

DRAFT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

29 WILDWOOD AVENUE ELECTRIC VEHICLE CHARGING STATION PROJECT
PIEDMONT, CALIFORNIA



LSA

July 2024

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MITIGATED NEGATIVE DECLARATION**

**29 WILDWOOD AVENUE ELECTRIC VEHICLE CHARGING STATION PROJECT
PIEDMONT, CALIFORNIA**

Submitted to:

City of Piedmont
120 Vista Avenue
Piedmont, California 94611

Prepared by:

LSA
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Project No. 20241601



July 2024

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TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
FIGURES AND TABLES.....	ii
LIST OF ABBREVIATIONS AND ACRONYMS.....	iii
1.0 PROJECT INFORMATION	1-1
2.0 PROJECT DESCRIPTION	2-1
2.1 Project Site	2-1
2.2 Proposed Project	2-5
3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....	3-1
3.1 Determination	3-1
4.0 CEQA ENVIRONMENTAL CHECKLIST	4-1
4.1 Aesthetics.....	4-1
4.2 Agriculture and Forestry Resources	4-4
4.3 Air Quality	4-6
4.4 Biological Resources	4-15
4.5 Cultural Resources.....	4-18
4.6 Energy	4-22
4.7 Geology and Soils	4-25
4.8 Greenhouse Gas Emissions	4-31
4.9 Hazards and Hazardous Materials.....	4-38
4.10 Hydrology and Water Quality.....	4-47
4.11 Land Use and Planning.....	4-52
4.12 Mineral Resources	4-54
4.13 Noise	4-55
4.14 Population and Housing.....	4-67
4.15 Public Services.....	4-68
4.16 Recreation	4-70
4.17 Transportation.....	4-71
4.18 Tribal Cultural Resources	4-75
4.19 Utilities and Service Systems.....	4-77
4.20 Wildfire	4-81
4.21 Mandatory Findings of Significance.....	4-83
5.0 LIST OF PREPARERS	5-1
6.0 REFERENCES	6-1

APPENDICES

- A: CALEEMOD OUTPUT SHEETS
- B: NOISE MEASUREMENT SHEETS
- C: TRIP GENERATION AND VEHICLE MILES TRAVELED ANALYSIS

FIGURES AND TABLES

FIGURES

Figure 2-1: Regional Location.....	2-3
Figure 2-2: Aerial View of the Project Site	2-4
Figure 2-3: Proposed Site Plan	2-7
Figure 2-4: Landscape Plan	2-11
Figure 2-5: Stormwater Management Plan	2-12
Figure 4.13-1: Noise Monitoring Locations.....	4-57

TABLES

Table 4.3.A: Project Construction Emissions in Pounds Per Day	4-10
Table 4.3.B: Project Operational Emissions	4-12
Table 4.13.A: Long-Term 24-Hour Ambient Noise Monitoring Results	4-59
Table 4.13.B: Typical Construction Equipment Noise Levels	4-60
Table 4.13.C: Vibration Source Amplitudes for Construction Equipment	4-65
Table 4.17.A: Trip Generation Comparison	4-72

LIST OF ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACDEH	Alameda County Department of Environmental Health
ACM	asbestos-containing materials
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal-OSHA	California Occupational Health and Safety Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH ₄	methane
City	City of Piedmont

Clean Air Plan	<i>2017 Clean Air Plan</i> (Bay Area Air Quality Management District)
CMP	Congestion Management Program
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPS	Cleanup Program Site
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DOSH	Division of Occupational Safety and Health
DOT	United States Department of Transportation
DWR	Division of Water Rights
EBMUD	East Bay Municipal Utility District
EO	Executive Order
EPA	United States Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
GSA	Groundwater Sustainability Agency
HFCs	hydrofluorocarbons
I	Interstate
ITE	Institute of Transportation Engineers
LBP	lead-based paint
LID	Low Impact Development
LUST	Leaking Underground Storage Tank
mgd	million gallons per day

mg/kg	milligrams per kilogram
MLD	Most Likely Descendant
MRP	Municipal Regional Stormwater NPDES Permit
MTBE	methyl tert-butyl ether
MTC	Metropolitan Transportation Commission
MWWTP	Main Wastewater Treatment Plant
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
OPR	Office of Planning and Research
OSHA	Occupational Health and Safety Administration
PFCs	perfluorocarbons
PFD	Piedmont Fire Department
PG&E	Pacific Gas and Electric Company
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
PPD	Piedmont Police Department
PRC	Public Resources Code
Project	29 Wildwood Avenue Electric Vehicle Charging Station Project
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SF ₆	sulfur hexafluoride

