
OI100-1s
12.2 ac
17 cfs
OI103-4s
89.5 ac
82 cfs
OI102-3s
63.7 ac
64 cfs
Site
OI107-1
40.5 ac
40 cfs
OI99-1s
16.2 ac
26 cfs
OI98-2s
40.0 ac
57 cfs
OI97-1s
22.5 ac
34 cfs
OI96-7s
176.8 ac
159 cfs
OI95-6s
169.4 ac
150 cfs
OI94-5s
164.1 ac
145 cfs
OI94-3t
136.6 ac
123 cfs
OI93-2s
27.5 ac
40 cfs
OI92-1s
20.1 ac
29 cfs
OI91-1s
11.8 ac
21 cfs
OI88-2s
102.7 ac
82 cfs
OI89-3s
108.8 ac
83 cfs
OI86-1s
14.1 ac
17 cfs
RR115-1s
10.7 ac
13 cfs
OI106-2s
119.0 ac
98 cfs
OI105-1s
90.3 ac
79 cfs
ED12-1s
28.9 ac
42 cfs
OI104-1s
46.0 ac
54 cfs
59 cfs

LEGEND

▲ Concentration Point

Storm Drain

Hydrologic Subarea

Study Area

Watershed Boundary

Parcels

Open Channel

ED22-1	Conc pt. ID
85.9 ac	Cumulative Area
67 cfs	Q10

HAWKS &

CONSULTING

Appendix F.

Manning Formula Calculations for Pipes & Trap. Channel

1. Bio-3 Vegetated Swale Q 100 Post-Dev. Velocity Check, Manning's Formula Trap. Channel Calc.
2. Bio-3, 8" PVC Low Flow Drainpipe Q10 Pre-Dev., Volume Check, Manning's Pipe Flow
3. 3'x3' CB, 15" RCP flow restricting connector outlet, Check Max Flow, Manning's Pipe Flow

Manning Formula Uniform Trapezoidal Channel Flow at Given Slope and Depth

320 E Hueneme Rd., 2.81 Ac Post Dev., Velocity Check Bio-3, Veg Swale

Q-100=13.24 cfs, S=0.7%, Side Slope=9(H):1(V), Vp=2.22 fps,3 fps max.

Inputs

Bottom width	4	ft	X
Side slope 1 (horiz./vert.)	9		X
Side slope 2 (horiz./vert.)	9		X
Manning roughness, n ? ○Strickler ○B/B (See notes)	0.03		X
Channel slope	0.007	rise/run	X
Flow depth	7.5	in	X

Results

Flow area	6.0157	ft^2	X
Wetted perimeter	15.3191	ft	X
Hydraulic radius	0.3927	ft	X
Velocity, v	2.2222	ft/sec	X
Flow, Q (See notes)	13.3675	cfs	X
Velocity head, h_v	0.0767	ft	X
Top width, T	15.2499	ft	X

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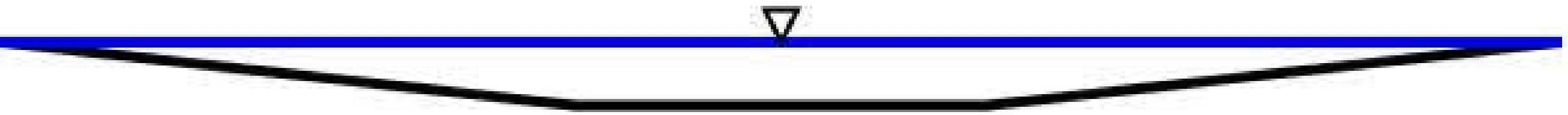

Manning Formula Uniform Pipe Flow at Given Slope and Depth

BIO-3 VEGETATED SWALE CAPACITY CHECK 8" PVC LOW FLOW

Restrict flow to less then Pre-Dev. Flow. Q10=0.96(Cooks Mod.). S=1%, n=0.011, Q=0.96 Max. Allowed

Inputs

Pipe diameter, d_0	8	in	X
Manning roughness, n	0.011		X
Pressure slope (possibly ? equal to pipe slope), S_0	1	% rise/run	X
Percent of (or ratio to) full depth (100% or 1 if flowing full)	0.6	fraction	X

Results

Flow, Q (See notes)	0.9594	cfs	X
Velocity, v	4.3873	ft/sec	X
Velocity head, h_v	0.2992	ft H2O	X
Flow area	0.2187	ft^2	X
Wetted perimeter	1.1814	ft	X
Hydraulic radius	0.1851	ft	X
Top width, T	0.6532	ft	X
Froude number, F	1.34		X
Average shear stress (tractive force), tau	0.1156	psf	X

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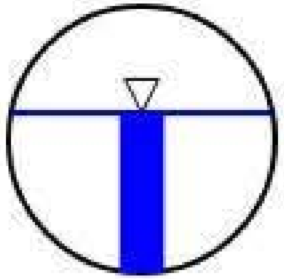


Notes:

This is the flow and depth *inside* the pipe.

Manning Formula Uniform Pipe Flow at Given Slope and Depth

20' L.F., 15" RCP LATERAL FROM 3' x 3' C.B. TO (E) 24" RCP CITY S.D. LAT

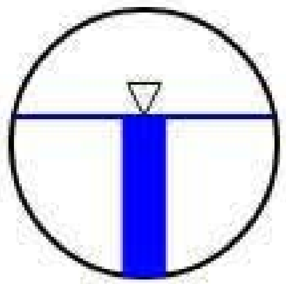
15" RCP, S = 0.25%, Inlet WS=11.25, >3 x 2.62 ft/sec (Velocity), Q = 2.01 cfs < 2.2 cfs allowable

Inputs

Pipe diameter, d_0	15	in
Manning roughness, n	0.014	
Pressure slope (possibly ? equal to pipe slope), S_0	0.0025	rise/run
Percent of (or ratio to) full depth (100% or 1 if flowing full)	0.6	fraction

Results

Flow, Q (See notes)	2.0148	cfs
Velocity, v	2.6208	ft/sec
Velocity head, h_v	0.1067	ft H2O
Flow area	0.7688	ft^2
Wetted perimeter	2.2152	ft
Hydraulic radius	0.3471	ft
Top width, T	1.2247	ft
Froude number, F	0.58	
Average shear stress (tractive force), tau	2.5933	N/m^2



Notes:

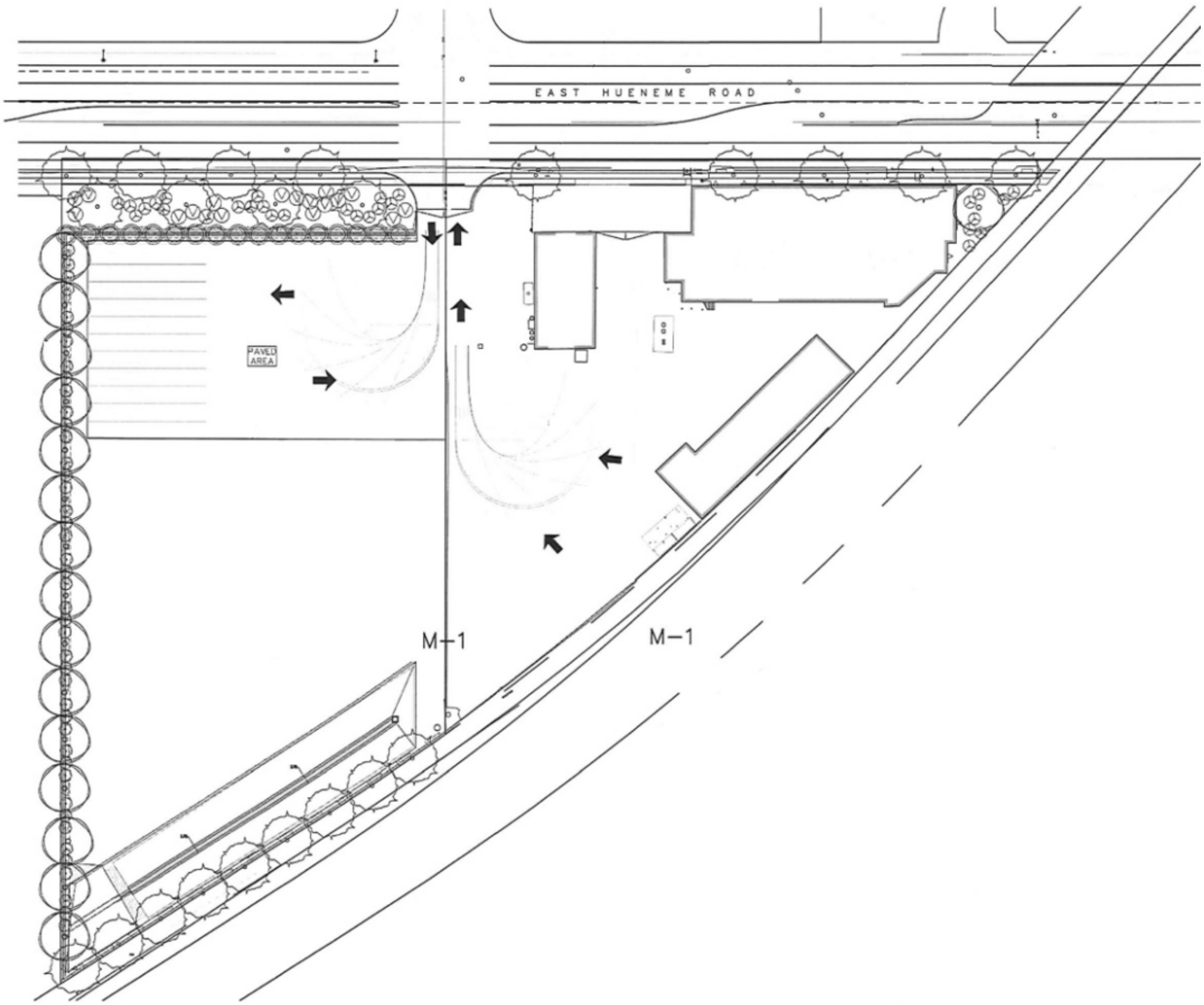
This is the flow and depth *inside* the pipe.

Appendix E

Traffic Study and Vehicle Miles Traveled Analysis

PANTOJA TRUCKING PROJECT OXNARD, CALIFORNIA

REVISED TRAFFIC STUDY AND VEHICLE MILES TRAVELED ANALYSIS



December 17, 2024 **ATE Project 23058**

Rincon Consultants
180 North Ashwood Avenue
Ventura, California 93003

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 • (805) 687-4418 • FAX (805) 682-8509

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805)687-4418 • FAX (805)682-8509 • main@atesb.com

Since 1978

Richard L. Pool, P.E.
Scott A. Schell

December 17, 2024

Greg Martin
Rincon Consultants
180 North Ashwood Avenue
Ventura, California 93003

REVISED TRAFFIC STUDY AND VEHICLE MILES TRAVELED ANALYSIS FOR THE PANTOJA TRUCKING PROJECT - CITY OF OXNARD

Associated Transportation Engineers (ATE) has prepared the following revised traffic study and Vehicle Mile Traveled analysis for the Pantoja Trucking Project. The revised traffic study address comments provided by City of Oxnard staff. It's our understanding that the results of revised traffic study and Vehicle Miles Travelled analysis will be used by the City of Oxnard to process the Project's environmental development application.

We appreciate the opportunity to assist Rincon Consultants with this Project.

Associated Transportation Engineers

By: Scott A. Schell
Vice President

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INTRODUCTION

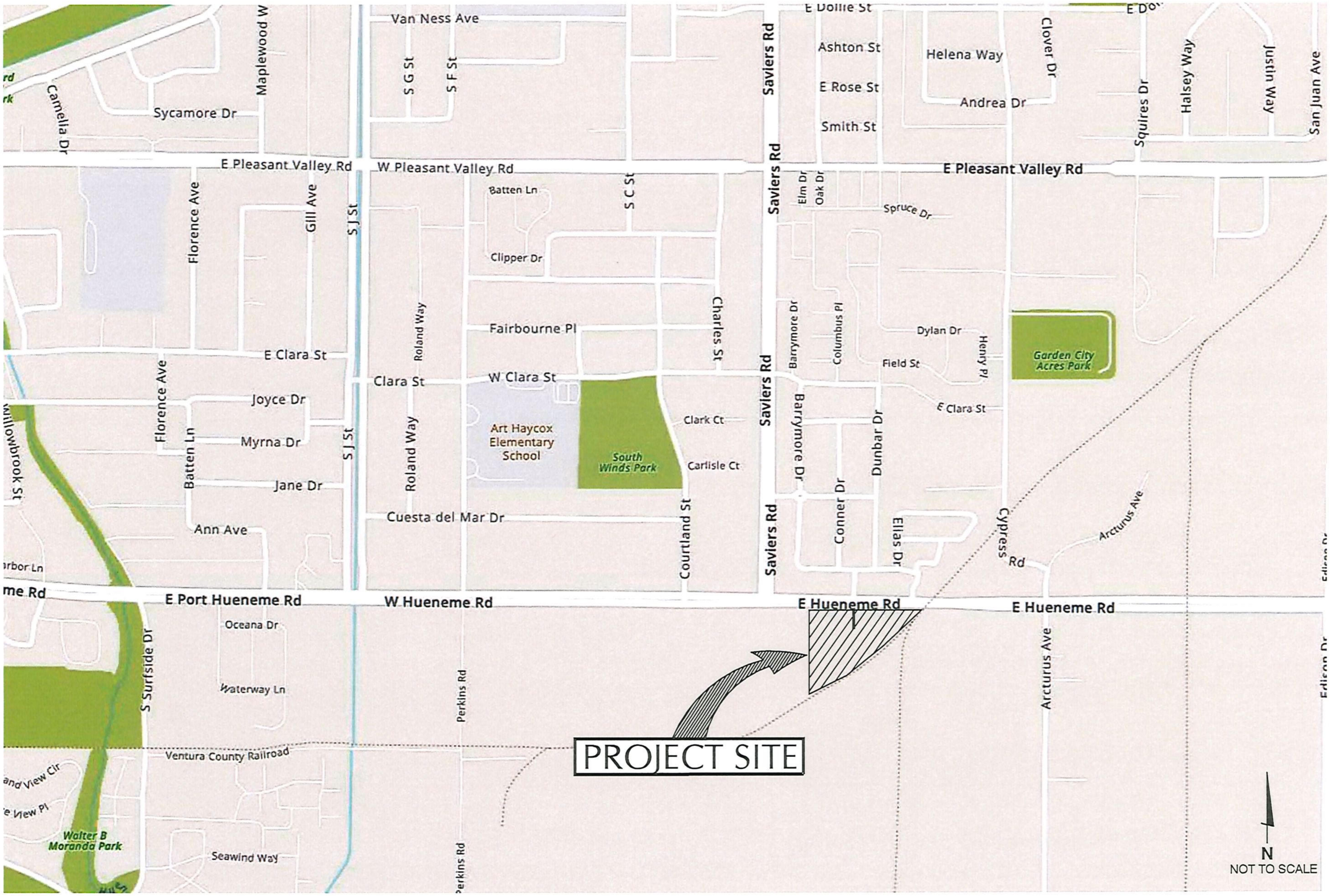
The following study contains an analysis of the potential traffic and circulation effects associated with the Pantoja Trucking Company planned facilities improvement and permitting (the "Project"), located in the City of Oxnard. The guidelines set forth in the City of Oxnard's Traffic Impact Study guidelines were utilized in formatting the various sections of the traffic study. The study provides information relative to "Existing", "Existing + Project", "Cumulative" (existing + approved/pending projects) and "Cumulative + Project" traffic conditions. Site access and Vehicle Miles Traveled (VMT) are also addressed.