SGMA	Sustainable Groundwater Management Act
SO ₂	sulfur dioxide
SR	State Route
SRA	State responsibility area
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
Technical Advisory	<i>Technical Advisory on Evaluating Transportation Impacts in CEQA</i> (December 2018)
TMDL	Total Maximum Daily Load
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel
UCMP	University of California Museum of Paleontology
USDA	United States Department of Agriculture
UST	underground storage tank
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compounds
Water Board	San Francisco Bay Regional Water Quality Control Board
WTP	water treatment plant

1.0 PROJECT INFORMATION

1. Project Title:

29 Wildwood Avenue Electric Vehicle Charging Station

2. Lead Agency Name and Address:

City of Piedmont
120 Vista Avenue
Piedmont, California 94611

3. Contact Person and Phone Number:

Joshua Muller, Assistant Planner
(510) 420-3050

4. Project Location:

The approximately 0.22-acre project site is located at 29 Wildwood Avenue in Piedmont, Alameda County (Assessor's Parcel Number [APN] 051-4638-014-00).

5. Project Sponsor's Name and Address:

150 North Ashford Dairy Road
Floor 7
Houston, Texas 77079

6. General Plan Designation:

Mixed Use

7. Zoning:

Zone D – Commercial and Mixed Use

8. Description of Project:

The City of Piedmont (City) is considering a request for a Conditional Use Permit, a Non-Residential Sign Design Review Permit, and a Design Review Permit and Variance to demolish an existing gas and auto repair station at 29 Wildwood Avenue and replace it with a 14-stall electric vehicle (EV) charging station. A more detailed description of the proposed project is provided in Chapter 2.0, Project Description.

9. Surrounding Land Uses and Setting:

The project site is generally surrounded by single-family residential uses to the north and east and commercial uses to the west and south. The project site is bordered by Grand Avenue to the west and Wildwood Avenue to the south-southeast. A more detailed description of the surrounding land uses is provided in Chapter 2.0, Project Description.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

Please see Section 2.2.6, Project Approvals.

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

On May 31, 2024, the City sent an Assembly Bill (AB) 52 outreach letter to the Native American tribe that had previously requested to be contacted by the City for potential consultation pursuant to AB 52. The letter, which was sent via email, described the project and invited the tribe to request consultation should they have any concerns. The City did not receive any requests from any tribes during the 30-day request period; therefore, consultation pursuant to Public Resources Code (PRC) Section 21080.3.1 has been completed.

2.0 PROJECT DESCRIPTION

The following describes the proposed 29 Wildwood Avenue Electric Vehicle Charging Station Project (project) that is the subject of this Initial Study prepared pursuant to the California Environmental Quality Act (CEQA). The proposed project would result in demolition of the existing gas and auto repair station at 29 Wildwood Avenue and construction of a 14-stall EV charging station as detailed below. The City of Piedmont is the lead agency for review of the proposed project under CEQA.

2.1 PROJECT SITE

The following describes the project location, existing conditions, surrounding land uses, and regulatory setting.

2.1.1 Project Location

The approximately 9,691-square-foot project site is located at 29 Wildwood Avenue in Piedmont and consists of one parcel (APN 051-4638-014-00). The project site is bounded by Wildwood Avenue to the south-southeast, Grand Avenue to the west, and single-family residential development to the north.

Regional vehicular access to the project site is provided by Interstate (I) 580, approximately 0.5 mile west of the project site. The closest on- and off-ramps to I-580 are at Grand Avenue approximately 0.75 mile to the south. Figure 2-1 shows the regional and local context of the project site. Figure 2-2 depicts an aerial photograph of the project site (see Section 2.1.3 for a description of surrounding uses).

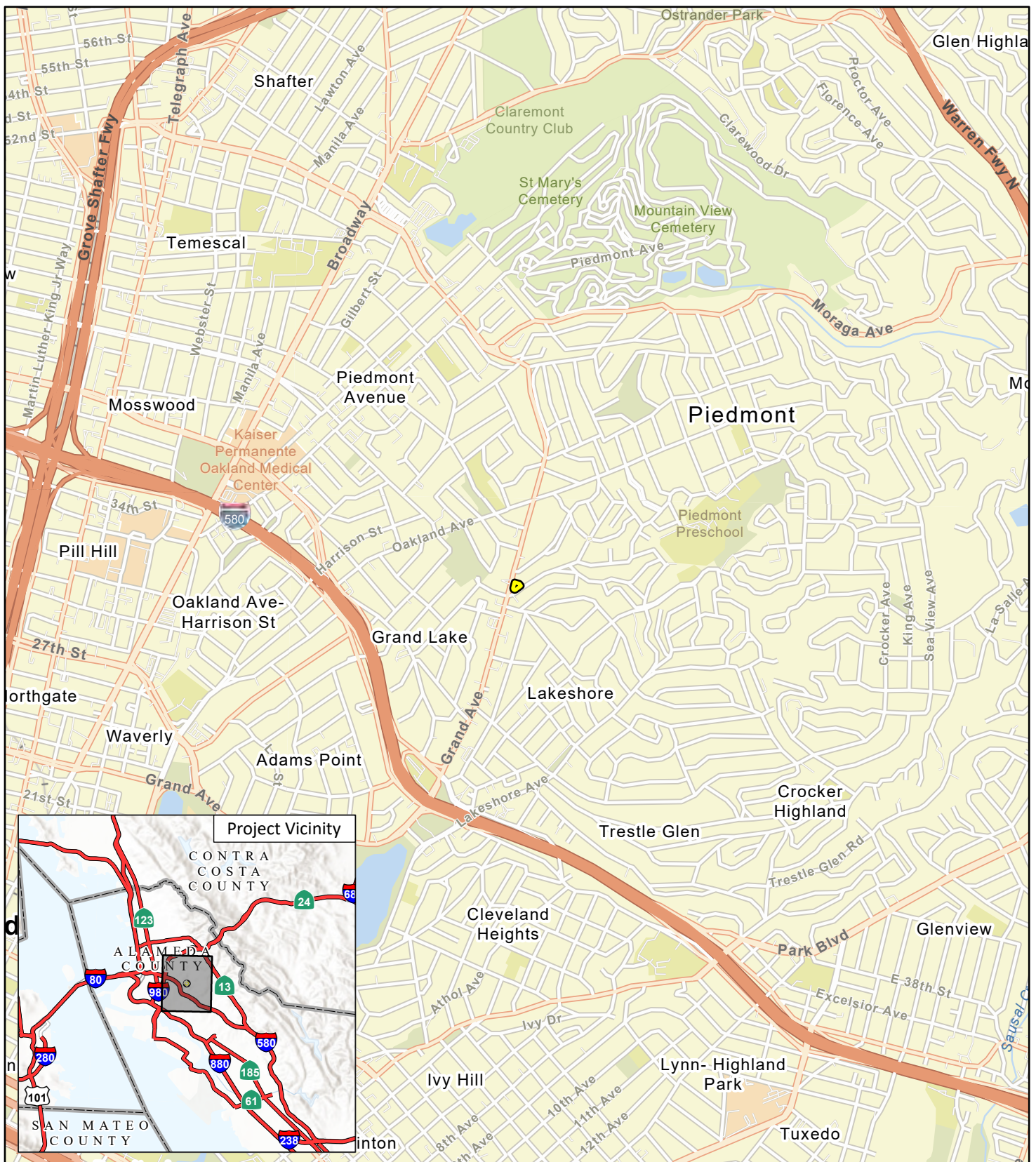
2.1.2 Existing Conditions

The project site is currently developed with a closed and vacated gas station, minor auto-repair shop, and convenience store. The current structures include four fueling stations under two canopies and a one-story building containing a minor auto-repair shop and a convenience store. The previous uses as a gas station, minor auto-repair shop, and convenience store have all been discontinued and all structures above ground and all infrastructure below ground (e.g., underground fuel storage tanks) are proposed to be removed. Removal of the underground fuel storage tanks would occur prior to redevelopment of the project site in accordance with the regulations and requirements of the Alameda County Department of Environmental Health (ACDEH) and the State Water Resources Control Board (SWRCB).

2.1.3 Surrounding Land Uses

As shown in Figure 2-2, the project site is generally surrounded by single-family residential uses to the north and east and commercial uses to the west and south. The project site is bordered by Grand Avenue to the west and Wildwood Avenue to the south-southeast.

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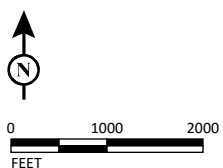
 Project Location