PROJECT DESCRIPTION

As illustrated on Figure 1, the Project is located at 210 and 320 Hueneme Road in the City of Oxnard. The Project site has historically operated as a truck and freight transportation storage yard, and the applicant (Pantoja Trucking) intends to continue operating the site as such. The Pantoja Trucking Company hauls frozen products (such as shrimp and fish) received in containers from the Port of Hueneme, either directly to customers or to the Project site. Product stored on-site is then shipped to customers throughout California during the next several days.

The Project includes the permitting of un-permitted development on a property on Hueneme Road. The proposed Project would involve construction of an approximately 0.77-acre parking area for trucks, removal of a perimeter chain link fence and construction of a perimeter wrought iron fence with landscaping, a detention basin for drainage, and restoration of part of this parcel back to vacant undeveloped land. The new paved parking area will be utilized as truck overflow parking for trucks that are used to haul freight for the Pantoja Trucking Company. Three existing industrial buildings totaling 24,313 square-feet, as well as accessory structures with truck parking areas, are present on two other parcels that make up the Project site. No changes to these three buildings or accessory structures are proposed as part of the Project.

Access to the Project site will be provided via a proposed new vehicular entry/exit driveway directly opposite Conner Drive connection to Hueneme Road. The proposed entry gate would be open during hours of operation and monitored by security cameras. The existing driveway connection east of Conner Drive would be eliminated. The Project site plan is illustrated on Figure 2.



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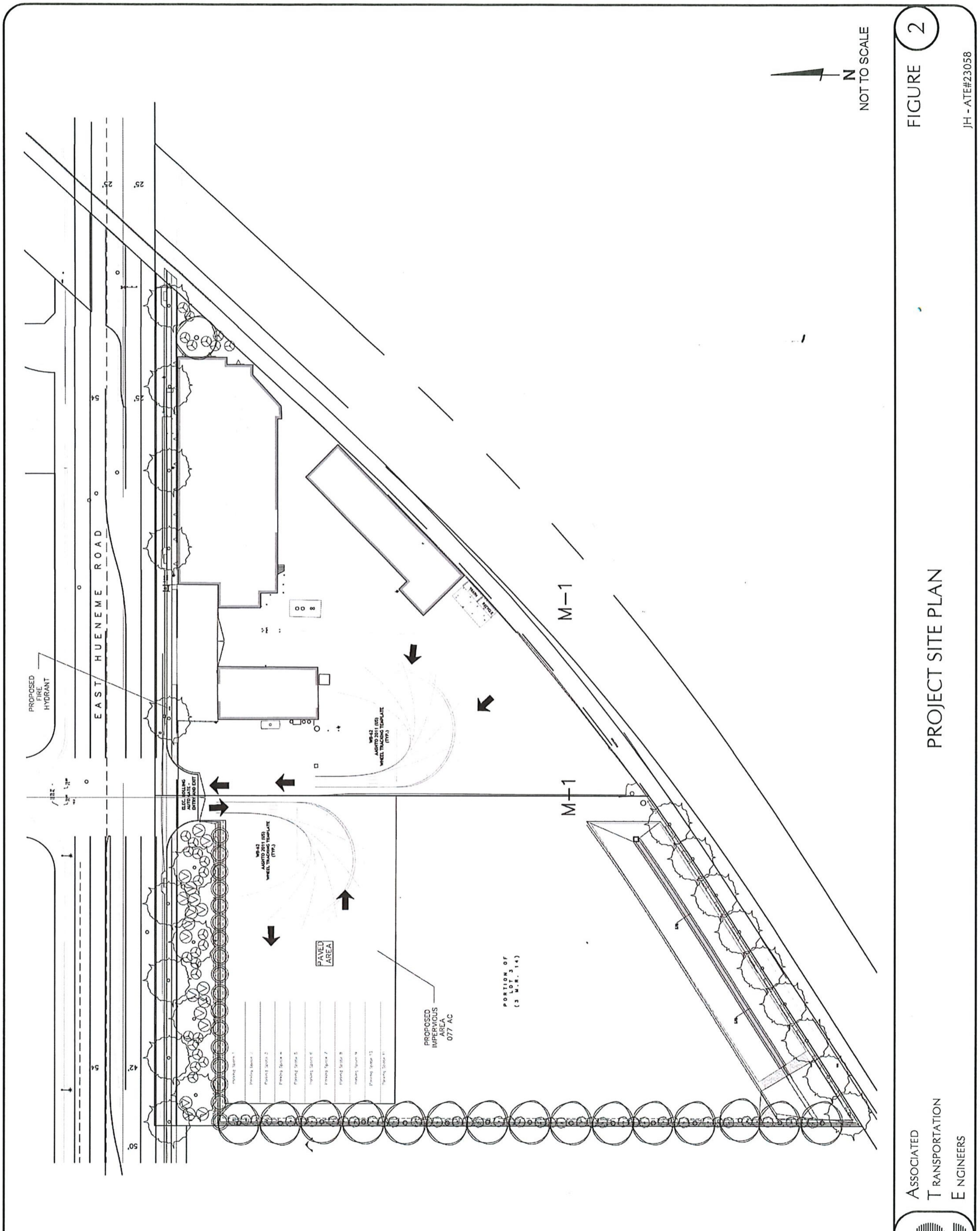
PROJECT SITE LOCATION

FIGURE 1

JH - ATE#23058


EAST HUENEME ROAD
PROPOSED FIRE HYDRANT
M-1
M-1
PAVED AREA
PROPOSED IMPERVIOUS AREA 077 AC
N
NOT TO SCALE
PROJECT SITE PLAN
FIGURE 2
JH - ATE#23058
ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING CONDITIONS

Existing Street Network

The Project site is served by a circulation system comprised of arterial and collector streets, which are illustrated on Figure 1. The major roadways serving the site are discussed in the following text.

Hueneme Road, located adjacent to the Project site, is a 2- to 4-lane divided roadway extending from the Port of Hueneme gate to Potrero Road where it becomes Lewis Road. Hueneme Road in the study-area is fully improved with curb, gutter, sidewalk and street lighting. Hueneme Road serves the Port, residential, commercial, light industrial and agricultural land uses. The posted speed limit on Hueneme Road is 45 mph. In the study-area, the Hueneme Road/Saviers Road intersection is signalized. Direct access to the Project is provided via a new driveway connection on Hueneme Road opposite Conner Drive.

Saviers Road is a 2- to 6-lane divided arterial roadway that extends north from Hueneme Road to the Five Points intersection. In the study-area, Saviers Road serves residential and commercial land uses. Saviers Road is fully improved with curb, gutter, sidewalk and street lighting. The posted speed limit on Saviers Road is 40 mph. Saviers Road is signalized at Pleasant Valley Road and Hueneme Road.

Conner Drive is a 2-lane undivided north-south residential roadway that extends north from Hueneme Road terminating at Irwin Way. Conner Drive serves the Pacific Cove residential community and the Villa Cesar Chavez apartments north of the Project site. Conner Drive is fully improved with curb, gutter and sidewalk. Conner Drive is STOP-Sign controlled at Hueneme Road.

Existing Intersection Volumes and Levels of Service

Traffic flow on urban arterials is most constrained at intersections. Therefore, a detailed analysis of traffic flows must examine the operating conditions of critical intersections during peak travel periods. In rating intersection operations, "Levels of Service" (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating congested operations (definitions of levels of service contained in the Technical Appendix). In the City of Oxnard LOS "C" is the acceptable operating standard for intersections.

Figure 3 illustrates the existing traffic controls and lane geometries for the study-area intersections. Existing intersection traffic volumes were obtained from traffic count data collected in August of 2023 (see Technical Appendix for count data). Counts were conducted during the AM peak commuter period (6:00 - 9:00 AM) and PM peak commuter period (3:00 - 6:00 PM). The peak 1-hour volumes were then identified for the analysis. The existing AM and PM peak hour traffic volumes at the study-area intersections are illustrated on Figure 4.

Existing levels of service for the study-area intersections were calculated using the Intersection Capacity Utilization (ICU) methodology for signalized intersections and the Highway Capacity Manual (HCM)[1] unsignalized intersection methodology as required by the City of Oxnard (Level of service worksheets contained in Technical Appendix). Table 1 lists the existing AM and PM peak hour levels of service for the study-area intersections

Table 1
Existing Peak Hour Levels of Service

No.	Intersection	Control Type	AM Peak Hour[(a)]		PM Peak Hour[(a)]	
			ICU/Delay	LOS	ICU/Delay	LOS
1.	Hueneme Road/Saviers Road	Signal	0.28	LOS A	0.46	LOS A
2.	Hueneme Road/Conner Drive	STOP-Sign	13.4 sec.	LOS B	16.8 sec.	LOS C

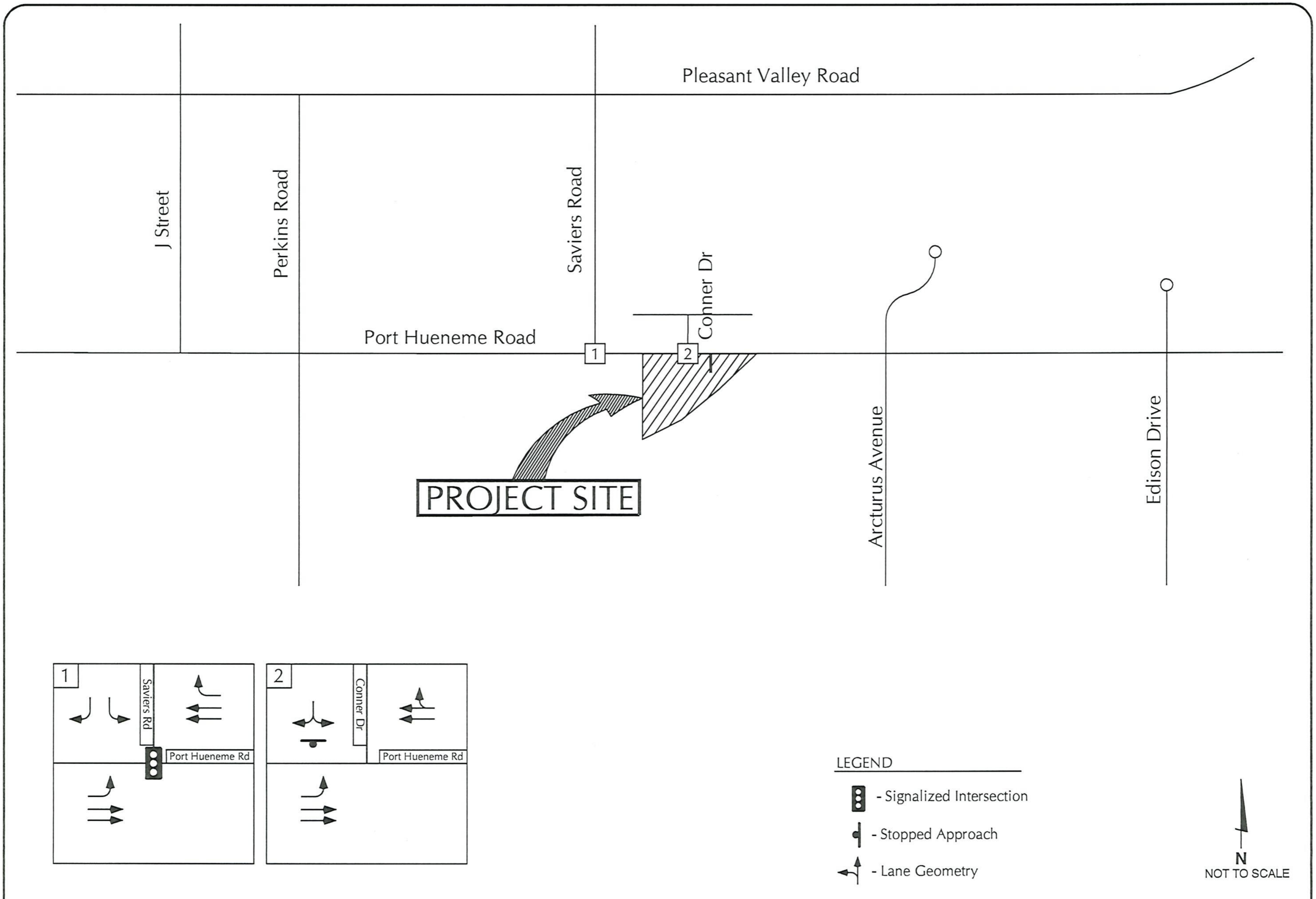
(a) AM peak hour between 6:00 - 9:00 AM; PM peak hour between 3:00 - 6:00 PM.

The data presented in Table 1 indicate that the study-area intersections currently operate at LOS "C" or better during the AM peak hour and PM peak hour periods, which meet the City's LOS "C" standard.

CITY OF OXNARD GENERAL POLICY

The City of Oxnard's criteria for evaluating project effects at intersections is based upon the change in ICU/LOS attributable to the project. The City of Oxnard has established LOS "C" as the threshold of significance for determining project effects at intersections. If the addition of project traffic increases the ICU by 0.02 or more at an intersection operating at LOS "C" or worse, it should be improved to the ICU level identified without the project traffic. These criteria were used to determine the significance of the impacts generated by the Project at the study-area intersections.

1 Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.



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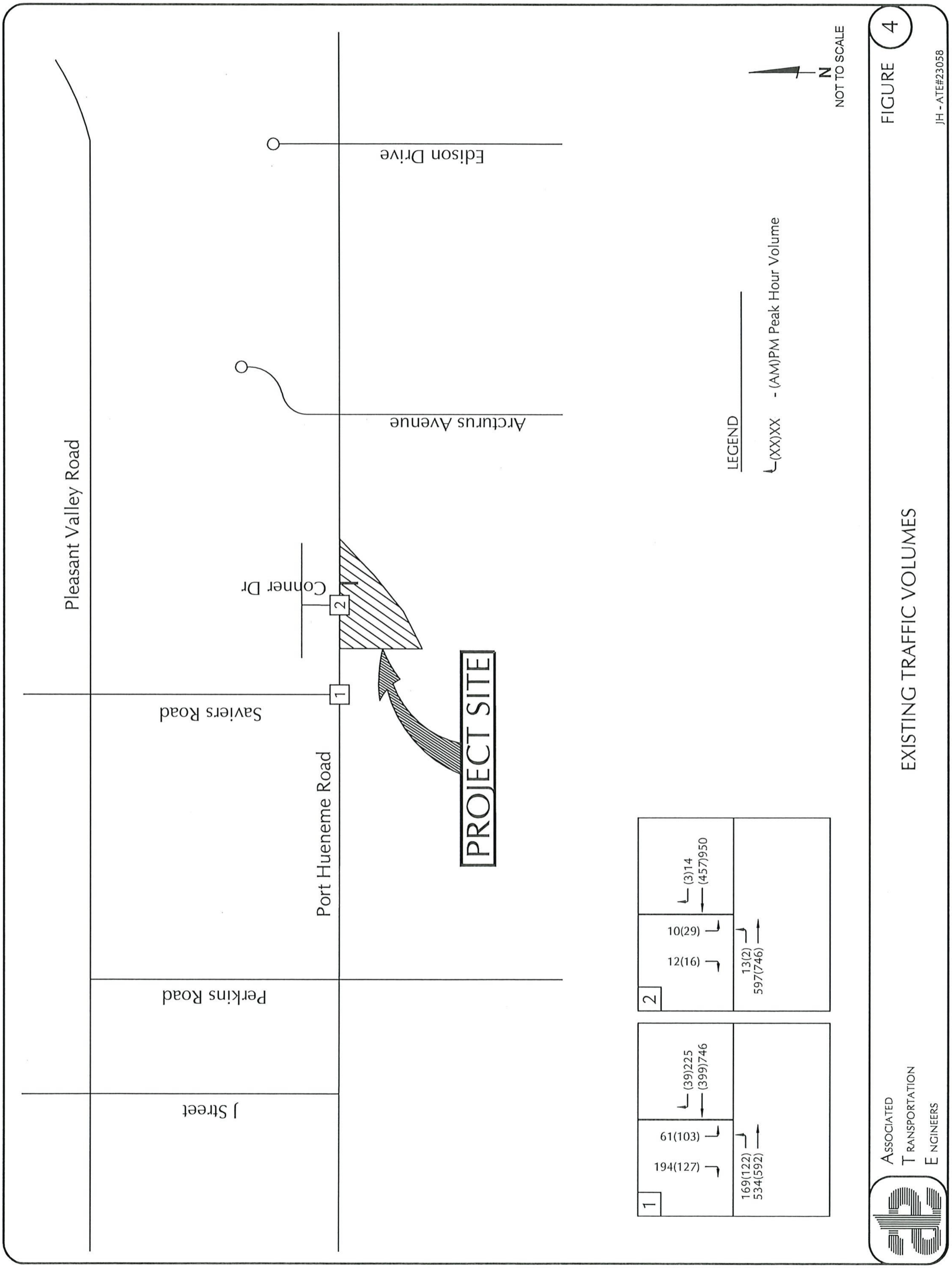
EXISTING LANE GEOMETRIES AND TRAFFIC CONTROLS

FIGURE 3

JH - ATE#23058



Pleasant Valley Road
Port Hueneme Road
J Street
Perkins Road
Saviers Road
Conner Dr
Arcturus Avenue
Edison Drive
PROJECT SITE
1
2
LEGEND
(XX)XX - (AM)PM Peak Hour Volume
N
NOT TO SCALE
1
194(127)
61(103)
(39)225
(399)746
169(122)
534(592)
2
12(16)
10(29)
(3)14
(457)950
13(2)
597(746)
EXISTING TRAFFIC VOLUMES
FIGURE 4
JH - ATE#23058
Associated
Transportation
Engineers

PROJECT GENERATED TRAFFIC VOLUMES

Project Trip Generation

Trip generation estimates were calculated for the Project based on operational data provided by the applicant. Table 2 presents the estimated Project trip generation. The business currently employs 6 truck drivers and 4 full-time office employees providing office support services to the transportation and freight business. When the Project is complete, the business will employ 11 truck drivers and 4 full-time office employees. The support services include accounting, scheduling, and human resources. The hours of truck operation range from 7:00 AM to 5:00 PM, and the office staff hours of operation would range from 8:00 AM to 5:00 PM. Miscellaneous and customer trips occur during off-peak hours.

The peak hourly truck trip traffic for on-site business operation is 12 trips between 7:30 AM to 8:30 AM on Thursdays but this depends on when the containers are ready for pickup at the Port. The office support personnel peak trips from 7:30 AM to 8:30 AM on Monday through Friday. The standard operation of the trucking business consists of hooking up cargo containers on chassis at the Port of Hueneme and delivering between 10 to 20 percent directly to businesses in California and the remainder to Pantoja's yard to be stored then delivered to customers statewide over the next several days. The containers remain on the same chassis from Port to customer, with no transfer of the containers to different chassis in the Pantoja yard. Truck traffic on non-peak days averages approximately 20 (10 in/10 out) a day and consists of trucks hooking up the chassis with containers in Pantoja's yard and delivering to customers statewide then returning to Pantoja's yard, usually the following day.

Table 2
Project Trip Generation Estimates

Land Use	Employee	ADT	AM Peak Hour	PM Peak Hour
			Trips (Entering/Exiting)	Trips (Entering/Exiting)
Existing Trucking Operation:		-	-	-
- Office Employees	4	16	4 (4/0)	4 (0/4)
- Customer/Miscellaneous	2	4	0 (0/0	0 (0/0)
- Truck Drivers	6	12	6 (6/0)	6 (0/6)
- Truck Deliveries	-	24[a]	12 (6/6)	6 (6/0)
Total Trip Generation:		56	22 (16/6)	16 (6/10)
Proposed Trucking Operation:		-	-	-
- Office Employees	4	20	4 (4/0)	4 (0/4)
- Customer/Miscellaneous	2	4	0 (0/0)	0 (0/0)
- Truck Drivers	11	22	11 (11/0)	11 (0/11)
- Truck Deliveries	-	72[b]	12 (6/6)	6 (6/0)
Total Trip Generation:		114	27 (21/6)	21 (6/15)
Net Trip Generation:		+58	5 (5/0)	5 (0/5)

(a) Based on peak existing daily trips.
(b) Based on peak future daily trips.

The data presented in Table 2 indicates that the Project would generate 114 average daily trips, 27 AM peak hour trips and 21 PM peak hour trips. The existing trucking operation generates 56 average daily trips, 22 AM peak hour trips and 16 PM peak hour trips. The proposed Project would result in a net increase of 58 average daily trips, 5 AM peak hour trips and 5 PM peak hour trips.

Project Trip Distribution and Assignment

The Project-generated employee AM and PM peak hour traffic volumes were assigned to the study-area intersections based on travel data derived from the existing traffic volumes as well as a general knowledge of the population, employment and commercial centers in the Oxnard/Ventura area. The distribution of truck traffic assumed the trip originates at the Port. Due to the raised median on Hueneme Road, it was assumed that trips exiting to the west would use the new driveway connection on Hueneme Road opposite Connor Drive. Figure 5 illustrates the trip assignment assumed for the Project's trips. Figure 6 illustrates the Existing + Project traffic volumes.

PROJECT-SPECIFIC ANALYSIS

Levels of service were calculated for the study-area intersections assuming the Existing + Project volumes. Tables 3 and 4 show the results of the calculations and identify the Project's impacts based on the City of Oxnard thresholds.

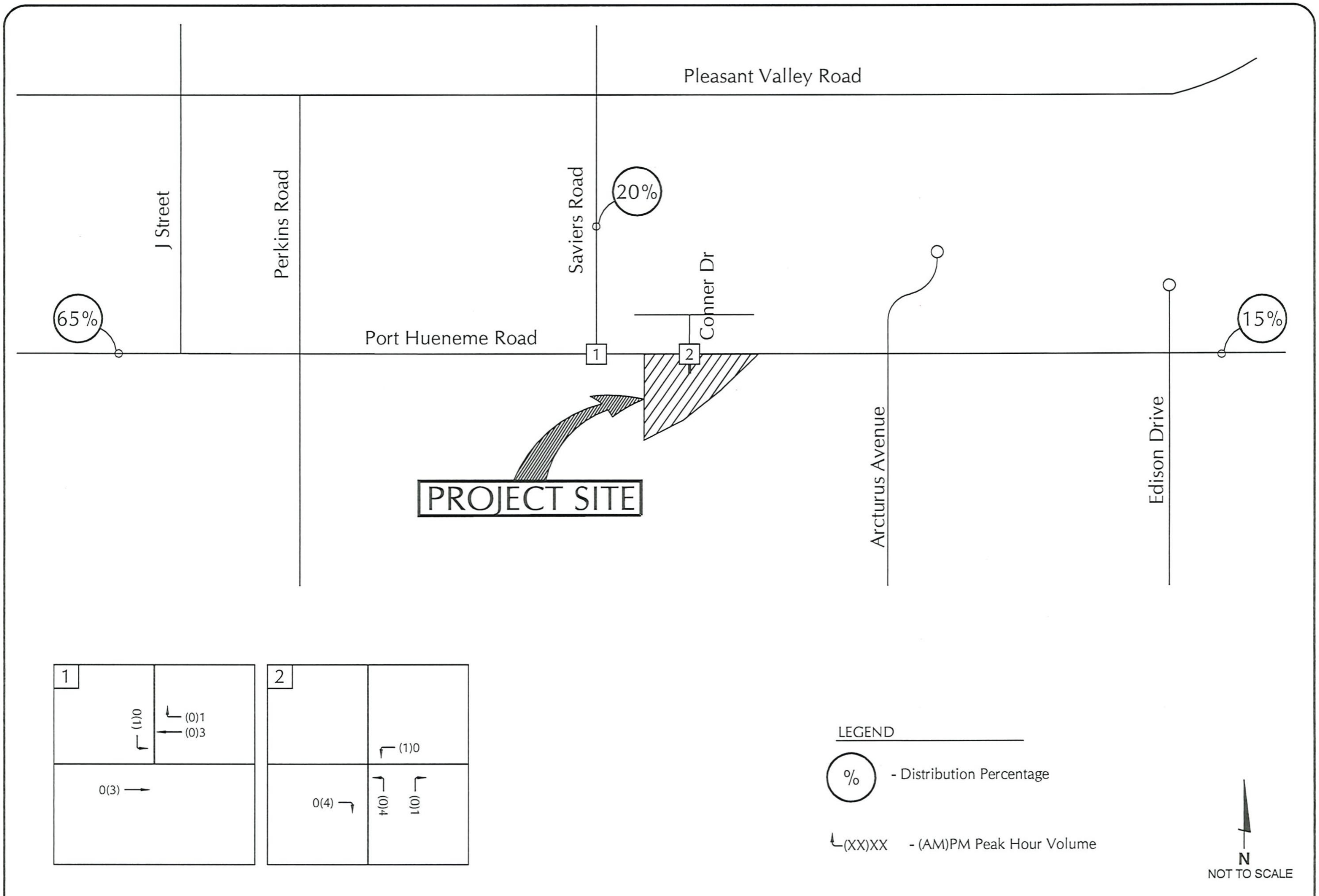
Table 3
Existing + Project AM Peak Hour Levels of Service

		Existing		Existing + Project			
No.	Intersection	ICU/Delay	LOS	ICU/Delay	LOS	Change	Consistent?
1.	Hueneme Rd/Saviers Rd	0.28	LOS A	0.28	LOS A	0.00	Yes
2.	Hueneme Rd/Conner Dr	13.4 sec.	LOS B	23.3 sec.	LOS B	9.9 sec.	Yes

Table 4
Existing + Project PM Peak Hour Levels of Service

		Existing		Existing + Project			
No.	Intersection	ICU/Delay	LOS	ICU/Delay	LOS	Change	Consistent?
1.	Hueneme Rd/Saviers Rd	0.46	LOS A	0.46	LOS A	0.00	Yes
2.	Hueneme Rd/Conner Dr	16.8 sec.	LOS C	16.9 sec.	LOS C	0.1 sec.	Yes

The data presented in Tables 3 and 4 indicate that the addition of Project trips would not have an adverse effect on the operation of the study-area intersections during the AM or the PM peak hour periods. The study-area intersection operations would be consistent with the General Plan policy. The study-area intersections would continue to operate at LOS "C" or better during the AM and PM peak hour periods with Existing + Project cumulative traffic volumes, which meets the City's LOS "C" standard.



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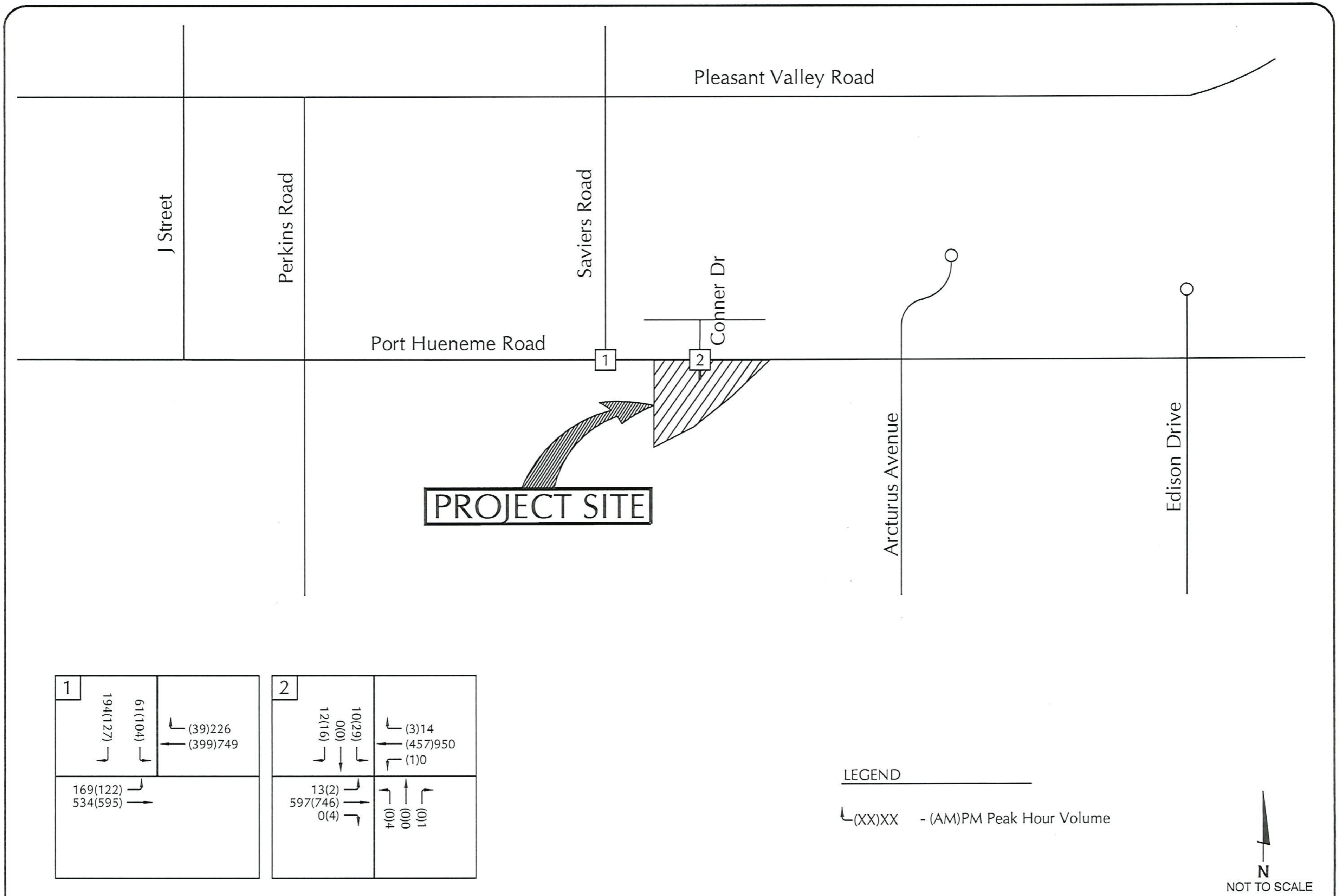
PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

JH - ATE#23058



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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 6

JH - ATE#23058

CUMULATIVE (EXISTING + APPROVED/PENDING PROJECTS) CONDITIONS

Cumulative Traffic Forecasts and Levels of Service

The City of Oxnard requires that intersection operations be analyzed with the addition of traffic generated by projects which have been approved or are pending within the Project study-area. The cumulative projects account for future traffic growth. Trip generation estimates were developed for the cumulative developments using the rates presented in the ITE, Trip Generation, 11th Edition. Table 5 summarizes the average daily, AM and PM peak hour trip generation estimates for the approved/pending projects.