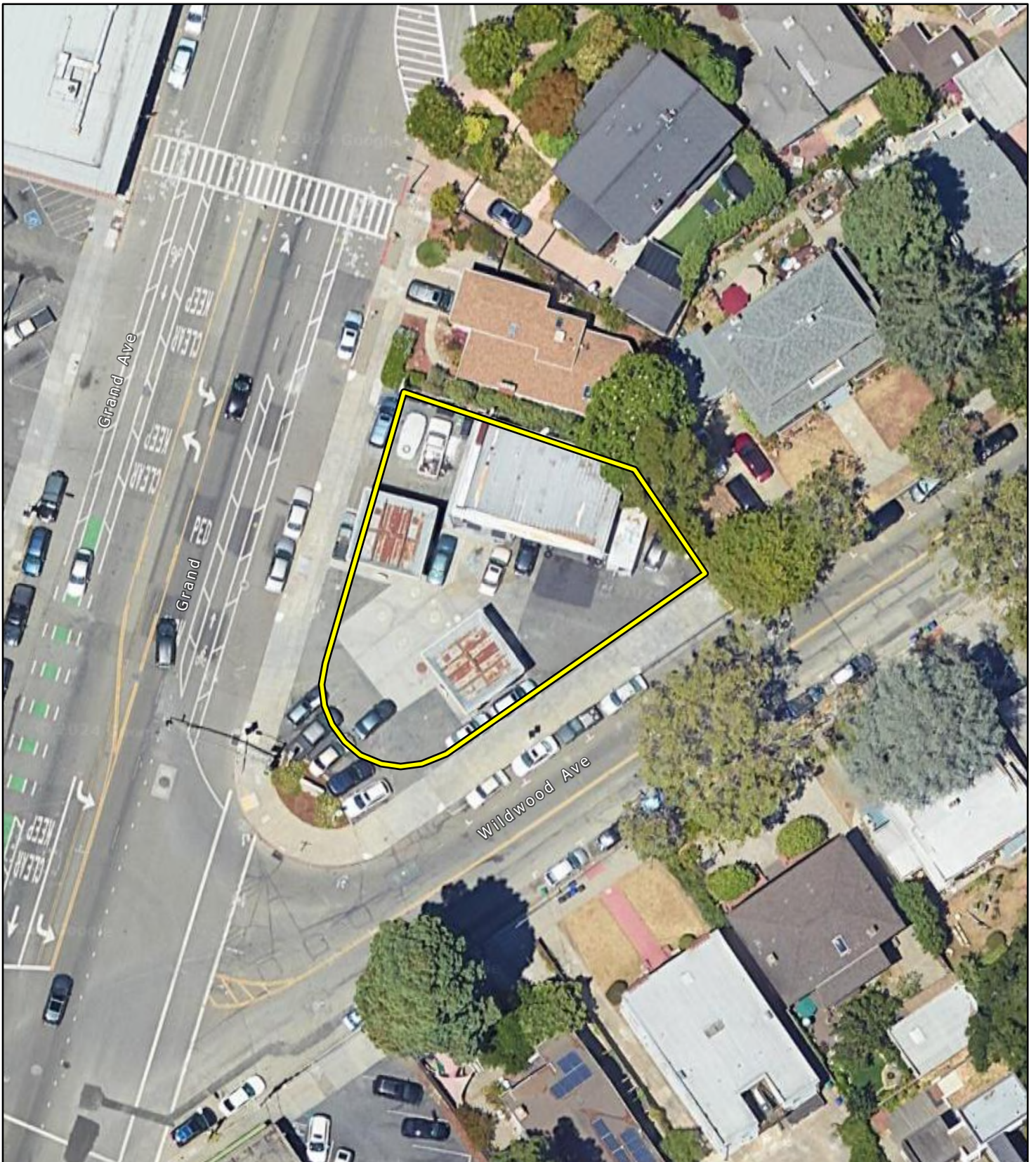
FIGURE 2-1



SOURCE: Esri Topo 2024

I:\20241601\GIS\Pro\29 Wildwood Avenue Electric Vehicle Charging Station\29 Wildwood Avenue Electric Vehicle Charging Station.aprx (6/1/2024)

29 Wildwood Avenue Electric Vehicle Charging Station
Regional Location



LSA

 Project Location

FIGURE 2-2



0 20 40
FEET

SOURCE: Google Maps

29 Wildwood Avenue Electric Vehicle Charging Station
Project Site

2.1.4 Circulation and Access

The project site consists of a vacant fuel station with a large, paved parking lot. Vehicle access to the project site is provided by four driveways (two on Wildwood Avenue and two on Grand Avenue) allowing ingress and egress to the project site. The site is currently gated with a chain-link fence.

2.1.5 Regulatory Setting

The project site has a General Plan land use designation of Mixed Use and is within the Zone D zoning district. According to Division 17.26 of the City Code, Zone D is established to regulate and control commercial and mixed-use commercial/residential development where pedestrian-oriented commercial development will serve the neighborhood, consistent and in harmony with the character of the neighborhood and adjacent residential areas. Commercial uses that will serve the neighborhood are those uses which neighbors would be expected to use on a regular basis. They do not include uses that would be expected to draw the major portion of their clientele from outside the neighborhood.

2.2 PROPOSED PROJECT

The proposed project involves the demolition of the existing gas and auto repair station at 29 Wildwood Avenue and construction of a 14-stall EV charging station. Figure 2-3 shows the proposed site plan. Individual components of the proposed project are discussed below.

2.2.1 Proposed EV Charging Facility

The proposed project would result in the redevelopment of the project site with an EV charging facility that would include a total of three covered charging areas, two with five EV charging stalls and one with four EV charging stalls. Seven EV charging kiosks/dispensers would be installed to serve the 14 EV charging stalls. Associated electrical equipment would be located within an approximately 200-square-foot enclosure, on a concrete pad, in the northeastern corner of the project site. A new 6-foot-tall Trex fence would be installed along the rear property boundary and around the EV charging infrastructure. A public seating area with a picnic table, bench, and recycling bins would be provided in the central portion of the project site. Two benches would be provided adjacent to Wildwood Avenue. Twenty-two light fixtures would be installed throughout the project site.