Table 5
Approved/Pending Projects Trip Generation

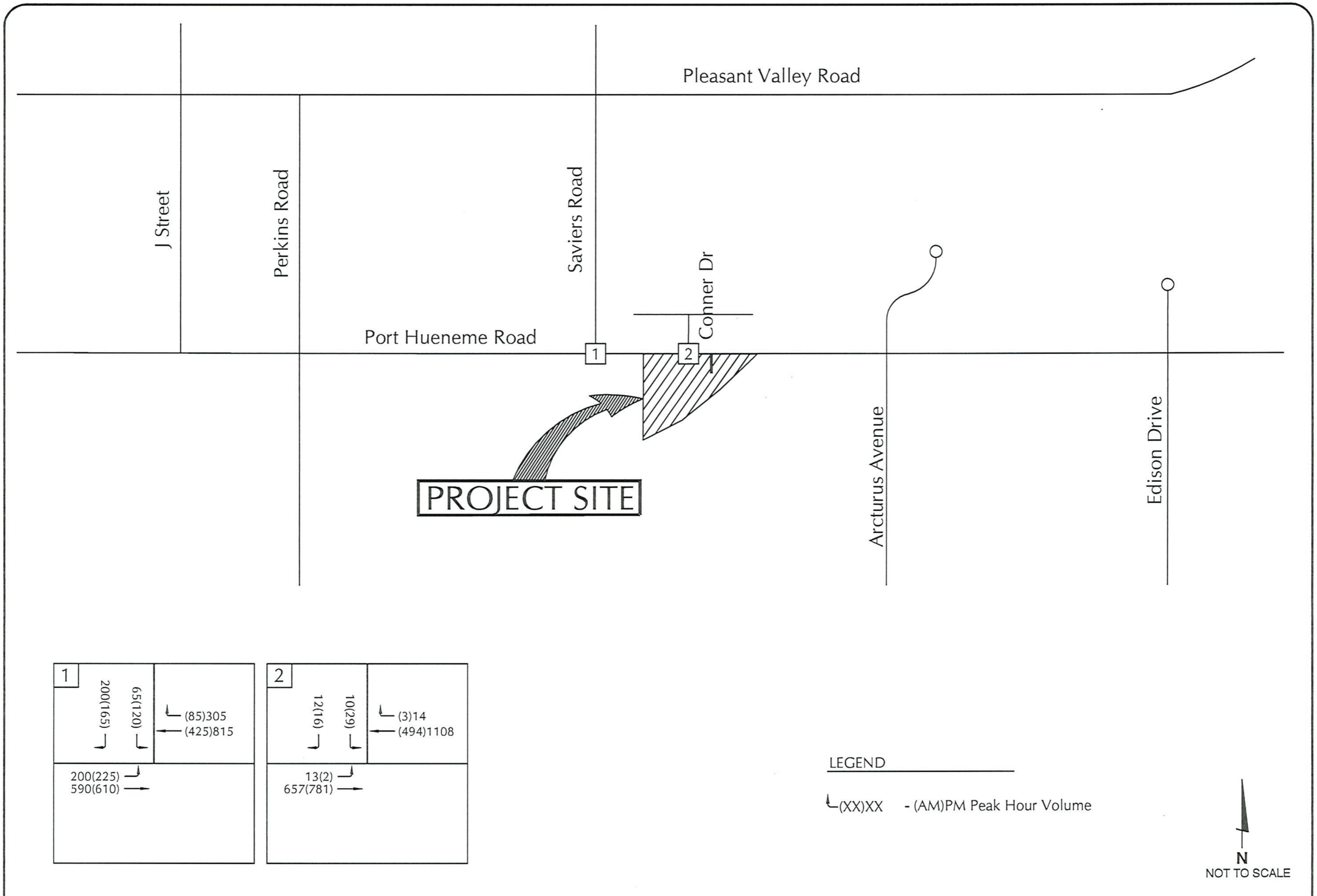
No.	Project	Land Use	Units/Size	ADT	AM Peak Hour	PM Peak Hour
1.	Garden City	Farmworker Res.	30 Units	50	6	4
2.	JBGR Investments, LLC	Townhomes	20 Units	146	9	11
3.	Daya Enterprise Gas Station	Gas Station	3,000 SF	2,121	128	147
4.	Cypress Place at Garden City	Multi-Family Res.	150 Units	721	75	41
5.	Cypress Court Tiny Homes	Multi-Family Res.	30 Units	293	18	22
6.	Pleasant Valley Plaza	Commercial	11,392 SF	430	11	43
7.	Port of Hueneme Vehicle Storage	Vehicle Storage	33.7 Acres	316	48	12
			Total Trips:	4,077	295	280

The data presented in Table 5 indicate that the approved/pending projects would generate a total of 4,077 average daily trips, 295 AM peak hour trips and 280 PM peak hour trips. The traffic generated by the approved/pending projects was distributed and assigned to the study-area intersections based on the location of each project, recent traffic studies, existing traffic patterns observed in the study area as well as a general knowledge of the population, employment and commercial centers in Oxnard and surrounding Ventura County area. Figure 7 illustrates the Cumulative peak hour traffic volumes at the study-area intersections. Table 6 presents the Cumulative levels of service for the study-area intersections.

Table 6
Cumulative Levels of Service

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			ICU/Delay	LOS	ICU/Delay	LOS
1.	Hueneme Road/Saviers Road	Signal	0.38	LOS A	0.51	LOS A
5.	Hueneme Road/Conner Drive	STOP-Sign	13.8 sec.	LOS B	19.3 sec.	LOS C

The data presented in Table 6 indicate that the study-area intersections would continue to operate at LOS "C" or better during the AM and PM peak hour periods with cumulative traffic volumes, which meets the City's LOS "C" standard.



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CUMULATIVE TRAFFIC VOLUMES

FIGURE 7

JH - ATE#23058

Cumulative + Project Analysis

Levels of service were calculated for the study-area intersections assuming the Cumulative + Project volumes illustrated on Figure 8. Tables 7 and 8 show the results of the calculations and identify the constancy of the Project with the City of Oxnard LOS policies.

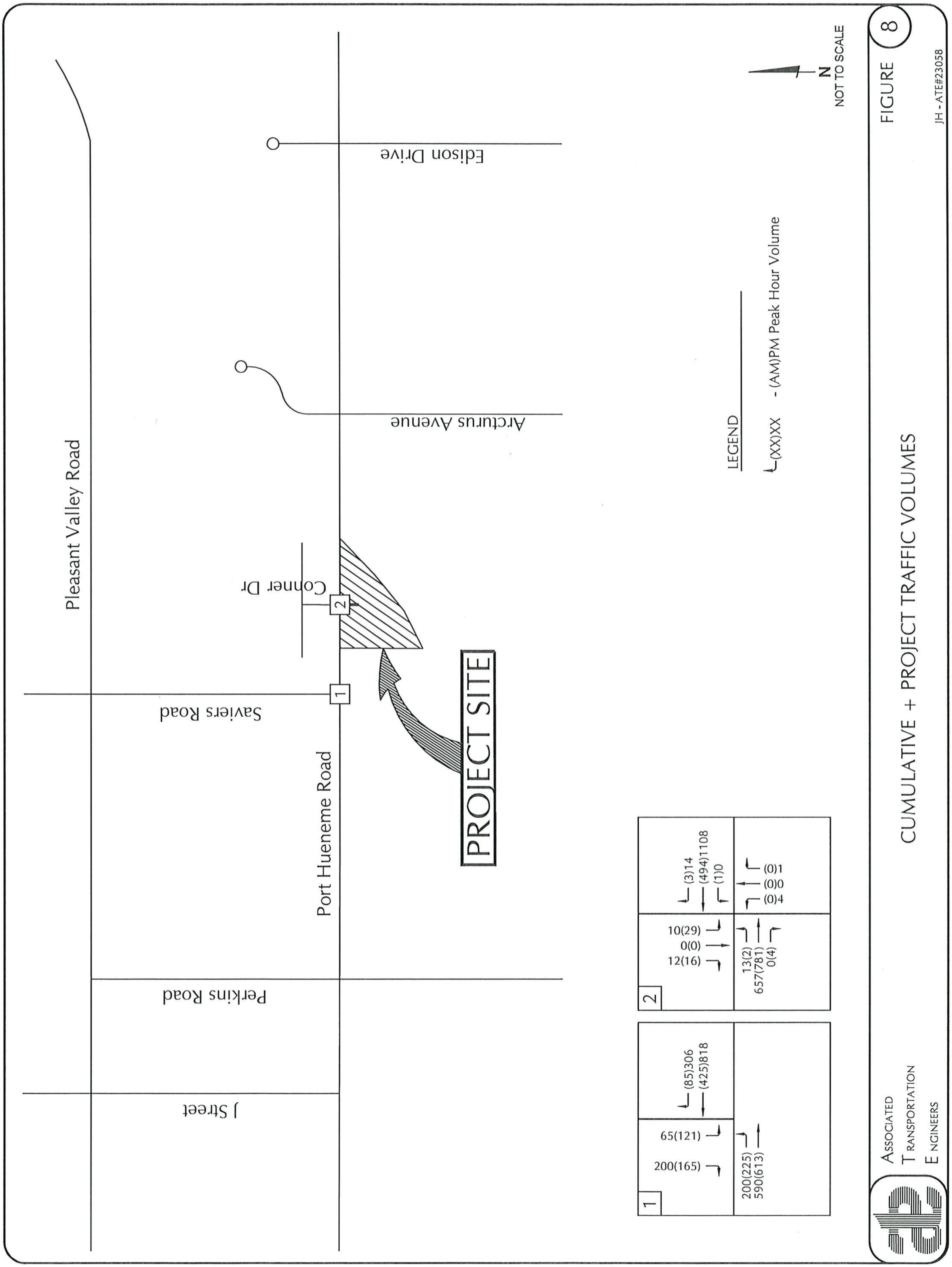
Table 7
Cumulative + Project AM Peak Hour Levels of Service

No.	Intersection	Cumulative		Cumulative+ Project		Change	Consistent?
		ICU/Delay	LOS	ICU/Delay	LOS		
1.	Hueneme Road/Conner Drive	0.38	LOS A	0.38	LOS A	0.00	Yes
2.	Hueneme Road/Saviers Road	13.8 sec.	LOS B	24.6 sec.	LOS C	10.8 sec.	Yes

Table 8
Cumulative + Project PM Peak Hour Levels of Service

No.	Intersection	Cumulative		Cumulative + Project		Change	Consistent?
		ICU/Delay	LOS	ICU/Delay	LOS		
1.	Hueneme Road/Conner Drive	0.51	LOS A	0.51	LOS A	0.00	Yes
2.	Huemene Road/Saviers Road	19.3 sec.	LOS C	22.1 sec.	LOS C	2.8 sec.	Yes

The data presented in Tables 7 and 8 indicate that the addition of Project trips would not have an adverse effect on the operation of the study-area intersections during the AM or the PM peak hour periods. The study-area intersection operations would be consistent with the General Plan policy. The study-area intersections would continue to operate at LOS "C" or better during the AM and PM peak hour periods with cumulative traffic volumes, which meets the City's LOS "C" standard.



Pleasant Valley Road
Port Hueneme Road
J Street
Perkins Road
Saviers Road
Conner Dr
Arcturus Avenue
Edison Drive
PROJECT SITE
1
2
N
NOT TO SCALE
LEGEND
(XX)XX - (AM)PM Peak Hour Volume
1
200(165)
65(121)
(85)306
(425)818
200(225)
590(613)
2
10(29)
0(0)
12(16)
(3)14
(494)1108
(1)0
13(2)
657(781)
0(4)
(0)1
(0)0
(0)4
ASSOCIATED
TRANSPORTATION
ENGINEERS
CUMULATIVE + PROJECT TRAFFIC VOLUMES
FIGURE 8
JH - ATE#23058

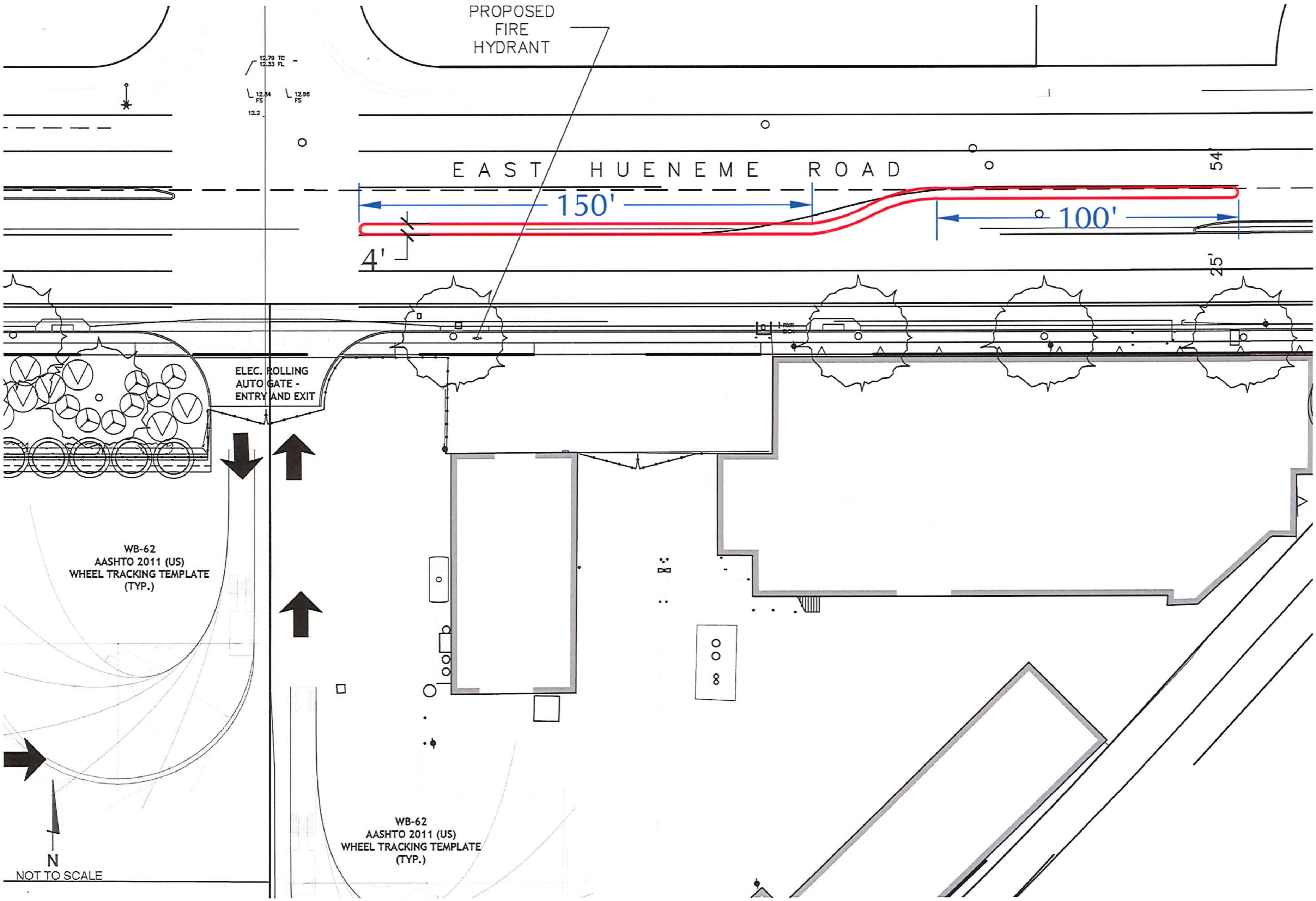
SITE ACCESS

As illustrated on Figure 2, access to the Project site would be provided by a new driveway connection on Hueneme Road opposite Conner Drive. The Project driveway will operate with an automated gate. The new driveway connection will allow full access opposite Conner Drive. The existing Project driveway east of Conner Drive would be eliminated. The Project would extend the existing raised median from Salvador Drive on the east to the Conner Drive intersection, as illustrated on Figure 9. The westbound left-turn lane at Connor Drive would provide 150 feet of left-turn storage. The eastbound left-turn lane at Salvador Drive would provide 100 feet of left-turn storage. Given the estimated Project trip generation and the traffic on Hueneme Road the driveway would operate at acceptable levels of service. Figures 10 through 14 illustrate the truck (WB-62) ingress and egress movements at the Hueneme Road driveway. As shown on the figures, adequate maneuvering widths are provided at the driveway. The Project driveway will be designed and constructed to City of Oxnard design standards. The Project will be required to complete any and all necessary frontage improvements on Hueneme Road.

TRANSIT, PEDESTRIAN AND BICYCLE FACILITIES

Transit Service

Gold Coast Transt is the local transit provider for the City of Oxnard. The Project site is served by the #23 Route (Oxnard College - Naval Base - Esplanade). The #23 Route operates on weekdays and weekends providing fixed route bus service on Hueneme Road and Saviers Road in the immediate vicinity of the Project site. An existing transit stop is located at the northwest corner of Hueneme Road and Courtland Street approximately 400 feet west of the Project.

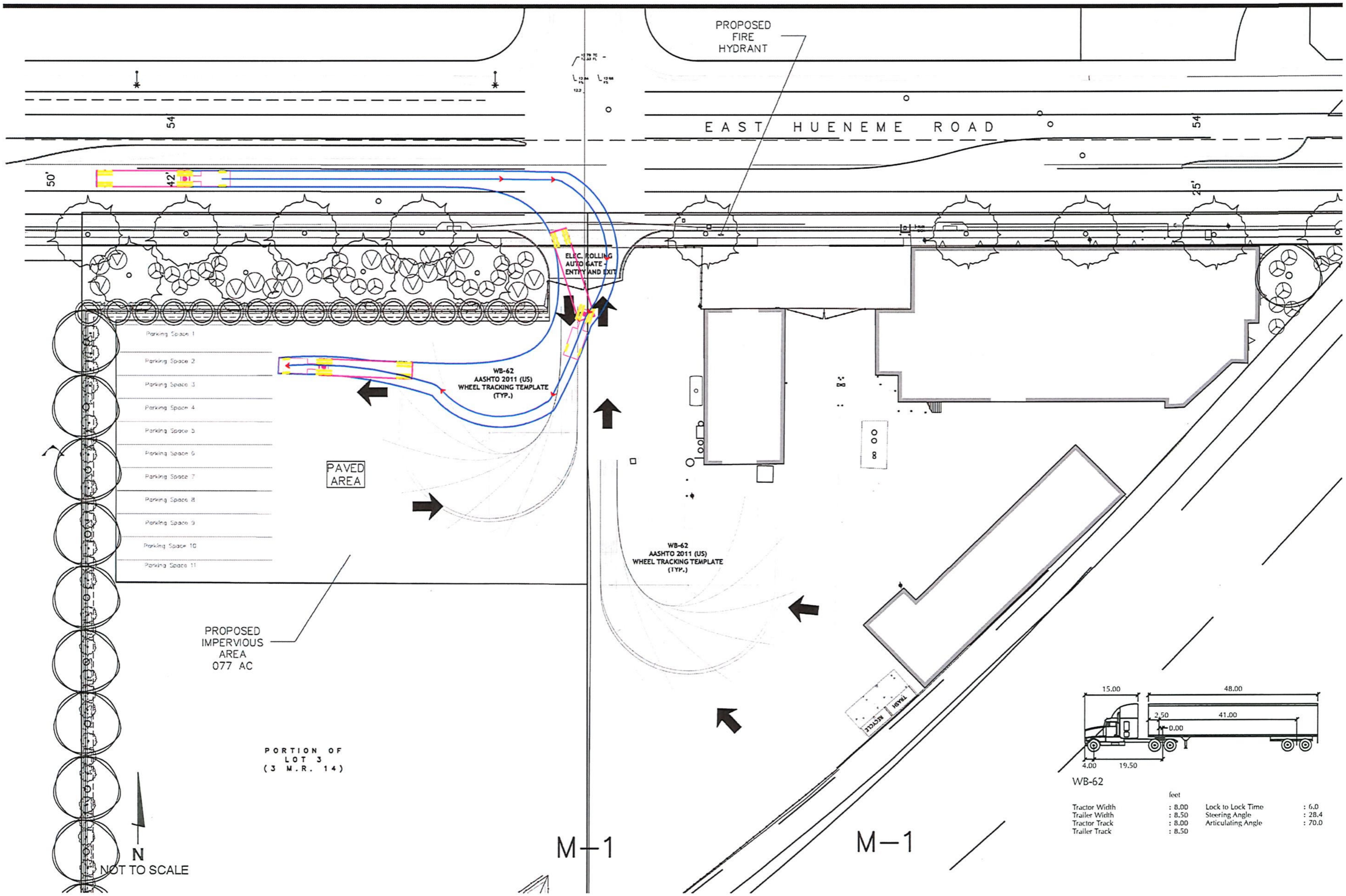


ASSOCIATED
TRANSPORTATION
ENGINEERS

RAISED MEDIAN TREATMENT ON EAST HUENEME ROAD

FIGURE 9

JH - ATE#23058

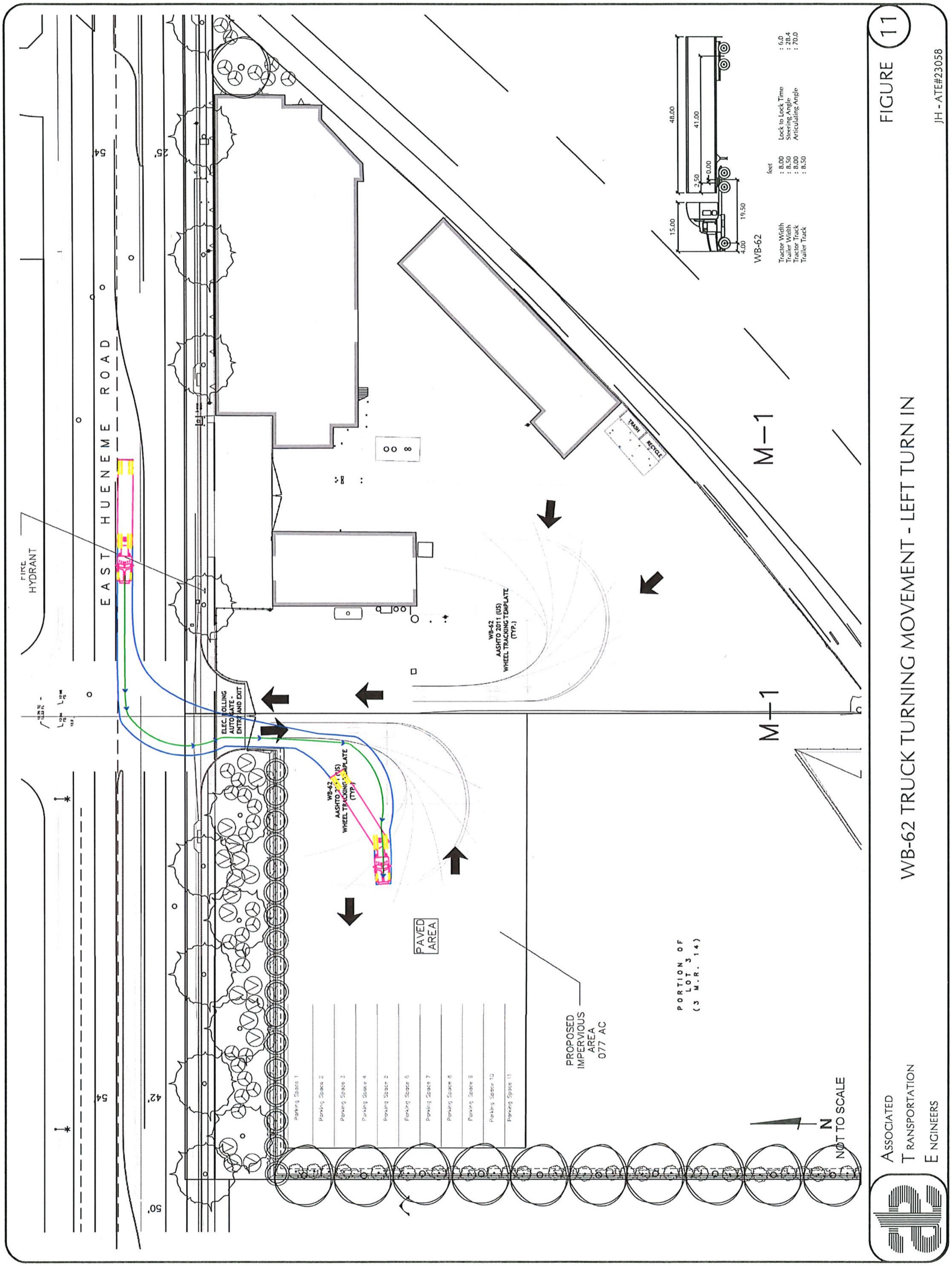


ASSOCIATED TRANSPORTATION ENGINEERS

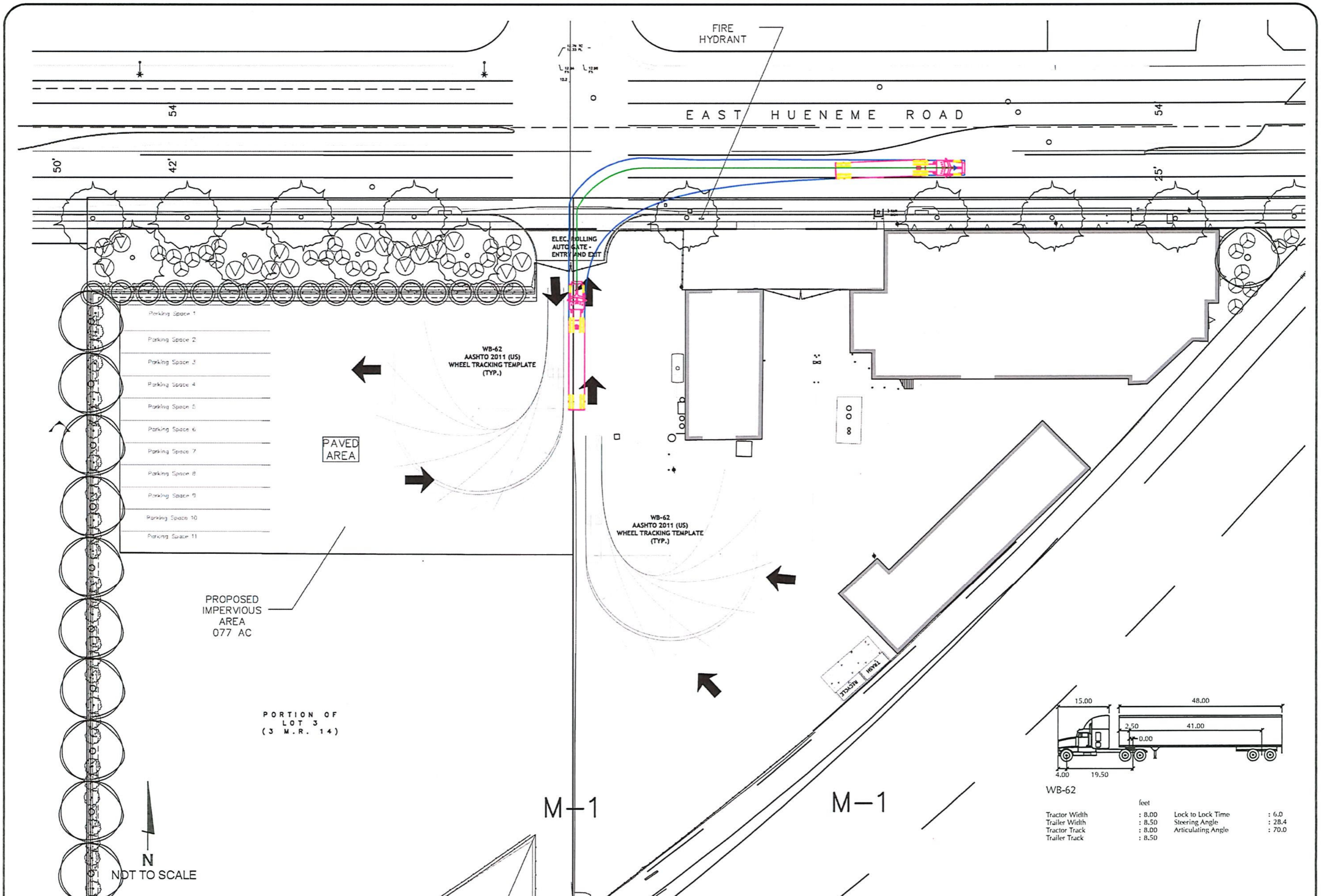
WB-62 TRUCK TURNING MOVEMENT - RIGHT TURN IN

FIGURE 10

JH - ATE#23058



WB-62 TRUCK TURNING MOVEMENT - LEFT TURN IN
FIGURE 11
JH - ATE#23058
EAST HUENEME ROAD
FIRE HYDRANT
ELEC. ROLLING AUTO GATE - ENTRY AND EXIT
WB-62 AASHTO 2011 (US) WHEEL TRACKING TEMPLATE (TYP.)
TRASH
RECYCLE
M-1
M-1
PAVED AREA
PROPOSED IMPERVIOUS AREA 077 AC
PORTION OF LOT 3 (3 M.R. 14)
N
NOT TO SCALE
WB-62
feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 70.0
Associated Transportation Engineers

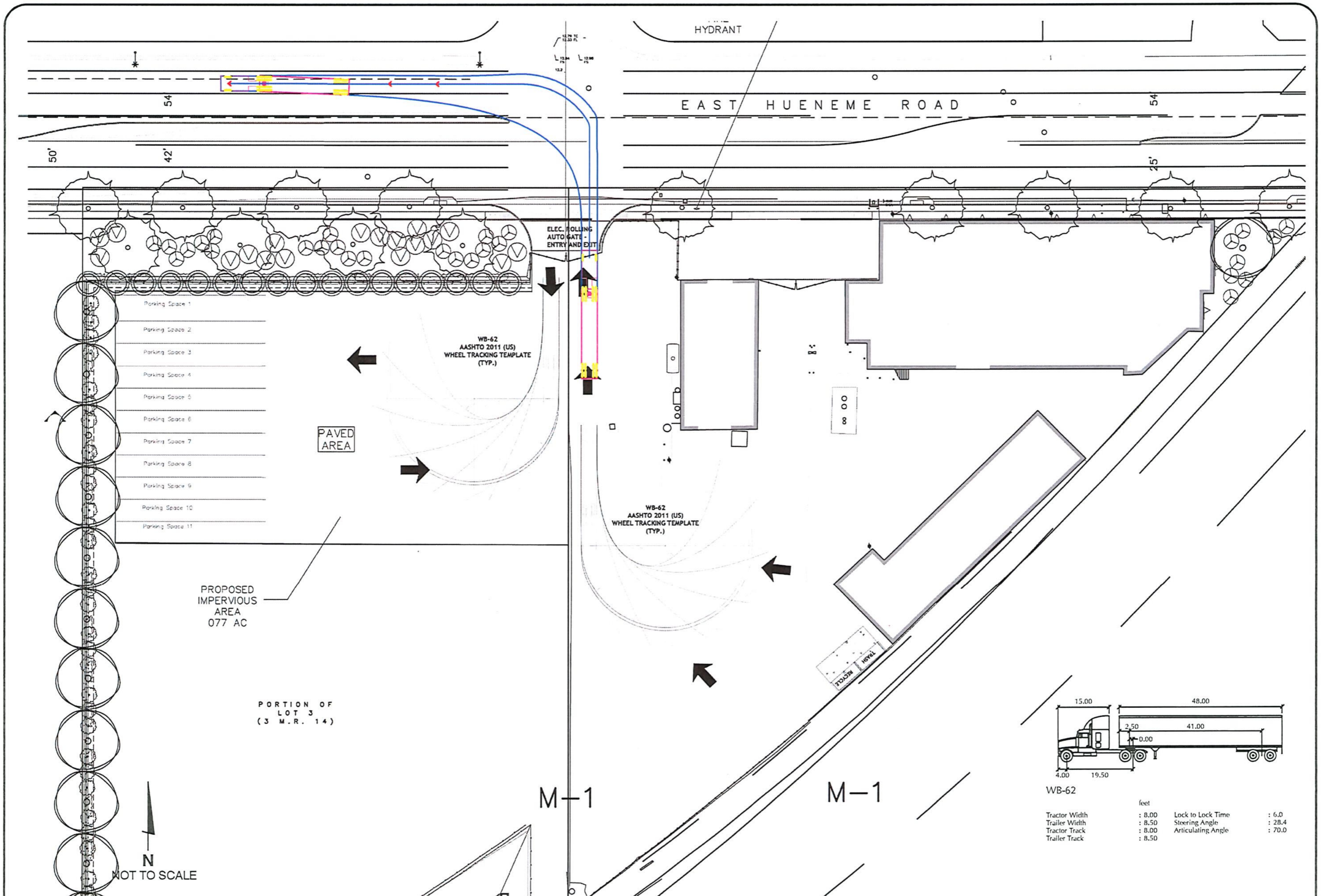


ASSOCIATED TRANSPORTATION ENGINEERS

WB-62 TRUCK TURNING MOVEMENT - RIGHT TURN OUT

FIGURE 12

JH - ATE#23058



ASSOCIATED TRANSPORTATION ENGINEERS

WB-62 TRUCK TURNING MOVEMENT - LEFT TURN OUT

FIGURE 13

JH - ATE#23058

Pedestrian Facilities

Currently, sidewalks are provided along Hueneme Road and Saviers Road. The sidewalks connect the Project site to Hueneme Road, Saviers Road and Pleasant Valley Road where transit service is provided in the study-area. The Project would provide curb, gutter and sidewalk on Hueneme Road and Saviers Road along its frontage.