Two new canopies supported by laminated timber canopy beams and columns would be installed. Canopy A, approximately 11 feet, 6 inches in height, would be installed in the center of the project site. Canopy B, approximately 12 feet, 4 inches in height, would be installed near the corner of Wildwood Avenue and Grand Avenue.

The proposed project would include installation of new signage, including four brand signs attached to the proposed canopies, three bay header signs also attached to the canopies, and six freestanding brand specific signs. The brand signs on the canopies would face Wildwood Avenue and Grand Avenue, with two on Canopy A and two on Canopy B. The bay header signs are proposed to be attached to the posts of the canopies, with marking for the numbers charging bays and the maximum kilowatts available for charging. The freestanding signs would be mounted on galvanized steel poles throughout the facility. Signs would be made of aluminum composite with printed

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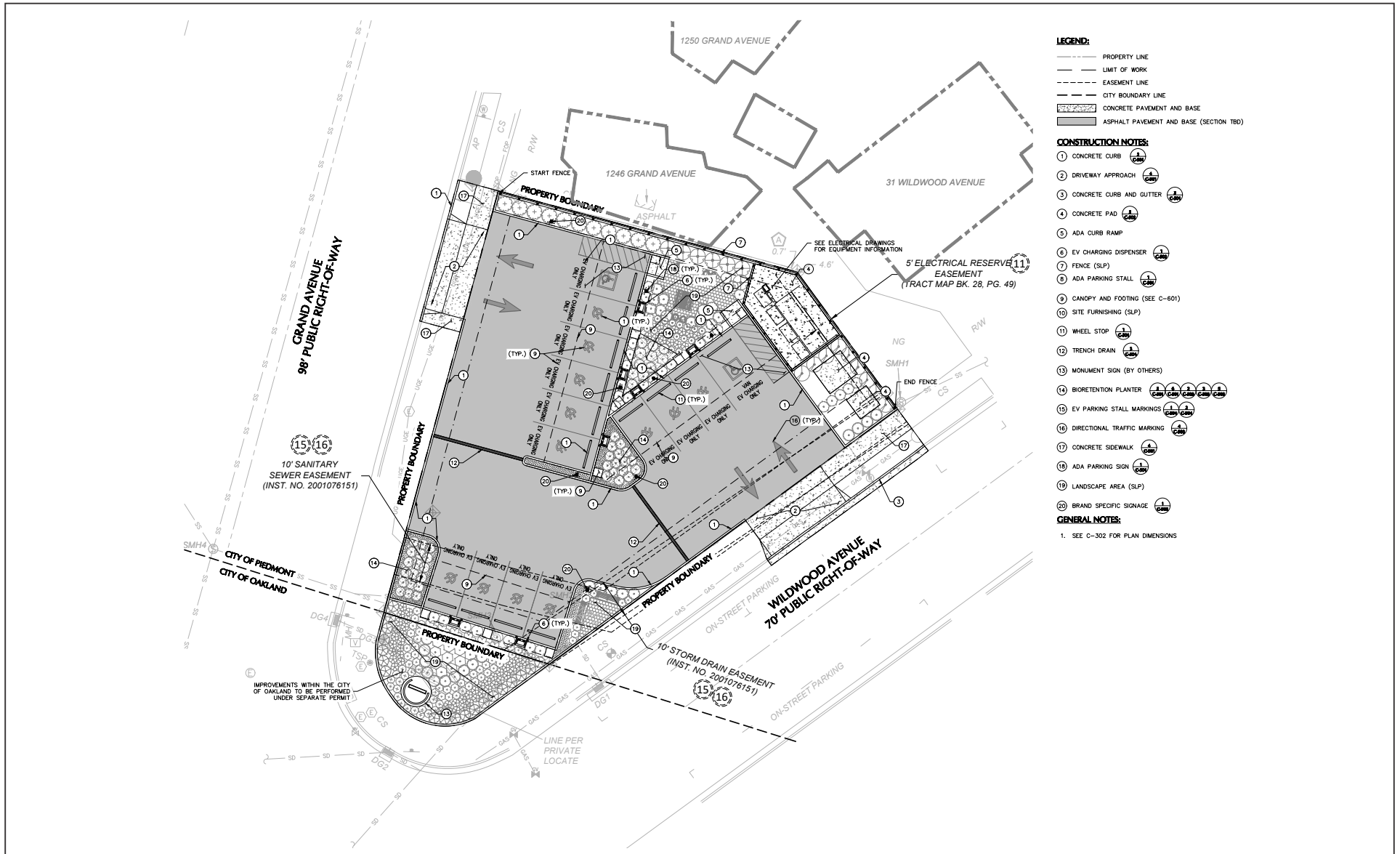


FIGURE 2-3

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0 20 40
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SOURCE: CBRE, Langan, Inc.

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29 Wildwood Avenue Electric Vehicle Charging Station
Proposed Site Plan

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graphics in clear vinyl. A monument sign is proposed at the corner of Grand Avenue and Wildwood Avenue; however, this portion of the project site is located in the city of Oakland and is not part of the proposed project.

The proposed EV charging station would operate 7 days per week, 24 hours per day. The proposed facility would be managed off site by a customer service manager, and EV chargers would be monitored remotely. Occasional maintenance of site facilities, EV chargers, and landscaping would occur.

2.2.2 Access and Circulation

Vehicular access into and out of the proposed EV charging facility would be provided via two existing driveways, one on Wildwood Avenue and one on Grand Avenue. Existing sidewalks on both Wildwood Avenue and Grand Avenue would be reconstructed to conform to the redeveloped driveway approaches.

2.2.3 Landscaping

A total of 1,595 square feet of landscaped area would be added to the project site, 400 square feet of which would be used as bio-retention areas. Shrubs and ground cover would be planted along the southern portion of the project site, near the corner of Wildwood Avenue and Grand Avenue, within the site interior and along the northern property boundary. Concrete pavers would be used to denote the picnic/seating area in the northern portion of the project site. Figure 2-4 shows the proposed landscaping plan.

Three bio-retention areas would be located throughout the project site to reduce the flow of stormwater runoff. Two of these areas would be located within the central portion of the project site and one would be located in the southern portion of the site. The proposed stormwater management plan is shown on Figure 2-5.

2.2.4 Utilities and Infrastructure

The project site is located in an urban area with existing utilities and infrastructure. The proposed project would remove existing sewer and water laterals, some electrical conduit, and some of the existing fiber-optic conduit. Existing sewer and water mains, gas distribution lines, electrical distribution lines, and storm drain within the adjacent public right-of-way and within the southernmost portion of the project site would remain in place. The proposed project would include installation of new electrical conduit to serve the proposed EV charging stations within the project site. Trench drains would be installed to direct stormwater runoff from the site to the proposed bio-retention areas.

2.2.5 Demolition, Grading, and Construction

The proposed project would include demolition of the existing approximately 1,262-square-foot, one-story masonry building; associated appurtenances; site lighting; existing sewer, water, electrical, and fiber optic lines; and approximately 4,546 square feet of asphalt paving on the site. Construction debris, such as old foundations, pavements, and structures, would be collected and hauled off site for disposal. Approximately 513 tons of demolition waste would be generated by the

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FIGURE 2-4

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0 20 40
FEET

SOURCE: CBRE, Langan, Inc.

I:\20241601\G\Stormwater_Plan.ai (5/30/2024)