Bicycle Facilities

Hueneme Road and Saviers Road are identified as part of the City of Oxnard Bikeway System. Class II bike lanes currently exist along Hueneme Road from "J" Street to Saviers Road and Arcturus Avenue to Edison Drive through the City of Oxnard. Class II bike lanes are provided on Saviers Road from Hueneme Road to Birch Street just south of the Five Points intersection. The bike lanes on Hueneme Road and Saviers Road connect the Project site to the residential areas north, east and west of the Project site.

VEHICLE MILES TRAVELED ANALYSIS

Recent legislation, Senate Bill 743, is moving away from the Level of Service (LOS) metric to a Vehicle Miles Traveled (VMT) metric to evaluate whether a project results in a significant traffic impact under CEQA. Per the State's Natural Resource Agency Updated Guidelines for the Implementation of the CEQA adopted in 2018, VMT has been designated as the most appropriate measure of transportation impacts. "Vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. For land use projects, vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact.

Ventura County VMT Thresholds

CEQA Guidelines. The Governor's Office of Planning and Research (OPR) published a Technical Advisory on Transportation that includes recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. [2] The Technical Advisory provides screening tools to determine when a project may have a significant VMT impact, as follows:

> "Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing."
>
> *Screening Threshold for Small Projects*
>
> Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact."

As shown in Table 2, the Project is forecast to generate 58 ADT which would be less than the Small Project screening criteria of 110 ADT. The Project would therefore have a less-than-significant VMT impact. It is also noted that bulk of the additional ADT generated by the Project would be large delivery trucks which are not subject to the VMT standards per the State guidance.

■ ■ ■

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2 Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, Principal Planner
Darryl F. Nelson, Senior Transportation Planner
Glenn Manaois, Traffic Engineer I
Jiho Ha, Traffic Engineer I

Persons Contacted

Jose Riveria, Assistant City Traffic Engineer, City of Oxnard

References

Highway Capacity Manual, Transportation Research Board, 6th Edition 2016.

Trip Generation, Institute of Transportation Engineers, 11th Edition, 2021.

Technical Advisory on Evaluating Transportation Impacts in CEQA, Governor's Office of Planning and Research, December 2018.

TECHNICAL APPENDIX

CONTENTS

INTERSECTION LEVEL OF SERVICE CRITERIA/DEFINITIONS

TRAFFIC COUNTS

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 – Hueneme Road/Saviers Road
Reference 2 – Hueneme Road/Conner Drive

INTERSECTION LEVEL OF SERVICE CRITERIA/DEFINITIONS

DISCUSSION OF INTERSECTION CAPACITY UTILIZATION (ICU)

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. The technique used to compare the volumes and capacity of an intersection is known as Intersection Capacity Utilization (ICU). ICU or volume-to-capacity ratio, usually expressed as a percentage, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used.

The ICU calculation assumes that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient time to satisfy its demand, and excess time exists on other movements. This is an operational problem which should be addressed.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Data collected by Kunzman Associates indicates a typical lane, whether a through-lane or a left-turn lane, has a capacity of approximately 1,700 vehicles per hour, with nearly all locations showing a capacity greater than 1,600 vehicles per hour per lane. This finding is published in the August, 1978 issue of <u>ITE Journal</u> in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. For this study, a capacity of 1,600 vehicles per hour per lane will be assumed for left-turn, through, and right-turn lanes as per City policy.

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for less than 10 percent of a cycle, and a penalty of up to five percent is reasonable. On the other hand, during peak hour traffic operation, the yellow times are nearly completely used. In this study, no penalty will be applied for the yellow because the capacities have been assumed to be only 1,600 vehicles per hour per lane when in general they are 1,700-1,800 vehicles per hour per lane.

The ICU technique is an ideal tool to quantify existing as well as future intersection operations. The impact of adding a lane can be quickly determined by examining the effect the lane has on the intersection capacity utilization.

Source: <u>Oxnard Airport Business Park Traffic Study</u>, Kunzman Assoc., City of Oxnard, 1985.

LEVEL OF SERVICE DEFINITIONS

"Levels of Service" (LOS) A through F are used to rate roadway and intersection operating conditions, with LOS A indicating very good operations and LOS F indicating poor operations. More complete level of service definitions are:

LOS	Definition
A	Low volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within traffic stream. Drivers can maintain their desired speeds with little or no delay.
B	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. Stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	Stable operations, however the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail but adverse signal coordination or longer queues cause delays.
D	Approaching unstable traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and their selection of travel speeds. Comfort and convenience are low but tolerable.
E	Operations characterized by significant approach delays and average travel speeds of one-half to one-third of free flow speed. Flow is unstable and potential for stoppages of brief duration. High signal density, extensive queuing, or signal progression/timing are the typical causes of delays.
F	Forced flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion.

Signalized Intersection Level of Service Definitions

LOS	Delay[a]	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

[a] Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

1 Highway Capacity Manual, National Research Board, 2000

TRAFFIC COUNT DATA

Prepared by National Data & Surveying Services

Saviers Rd & Hueneme Rd

Peak Hour Turning Movement Count

ID: 22-050015-003
City: Oxnard

Day: Wednesday
Date: 3/16/2022

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM	AM	6:00 AM - 09:00 AM
NONE	NOON	NONE
03:45 PM - 04:45 PM	PM	3:00 PM - 06:00 PM

Saviers Rd – SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing
AM	127	0	99	4	165
NOON	0	0	0	0	0
PM	194	0	52	9	403
Peds/Bikes	0	0	0	0	

Hueneme Rd – WESTBOUND

	PM	NOON	AM	
Left	225	0	39	0
Thru	746	0	399	0
Right	0	0	0	0
U-Turn	0	0	0	0
Departing	586	0	691	

Hueneme Rd – EASTBOUND

	AM	NOON	PM	
Departing	526	0	940	
U-Turn	0	0	0	0
Left	122	0	169	0
Thru	592	0	534	0
Right	0	0	0	0

CONTROL

Signalized

	AM	NOON	PM
TEV	1382	0	1929
PHF	0.90		0.96

Saviers Rd – NORTHBOUND

	Departing	U-Turn	Left	Thru	Right
Peds/Bikes		0	0	0	0
PM	0	0	0	0	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

Totals (AM)

	Left	Thru	Right
Southbound	99	0	127
Westbound	0	399	39
Eastbound	122	592	0
Northbound	0	0	0

Totals (NOON)

	Left	Thru	Right
Southbound	0	0	0
Westbound	0	0	0
Eastbound	0	0	0
Northbound	0	0	0

Totals (PM)

	Left	Thru	Right
Southbound	52	0	194
Westbound	0	746	225
Eastbound	169	534	0
Northbound	0	0	0

Pedestrians (Crosswalks)

	AM	NOON	PM
North leg	0 0	0 0	0 0
South leg	0 0	0 0	0 0
East leg	0 0	0 0	0 0
West leg	0 0	0 0	0 0
Diagonals (each)	0	0	0

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Conner Dr -- Hueneme Rd

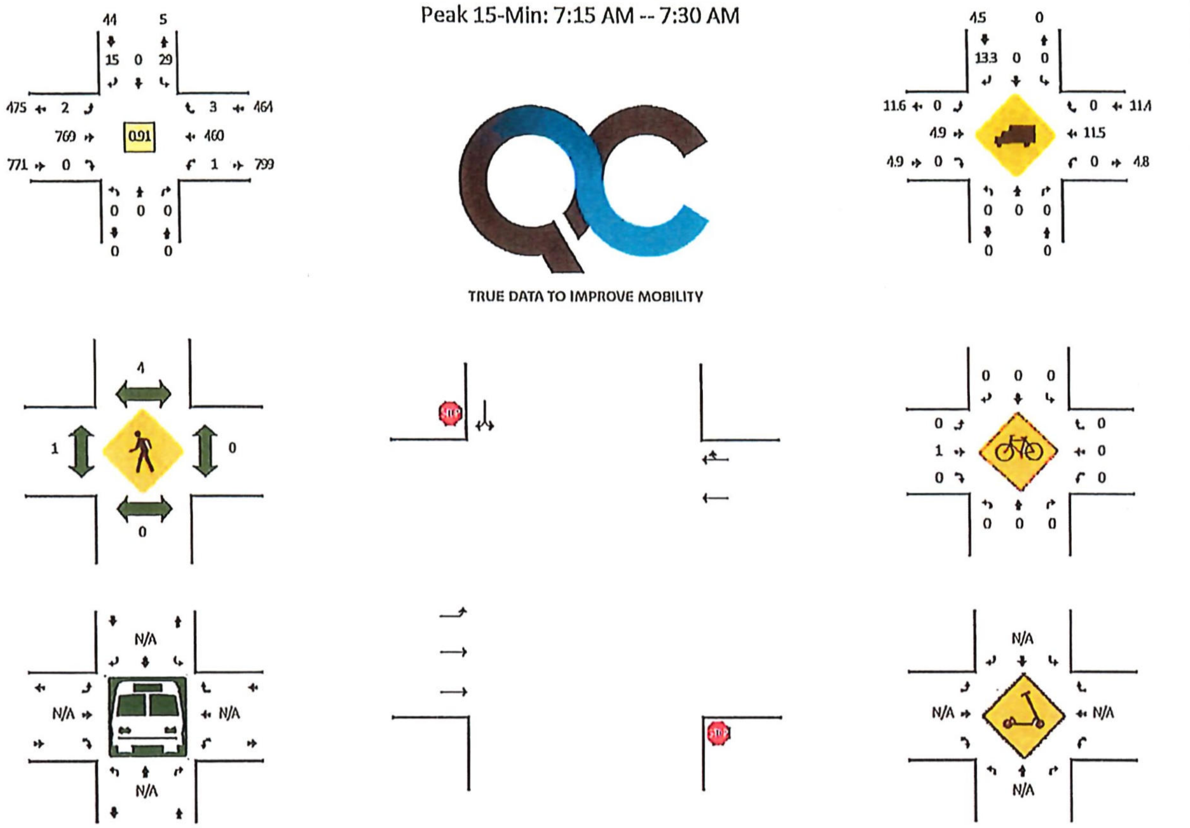
QC JOB #: 16178901

CITY/STATE: Oxnard, CA

DATE: Tue, Aug 22 2023

Peak-Hour: 7:10 AM -- 8:10 AM

Peak 15-Min: 7:15 AM -- 7:30 AM



5-Min Count Period Beginning At	Conner Dr (Northbound)				Conner Dr (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	3	0	0	63	0	0	0	20	0	1	87	
6:05 AM	0	0	0	0	0	0	1	0	0	62	0	0	0	13	1	0	77	
6:10 AM	0	0	0	0	3	0	0	0	0	49	0	0	0	15	0	0	67	
6:15 AM	0	0	0	0	0	0	0	0	0	51	0	0	0	19	0	0	70	
6:20 AM	0	0	0	0	1	0	0	0	0	42	0	0	0	18	0	0	61	
6:25 AM	0	0	0	0	3	0	0	0	0	70	0	0	0	24	0	0	97	
6:30 AM	0	0	0	0	3	0	2	0	0	45	0	0	0	24	0	0	74	
6:35 AM	0	0	0	0	1	0	0	0	0	57	0	0	0	30	0	0	88	
6:40 AM	0	0	0	0	1	0	0	0	0	57	0	0	0	25	0	0	83	
6:45 AM	0	0	0	0	2	0	0	0	0	75	0	0	0	24	1	0	102	
6:50 AM	0	0	0	0	2	0	1	0	0	75	0	0	0	29	0	0	107	
6:55 AM	0	0	0	0	1	0	0	0	0	61	0	0	0	42	0	0	104	1017
7:00 AM	0	0	0	0	4	0	0	0	1	41	0	0	0	31	0	0	77	1007
7:05 AM	0	0	0	0	4	0	0	0	0	44	0	0	0	33	1	0	82	1012
7:10 AM	0	0	0	0	2	0	0	0	0	60	0	0	0	35	0	0	97	1042
7:15 AM	0	0	0	0	4	0	2	0	0	63	0	0	0	39	0	0	108	1080
7:20 AM	0	0	0	0	1	0	4	0	1	76	0	0	0	43	0	0	125	1144
7:25 AM	0	0	0	0	3	0	1	0	0	80	0	0	0	34	0	1	119	1166
7:30 AM	0	0	0	0	3	0	1	0	0	46	0	0	0	33	0	0	83	1175
7:35 AM	0	0	0	0	1	0	0	0	0	68	0	0	0	54	0	0	123	1210
7:40 AM	0	0	0	0	3	0	0	0	0	60	0	0	0	39	0	0	102	1229
7:45 AM	0	0	0	0	4	0	1	0	0	67	0	0	0	39	0	0	111	1238
7:50 AM	0	0	0	0	4	0	1	0	0	66	0	0	0	26	0	0	97	1228
7:55 AM	0	0	0	0	1	0	3	0	1	54	0	0	0	45	1	0	105	1229
8:00 AM	0	0	0	0	3	0	2	0	0	72	0	0	0	34	1	0	112	1264
8:05 AM	0	0	0	0	0	0	0	0	0	57	0	0	0	39	1	0	97	1279
8:10 AM	0	0	0	0	2	0	1	0	0	37	0	0	0	31	0	0	71	1253
8:15 AM	0	0	0	0	0	0	2	0	0	72	0	0	0	41	0	0	115	1260
8:20 AM	0	0	0	0	0	0	0	0	1	41	0	0	0	45	0	0	87	1222
8:25 AM	0	0	0	0	1	0	1	0	2	59	0	0	0	35	0	0	98	1201
8:30 AM	0	0	0	0	0	0	0	0	0	73	0	0	0	33	1	0	107	1225
8:35 AM	0	0	0	0	4	0	0	0	1	60	0	0	0	30	1	0	96	1198
8:40 AM	0	0	0	0	0	0	1	0	0	50	0	0	0	34	1	0	86	1182
8:45 AM	0	0	0	0	1	0	0	0	2	45	0	0	0	26	0	0	74	1145
8:50 AM	0	0	0	0	1	0	1	0	0	48	0	0	0	38	0	0	88	1136
8:55 AM	0	0	0	0	0	0	1	0	1	42	0	1	0	39	0	0	84	1115