29 Wildwood Avenue Electric Vehicle Charging Station
Proposed Stormwater Management Plan

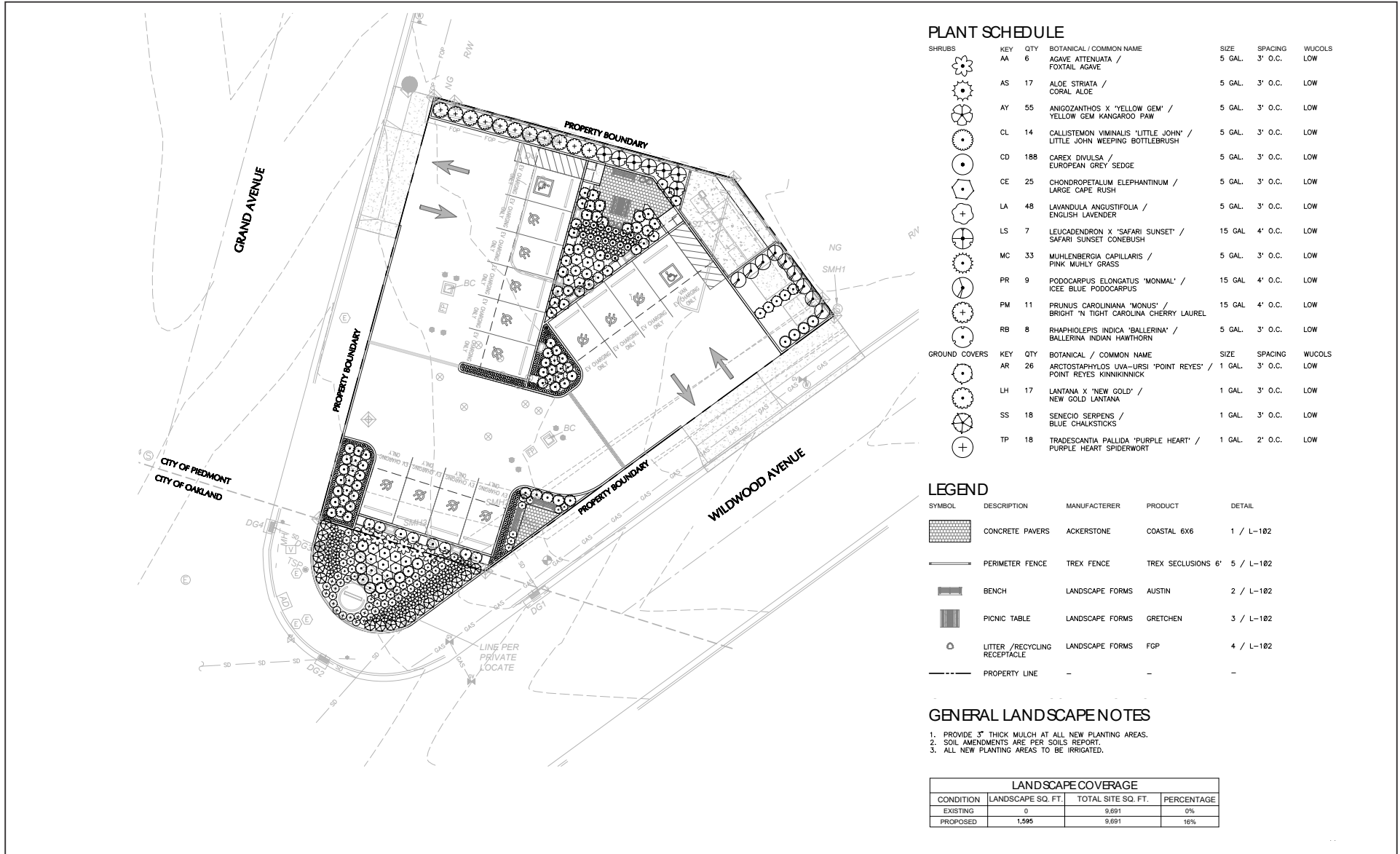


FIGURE 2-5

proposed project. Up to 1.5 feet of site soils would be excavated to remove materials that may not be suitable for project development. Up to 470 cubic yards of soils would be excavated from the site. If soils are determined to be suitable during construction, then approximately 170 cubic yards of soils would be retained to balance the site after excavation. If site soils are determined to be unsuitable during construction, then up to 470 cubic yards of soils would be off-hauled. As described above, removal of the existing underground storage tanks (USTs) would occur prior to commencement of the proposed project. Tank removal would be conducted in accordance with the requirements of and under the oversight of ACDEH.

If approved, construction of the proposed project is anticipated to begin in fall 2024 and would occur over a 2-month period. Demolition activities are anticipated to occur over an approximately 1-month period and grading would occur over an approximately 1-month period. An overlap of demolition and grading activities is anticipated. Exterior work such as foundation installation, construction, and installation of pavements is expected to occur over a 2-month period. A portion of the sidewalk along the project's boundary would be closed during construction of the proposed project.

2.2.6 Discretionary Actions

The proposed project is subject to approval by the City Council following a recommendation from the City's Planning Commission. The proposed project would require a Conditional Use Permit for the new use as an EV charging hub; Non-Residential Sign Design Review Permit and Design Review Permit for the construction of canopies, signage, kiosks, fencing and accessory equipment and features; and Variance to allow for the construction of a proposed canopy structure within the 10-foot street-yard setback along Wildwood Avenue.

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist in Chapter 3.0.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

3.1 DETERMINATION

On the basis of 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 in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “Potentially Significant Impact” or “Potentially Significant Unless Mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kevin Jackson

Signature

July 10, 2024

Date

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4.0 CEQA ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project have a substantial effect on a scenic vista? (Less Than Significant Impact)*

In Piedmont, scenic vistas are characterized by public views of the San Francisco and Oakland skylines, Lake Merritt and San Francisco Bay, the Bay and Golden Gate Bridges and surrounding hills, canyons, and geological features.¹ While the City is largely urban, with a relatively dense development pattern that can restrict scenic views, higher elevations in the hills provide scenic vistas that are an important part of Piedmont's character. The project site is located in a generally flat area, surrounded by urban development. Limited distant views of the hills are available looking north from Grand Avenue at the project site. However, due to intervening development, distance, and site topography, the project site provides no scenic views of the San Francisco and Oakland skylines, Lake Merritt and San Francisco Bay, or the Bay and Golden Gate Bridges.