5-Min Count Period Beginning At	Conner Dr (Northbound)				Conner Dr (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	32	0	28	0	4	876	0	0	0	464	0	4	1408
Heavy Trucks	0	0	0		0	0	4		0	36	0		0	44	0		84
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 8/31/2023 11:04 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Conner Dr -- Hueneme Rd

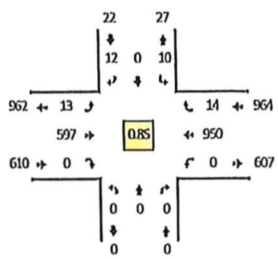
CITY/STATE: Oxnard, CA

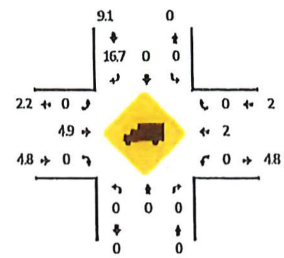
QC JOB #: 16178902

DATE: Tue, Aug 22 2023

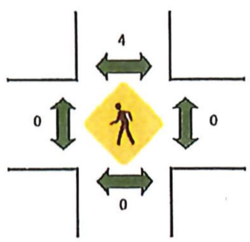
Peak-Hour: 3:30 PM -- 4:30 PM

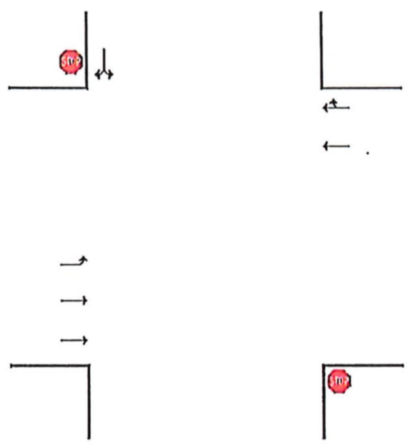
Peak 15-Min: 3:35 PM -- 3:50 PM

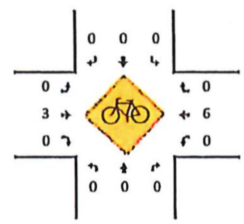


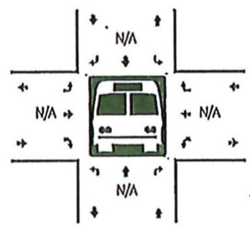


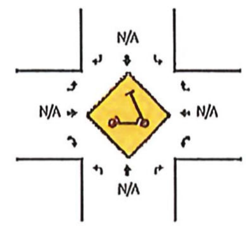
TRUE DATA TO IMPROVE MOBILITY











5-Min Count Period Beginning At	Conner Dr (Northbound)				Conner Dr (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	0	0	2	0	2	62	0	0	0	45	2	0	113	
3:05 PM	0	0	0	0	1	0	0	0	0	38	0	0	0	59	0	0	98	
3:10 PM	0	0	0	0	1	0	0	0	2	60	0	0	0	64	2	0	129	
3:15 PM	0	0	0	0	2	0	3	0	1	52	0	0	0	85	2	0	145	
3:20 PM	0	0	0	0	2	0	1	0	0	58	0	0	0	71	4	0	136	
3:25 PM	0	0	0	0	0	0	1	0	2	39	0	0	0	65	1	0	108	
3:30 PM	0	0	0	0	2	0	3	0	3	51	0	0	0	67	2	0	128	
3:35 PM	0	0	0	0	2	0	1	0	1	55	0	0	0	110	0	0	169	
3:40 PM	0	0	0	0	0	0	0	0	1	52	0	0	0	113	0	0	166	
3:45 PM	0	0	0	0	0	0	1	0	1	45	0	0	0	86	3	0	136	
3:50 PM	0	0	0	0	1	0	1	0	0	43	0	0	0	56	1	0	102	
3:55 PM	0	0	0	0	0	0	0	0	0	40	0	0	0	59	1	0	100	1530
4:00 PM	0	0	0	0	1	0	1	0	1	47	0	0	0	94	1	0	145	1562
4:05 PM	0	0	0	0	1	0	0	0	1	56	0	0	0	57	1	0	116	1580
4:10 PM	0	0	0	0	0	0	1	0	3	47	0	0	0	78	2	0	131	1582
4:15 PM	0	0	0	0	1	0	3	0	1	61	0	0	0	68	0	0	134	1571
4:20 PM	0	0	0	0	2	0	0	0	1	56	0	0	0	77	1	0	137	1572
4:25 PM	0	0	0	0	0	0	1	0	0	44	0	0	0	85	2	0	132	1596
4:30 PM	0	0	0	0	0	0	2	0	5	40	0	0	0	49	2	0	98	1566
4:35 PM	0	0	0	0	1	0	2	0	0	48	0	0	0	68	1	0	120	1517
4:40 PM	0	0	0	0	1	0	1	0	3	44	0	0	0	63	0	0	112	1463
4:45 PM	0	0	0	0	0	0	2	0	1	51	0	0	0	56	2	0	112	1439
4:50 PM	0	0	0	0	1	0	3	0	3	43	0	0	0	61	3	0	114	1451
4:55 PM	0	0	0	0	0	0	2	0	0	41	0	0	0	78	3	0	124	1475
5:00 PM	0	0	0	0	2	0	3	0	2	34	0	1	0	63	0	0	105	1435
5:05 PM	0	0	0	0	0	0	1	0	2	31	0	0	0	70	2	0	106	1425
5:10 PM	0	0	0	0	1	0	2	0	1	42	0	0	0	64	1	0	111	1405
5:15 PM	0	0	0	0	0	0	2	0	0	33	0	0	0	64	2	0	101	1372
5:20 PM	0	0	0	0	0	0	2	0	3	29	0	0	0	51	3	0	88	1323
5:25 PM	0	0	0	0	0	0	3	0	0	32	0	0	0	68	0	0	103	1294
5:30 PM	0	0	0	0	1	0	2	0	0	31	0	0	0	80	1	0	115	1311
5:35 PM	0	0	0	0	1	0	0	0	2	15	0	0	0	51	0	0	69	1260
5:40 PM	0	0	0	0	2	0	3	0	2	31	0	0	0	66	5	0	109	1257
5:45 PM	0	0	0	0	0	0	1	0	1	28	0	0	0	45	3	0	78	1223
5:50 PM	0	0	0	0	2	0	1	0	2	30	0	0	0	44	2	0	81	1190
5:55 PM	0	0	0	0	0	0	2	0	1	16	0	0	0	38	0	0	57	1123

5-Min Count Period Beginning At	Conner Dr (Northbound)				Conner Dr (Southbound)				Hueneme Rd (Eastbound)				Hueneme Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	8	0	8	0	12	608	0	0	0	1236	12	0	1884
Heavy Trucks	0	0	0		0	0	0		0	40	0		0	16	0		56
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	4	0		0	20	0		24
Scooters																	

Comments:

Report generated on 8/31/2023 11:05 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

INTERSECTION LOS CALCULATION WORKSHEETS

Reference 1 – Hueneme Road/Saviers Road
Reference 2 – Hueneme Road/Conner Drive

PANTOJA TRUCKING (#23058) REF: 01 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: *03/17/202*

TIME PERIOD: *AM PEAK HOUR*

N/S STREET: *SAVIERS ROAD*

E/W STREET: *HUENEME ROAD*

CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	T	R	SOUTH BOUND L	T	R	EAST BOUND L	T	R	WEST BOUND L	T	R
(A) EXISTING:	0	0	0	103	0	127	122	592	0	0	399	39
(B) PROJECT-ADDED:	0	0	0	1	0	0	0	3	0	0	0	0
(C) CUMULATIVE:	0	0	0	120	0	165	225	610	0	0	425	85

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
LANE GEOMETRICS		L R	L TT	TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	0	0	0	0	-	-	-	-
NBT	0	0	0	0	0	0	-	-	-	-
NBR	0	0	0	0	0	0	-	-	-	-
SBL	1	1600	103	104	120	121	0.064	0.065	0.075	0.076
SBT	0	0	0	0	0	0	-	-	-	-
SBR	1	1600	127	127	165	165	0.079 *	0.079 *	0.103 *	0.103 *
EBL	1	1600	122	122	225	225	0.076 *	0.076 *	0.141 *	0.141 *
EBT	2	3200	592	595	610	613	0.185	0.186	0.191	0.192
EBR	0	0	0	0	0	0	-	-	-	-
WBL	0	0	0	0	0	0	-	-	-	-
WBT	2	3200	399	399	425	425	0.125 *	0.125 *	0.133 *	0.133 *
WBR	1	1600	39	39	85	85	0.024	0.024	0.053	0.053
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.28	0.28	0.38	0.38
SCENARIO LEVEL OF SERVICE:							A	A	A	A

NOTES:

Printed: 01/04/24

PANTOJA TRUCKING (#23058') REF: 01 PM
INTERSECTION CAPACITY UTILIZATION WORKSHEET
COUNT DATE: *03/17/2022*
TIME PERIOD: *PM PEAK HOUR*
N/S STREET: *SAVIERS ROAD*
E/W STREET: *HUENEME ROAD*
CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	0	0	0	61	0	194	169	534	0	0	746	225
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	0	0	0	3	1
(C) CUMULATIVE:	0	0	0	65	0	200	200	590	0	0	815	305

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
LANE GEOMETRICS		L R	L TT	TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
SCENARIO 3 = CUMULATIVE (C)
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	0	0	0	0	0	0	-	-	-	-
NBT	0	0	0	0	0	0	-	-	-	-
NBR	0	0	0	0	0	0	-	-	-	-
SBL	1	1600	61	61	65	65	0.038	0.038	0.041	0.041
SBT	0	0	0	0	0	0	-	-	-	-
SBR	1	1600	194	194	200	200	0.121 *	0.121 *	0.125 *	0.125 *
EBL	1	1600	169	169	200	200	0.106 *	0.106 *	0.125 *	0.125 *
EBT	2	3200	534	534	590	590	0.167	0.167	0.184	0.184
EBR	0	0	0	0	0	0	-	-	-	-
WBL	0	0	0	0	0	0	-	-	-	-
WBT	2	3200	746	749	815	818	0.233 *	0.234 *	0.255 *	0.256 *
WBR	1	1600	225	226	305	306	0.141	0.141	0.191	0.191
					TOTAL INTERSECTION CAPACITY UTILIZATION:		0.46	0.46	0.51	0.51
					SCENARIO LEVEL OF SERVICE:		A	A	A	A

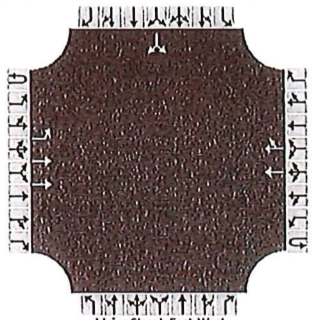
NOTES:

Printed: 01/04/24

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	2023	North/South Street	Conner Drive
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)	0	2	746				457	3						29		16
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)		2													49	
Capacity, c (veh/h)		1053													478	
v/c Ratio		0.00													0.10	
95% Queue Length, Q_{95} (veh)		0.0													0.3	
Control Delay (s/veh)		8.4													13.4	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.0												13.4			
Approach LOS													B			

HCS™ TWSC Version 7.7
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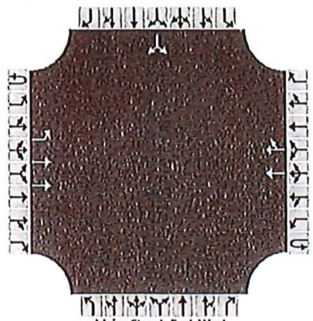
Generated: 1/4/2024 8:34:33 AM

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	2023	North/South Street	Conner Drive
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)	0	13	597				950	14						10		12
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

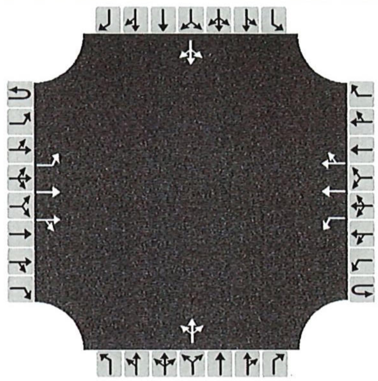
Delay, Queue Length, and Level of Service

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Flow Rate, v (veh/h)		14													24	
Capacity, c (veh/h)		654													330	
v/c Ratio		0.02													0.07	
95% Queue Length, Q_{95} (veh)		0.1													0.2	
Control Delay (s/veh)		10.6													16.8	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.2												16.8			
Approach LOS													C			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	2023 + Project	North/South Street	Conner Drive
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		2	746	14		7	457	3		4	0	2		29	0	16
Percent Heavy Vehicles		3				33				85	3	85		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

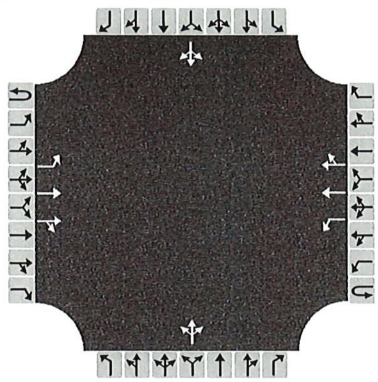
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		2				8					6				49	
Capacity		1054				629					202				423	
v/c Ratio		0.00				0.01					0.03				0.12	
95% Queue Length		0.0				0.0					0.1				0.4	
Control Delay (s/veh)		8.4				10.8					23.3				14.6	
Level of Service (LOS)		A				B					C				B	
Approach Delay (s/veh)	0.0				0.2				23.3				14.6			
Approach LOS									C				B			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	2023 + Project	North/South Street	Conner Drive
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		13	597	4		2	950	14		10	0	5		10	0	12
Percent Heavy Vehicles		3				33				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		14				2					16				24	
Capacity		654				748					319				288	
v/c Ratio		0.02				0.00					0.05				0.08	
95% Queue Length		0.1				0.0					0.2				0.3	
Control Delay (s/veh)		10.6				9.8					16.9				18.7	
Level of Service (LOS)		B				A					C				C	
Approach Delay (s/veh)	0.2				0.0				16.9				18.7			
Approach LOS									C				C			

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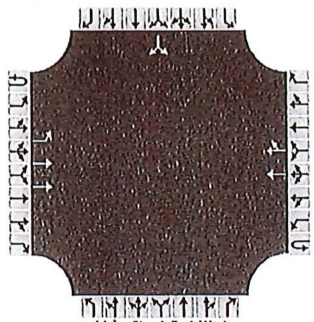
HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	Cum	North/South Street	Conner Drive
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)	0	2	781				494	3						29		16
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

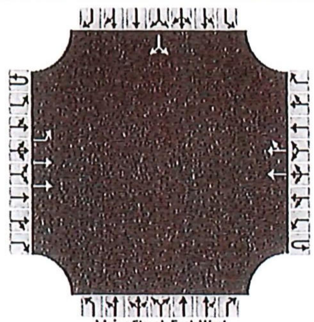
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2													49	
Capacity, c (veh/h)		1017													456	
v/c Ratio		0.00													0.11	
95% Queue Length, Q_{95} (veh)		0.0													0.4	
Control Delay (s/veh)		8.5													13.8	
Level of Service (LOS)		A													B	
Approach Delay (s/veh)	0.0												13.8			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	Cum	North/South Street	Conner Drive
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		0	1	0
Configuration		L	T				T	TR							LR	
Volume (veh/h)	0	13	657				1108	14						10		12
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

	Eastbound				Westbound				Northbound				Southbound			
Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

	Eastbound				Westbound				Northbound				Southbound			
Flow Rate, v (veh/h)		14													24	
Capacity, c (veh/h)		562													276	
v/c Ratio		0.03													0.09	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		11.6													19.3	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.2												19.3			
Approach LOS													C			

HCS™ TWSC Version 7.7
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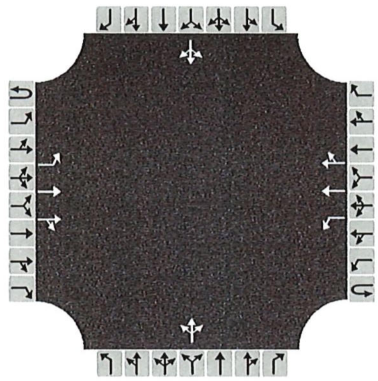
HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	Cum & Project	North/South Street	Conner Drive
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		2	781	14		7	494	3		4	0	2		29	0	16
Percent Heavy Vehicles		3				33				85	3	85		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

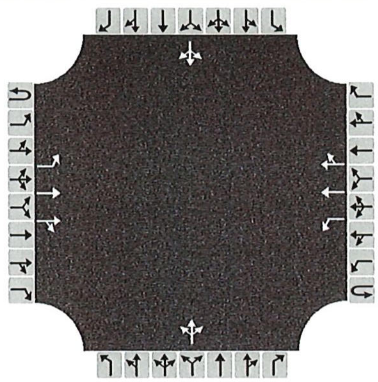
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		2				8					6				49	
Capacity		1018				606					189				401	
v/c Ratio		0.00				0.01					0.03				0.12	
95% Queue Length		0.0				0.0					0.1				0.4	
Control Delay (s/veh)		8.5				11.0					24.6				15.2	
Level of Service (LOS)		A				B					C				C	
Approach Delay (s/veh)	0.0				0.2				24.6				15.2			
Approach LOS									C				C			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	Darrryl F. Nelson	Intersection	Hueneme Road/Conner Drive
Agency/Co.	ATE	Jurisdiction	City of Oxnard
Date Performed	8/31/2023	East/West Street	Hueneme Road
Analysis Year	Cum + Project	North/South Street	Conner Drive
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Pantoja Trcuking #23058		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)		13	657	4		2	1108	14		10	0	5		10	0	12
Percent Heavy Vehicles		3				33				3	3	3		3	3	3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Left Only															
Median Storage	1															

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		14				2					16				24	
Capacity		562				701					280				235	
v/c Ratio		0.02				0.00					0.06				0.10	
95% Queue Length		0.1				0.0					0.2				0.3	
Control Delay (s/veh)		11.6				10.1					18.6				22.1	
Level of Service (LOS)		B				B					C				C	
Approach Delay (s/veh)	0.2				0.0				18.6				22.1			
Approach LOS									C				C			

HCS 2010™ TWSC Version 6.80
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Appendix F

Noise Data

Attachment A

Noise Measurement Data

-
Freq Weight : A
-
Time Weight : SLOW
-
Level Range : 40-100
-
Max dB : 89.1 - 2023/10/26 15:42:21
-
Level Range : 40-100
-
SEL : 102.5
-
Leq : 73.0
-

No.s	Date Time	(dB)				
1	2023/10/26 15:38:36	62.2	70.3	75.5	74.6	76.4
6	2023/10/26 15:38:51	76.6	75.4	77.5	77.9	74.7
11	2023/10/26 15:39:06	76.8	74.0	77.1	74.5	70.9
16	2023/10/26 15:39:21	73.9	72.1	73.1	75.0	77.1
21	2023/10/26 15:39:36	69.5	70.2	67.3	72.5	66.2
26	2023/10/26 15:39:51	69.0	72.8	71.8	68.8	70.8
31	2023/10/26 15:40:06	76.0	75.0	73.7	77.4	75.4
36	2023/10/26 15:40:21	72.4	71.7	74.1	73.6	74.0
41	2023/10/26 15:40:36	72.6	72.6	72.4	72.3	73.8
46	2023/10/26 15:40:51	71.4	75.5	73.4	69.5	69.6
51	2023/10/26 15:41:06	70.2	65.1	62.4	70.0	74.8
56	2023/10/26 15:41:21	73.1	74.8	76.2	77.1	76.4
61	2023/10/26 15:41:36	74.5	73.3	70.5	64.3	61.1
66	2023/10/26 15:41:51	65.4	71.1	68.0	67.2	59.7
71	2023/10/26 15:42:06	57.6	73.9	71.3	70.8	81.1
76	2023/10/26 15:42:21	83.5	77.1	72.3	68.1	73.0
81	2023/10/26 15:42:36	73.8	72.5	74.9	73.8	74.2
86	2023/10/26 15:42:51	82.7	78.1	75.4	75.3	75.9
91	2023/10/26 15:43:06	75.6	80.2	74.6	73.3	76.0
96	2023/10/26 15:43:21	74.8	75.3	72.6	72.6	73.6
101	2023/10/26 15:43:36	73.3	70.9	68.4	67.8	61.2
106	2023/10/26 15:43:51	57.0	59.9	73.9	71.1	70.5
111	2023/10/26 15:44:06	73.4	70.8	69.8	69.4	61.7
116	2023/10/26 15:44:21	58.0	65.3	69.0	70.0	65.0
121	2023/10/26 15:44:36	68.4	69.0	72.2	71.2	68.6
126	2023/10/26 15:44:51	73.0	70.2	76.7	74.7	69.7
131	2023/10/26 15:45:06	68.0	71.6	68.3	71.5	74.3
136	2023/10/26 15:45:21	70.3	70.4	75.6	74.6	75.4
141	2023/10/26 15:45:36	78.1	74.9	73.3	72.5	70.1
146	2023/10/26 15:45:51	66.0	67.8	78.3	78.8	78.2
151	2023/10/26 15:46:06	76.6	74.3	75.7	72.9	67.7
156	2023/10/26 15:46:21	60.3	55.8	59.2	72.1	71.5
161	2023/10/26 15:46:36	69.1	75.5	77.0	71.1	67.0
166	2023/10/26 15:46:51	72.1	71.0	72.4	69.6	64.9
171	2023/10/26 15:47:06	62.7	68.5	68.0	74.6	74.5
176	2023/10/26 15:47:21	71.4	70.4	73.5	72.8	71.3
181	2023/10/26 15:47:36	69.6	73.3	74.1	68.0	71.8
186	2023/10/26 15:47:51	73.9	71.4	73.9	75.0	75.1
191	2023/10/26 15:48:06	73.3	67.3	67.3	72.3	73.3
196	2023/10/26 15:48:21	76.8	76.1	73.8	73.2	74.4
201	2023/10/26 15:48:36	75.8	75.3	72.0	71.5	69.5
206	2023/10/26 15:48:51	67.6	74.2	71.7	72.0	73.8
211	2023/10/26 15:49:06	71.8	75.1	71.2	71.3	73.7
216	2023/10/26 15:49:21	74.6	76.9	70.7	66.6	63.1
221	2023/10/26 15:49:36	55.9	59.5	72.2	73.6	71.9
226	2023/10/26 15:49:51	70.3	69.0	67.5	64.9	67.6
231	2023/10/26 15:50:06	74.0	73.0	72.2	73.3	77.1
236	2023/10/26 15:50:21	75.1	73.7	73.5	71.3	69.9
241	2023/10/26 15:50:36	63.5	62.2	61.4	57.6	67.5
246	2023/10/26 15:50:51	71.7	78.1	76.4	71.4	72.6
251	2023/10/26 15:51:06	74.8	71.9	75.9	71.7	66.8
256	2023/10/26 15:51:21	69.6	76.7	74.9	75.3	70.9
261	2023/10/26 15:51:36	74.4	79.4	72.6	69.5	77.7
266	2023/10/26 15:51:51	75.3	73.4	73.3	74.4	76.2
271	2023/10/26 15:52:06	74.5	75.9	74.9	74.7	76.4
276	2023/10/26 15:52:21	74.4	67.9	65.0	71.1	74.2
281	2023/10/26 15:52:36	72.8	74.6	77.5	78.1	79.1
286	2023/10/26 15:52:51	76.8	72.3	70.2	73.1	69.0
291	2023/10/26 15:53:06	70.3	75.0	78.8	80.9	77.7
296	2023/10/26 15:53:21	75.3	75.1	74.8	74.7	72.3

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 59.9 - 2023/10/26 15:18:36
- Level Range : 40-100
- SEL : 80.6
- Leq : 51.1
-

No.s	Date Time	(dB)				
1	2023/10/26 15:12:36	49.8	49.7	49.7	49.2	54.8
6	2023/10/26 15:12:51	51.2	50.3	50.3	49.0	49.4
11	2023/10/26 15:13:06	50.9	51.9	50.8	52.2	51.4
16	2023/10/26 15:13:21	50.3	53.0	52.2	48.3	48.7
21	2023/10/26 15:13:36	47.5	47.3	46.1	47.1	46.2
26	2023/10/26 15:13:51	46.4	47.1	47.8	49.8	51.7
31	2023/10/26 15:14:06	50.5	50.3	50.4	50.3	50.7
36	2023/10/26 15:14:21	50.7	50.8	50.8	49.3	48.7
41	2023/10/26 15:14:36	48.7	50.1	51.1	52.2	51.6
46	2023/10/26 15:14:51	51.9	52.1	52.2	52.2	52.2
51	2023/10/26 15:15:06	51.0	49.4	47.9	47.4	48.6
56	2023/10/26 15:15:21	52.3	50.5	49.9	50.3	51.8
61	2023/10/26 15:15:36	50.1	48.3	47.0	48.0	49.5
66	2023/10/26 15:15:51	50.5	49.5	49.3	49.3	51.5
71	2023/10/26 15:16:06	52.2	51.8	52.0	51.7	52.3
76	2023/10/26 15:16:21	50.4	51.2	51.4	52.1	51.8
81	2023/10/26 15:16:36	49.3	49.4	47.6	48.0	49.0
86	2023/10/26 15:16:51	48.1	48.6	49.6	49.0	48.8
91	2023/10/26 15:17:06	50.5	50.1	50.7	53.7	52.9
96	2023/10/26 15:17:21	53.1	52.7	52.5	52.2	53.1
101	2023/10/26 15:17:36	51.2	52.2	51.4	49.6	48.4
106	2023/10/26 15:17:51	47.4	47.0	48.2	48.7	48.7
111	2023/10/26 15:18:06	48.2	47.6	49.3	50.9	55.3
116	2023/10/26 15:18:21	54.0	51.8	50.6	51.2	58.1
121	2023/10/26 15:18:36	53.7	51.3	50.3	50.2	49.8
126	2023/10/26 15:18:51	48.5	48.3	49.9	49.4	49.9
131	2023/10/26 15:19:06	50.0	50.8	50.3	49.8	51.0
136	2023/10/26 15:19:21	51.3	53.3	53.8	54.9	55.7
141	2023/10/26 15:19:36	56.9	56.2	54.4	54.9	54.4
146	2023/10/26 15:19:51	53.3	52.2	52.4	51.7	50.1
151	2023/10/26 15:20:06	48.9	48.0	48.2	47.9	51.0
156	2023/10/26 15:20:21	52.5	53.5	51.5	51.5	53.6
161	2023/10/26 15:20:36	55.6	56.1	56.4	56.3	56.1
166	2023/10/26 15:20:51	54.5	51.8	53.4	53.0	52.2
171	2023/10/26 15:21:06	51.9	51.7	51.6	51.7	50.9
176	2023/10/26 15:21:21	50.6	50.8	50.8	49.8	49.5
181	2023/10/26 15:21:36	49.8	49.9	49.0	48.5	48.8
186	2023/10/26 15:21:51	48.5	47.6	48.2	47.7	48.4
191	2023/10/26 15:22:06	47.9	50.0	51.5	49.8	50.8
196	2023/10/26 15:22:21	50.9	51.1	50.3	49.3	49.0
201	2023/10/26 15:22:36	50.4	51.3	51.0	52.0	51.8
206	2023/10/26 15:22:51	51.2	51.0	52.2	51.7	50.4
211	2023/10/26 15:23:06	51.0	51.5	51.8	50.0	48.4
216	2023/10/26 15:23:21	47.8	48.3	46.6	45.1	45.6
221	2023/10/26 15:23:36	45.8	47.0	46.9	46.4	47.1
226	2023/10/26 15:23:51	47.8	48.8	49.7	50.5	56.4
231	2023/10/26 15:24:06	57.4	55.5	51.8	51.2	52.6
236	2023/10/26 15:24:21	52.5	53.6	51.5	48.2	48.3
241	2023/10/26 15:24:36	45.7	46.0	46.0	46.4	47.3
246	2023/10/26 15:24:51	47.3	47.3	49.2	48.6	47.9
251	2023/10/26 15:25:06	49.0	50.3	51.0	50.2	49.4
256	2023/10/26 15:25:21	47.9	48.8	49.5	48.6	50.4
261	2023/10/26 15:25:36	51.9	50.1	51.4	49.2	49.5
266	2023/10/26 15:25:51	50.1	51.8	53.3	52.1	54.9
271	2023/10/26 15:26:06	53.9	52.2	49.8	52.1	52.1
276	2023/10/26 15:26:21	52.2	51.1	52.0	51.5	51.4
281	2023/10/26 15:26:36	52.0	54.9	53.6	50.1	49.6
286	2023/10/26 15:26:51	50.3	48.2	49.8	49.9	50.6
291	2023/10/26 15:27:06	51.2	50.4	48.4	48.8	48.7
296	2023/10/26 15:27:21	47.6	47.1	46.4	47.6	47.4

Attachment B

Roadway Construction Noise Modeling (RCNM)

Construction Noise

Distance	Noise Level @ 50 ft	Single-Family Residential Area to N
		110
Demolition	**83**	**76.152**
Site Preparation	**79**	**72.152**
Grading	**84**	**77.152**
Building Construction	**76**	**69.152**
Paving	**77**	**70.152**
Architechtural Coating	**79**	**72.152**

Construction Vibration

Distance	Vibration @ 25 ft	Single-Family Residential Area to N
		110
Large Bulldozer	**0.089**	**0.010**
Loaded Trucks	**0.076**	**0.008**
Small Bulldozer	**0.003**	**0.000**

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Demolition

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Demolition	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	83.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Site Preparation	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	79.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Grading	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Excavator	No	40		80.7	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Building Construction

**** Receptor #1 ****

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Vibratory Concrete Mixer	No	20		80.0	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Noise Limits (dBA) Evening		Noise Limits (dBA) Night		Noise Limit Exceedance (dBA) Day		Noise Limit Exceedance (dBA) Evening		Noise Limit Exceedance (dBA) Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Vibratory Concrete Mixer	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.0	76.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.6	76.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/23/2023
Case Description: Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	65.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Slurry Trenching Machine	No	50		80.4	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Welder / Torch	No	40		74.0	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Slurry Trenching Machine	80.4	77.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.4	79.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A