The generally level project site is currently developed with an existing, closed gas station, a minor auto-repair shop, and a convenience store. The current structures include four fueling stations under two canopies and a one-story building. The proposed project would result in the redevelopment of the project site with an EV charging facility that would include a total of three covered charging areas. Two new canopies supported by laminated timber canopy beams and columns would be installed. Canopy A, approximately 11 feet, 6 inches in height, would be installed in the center of the project site. Canopy B, approximately 12 feet, 4 inches in height, would be installed near the corner of Wildwood Avenue and Grand Avenue. The proposed project canopies would be similar in size to the previous gas station canopies, as well as the existing surrounding commercial and residential buildings, which range in height from approximately 15 to 25 feet.

¹ City of Piedmont. 2009. *City of Piedmont General Plan*. April 6.

Additionally, a new 6-foot-tall Trex fence would be installed along the rear property boundary and around the EV charging infrastructure.

New structures would blend in with existing surrounding development and would not further obstruct any scenic vistas from within the site or any nearby public vantage point. Therefore, impacts related to scenic vistas would be less than significant.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

According to the California Department of Transportation's (Caltrans) State Scenic Highway Program, a portion of State Route (SR) 13 is the closest eligible State Scenic Highway to the proposed project.² SR-13 is located approximately 2 miles east of the project site. Given this distance and existing intervening development, the project site is not visible from this section of the roadway. Additionally, the proposed project would be generally consistent with the character of the existing commercial area in which it is located. Therefore, the proposed project would have no impact on scenic resources located within view of a State Scenic highway.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Less Than Significant Impact)

The project site is located in an urbanized area, surrounded by a mix of primarily commercial and residential uses. As noted in Section 2.1.5, the project site has a General Plan land use designation of Mixed Use and is within the Zone D zoning district. According to Division 17.26 of the City Code, Zone D is established to regulate and control commercial and mixed-use commercial/residential development where pedestrian-oriented commercial development will serve the neighborhood, consistent and in harmony with the character of the neighborhood and adjacent residential areas.

The proposed project would require a Conditional Use Permit, Non-Residential Sign Design Review Permit, Design Review Permit and Variance, which would provide for the review of the physical improvements to the project site, including the scale, massing and design to ensure compatibility and compliance with City requirements governing scenic quality. Therefore, because site-specific review of the proposed EV charging facility would be required as part of the City's approval process, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality. This impact would be less than significant.

² California Department of Transportation (Caltrans). 2019. "California State Scenic Highway System Map." Website: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca> (accessed May 24, 2024).

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less Than Significant Impact)

The project is located in an urbanized area that is surrounded by existing sources of light, including streetlights and vehicle headlights, as well as exterior lighting and signage from commercial buildings in the vicinity. The proposed project would be located along Grand Avenue, which is designated a primary arterial roadway, and is lined with streetlights along the entire length of the roadway in the vicinity of the project site.

The proposed project would introduce new minor sources of light and glare to the area in the form of new exterior, under-canopy lighting for the fueling facility. Proposed lighting would consist of 22 Scottsdale “Commercial Canopy Series” light fixtures. Proposed lighting would be designed to provide even light distribution for vehicle safety. All lighting would be Dark Sky-compliant with downward facing to keep light from overflowing beyond the project boundaries. As shown in the photometric plan provided by the project applicant, the projected light along the property lines is proposed to not exceed 3 lumens. Therefore, the introduction of nighttime lighting associated with the EV charging facility is not expected to be substantial in the context of existing lighting sources. In addition, the initial lighting and photometric plans for the proposed fuel facility have been reviewed as part of the project approvals to ensure that the placement of exterior lights eliminates spillover illumination or glare onto adjoining properties to the maximum extent feasible and does not interfere with the normal operation or enjoyment of adjoining properties.

Daytime glare would not be substantial as no highly reflective glass elements are proposed as part of the proposed project. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and this impact would be less than significant.

4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

	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 (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (No Impact)

The project site is located within an urbanized area of Piedmont. There are no agricultural uses within or adjacent to the project site. Additionally, the site is classified as "Urban and Built-Up Land" by the State Department of Conservation.³ Therefore, development of the proposed project would not convert agricultural land to a non-agricultural use. The proposed project would not result in the

³ California, State of. 2016. Department of Conservation. California Important Farmland Finder (map). Website: maps.conservation.ca.gov/dlrp/ciff/ (accessed May 24, 2024).

conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use and no impact would occur.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? (No Impact)

The project site is designated Mixed Use in the City of Piedmont General Plan and is located within the Zone D zoning district. The project site is not subject to a Williamson Act contract.⁴ Therefore, development of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? (No Impact)

The project site is located within an existing urban area designated for Mixed Use within Piedmont. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or conversion of forest land to nonforest uses, and no impact would occur.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use? (No Impact)

Refer to Section 3.2.c. The proposed project would not result in the loss of forest land or conversion of forest land to nonforest uses, and no impact would occur.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

Refer to Sections 3.2.a and 3.2.c. The project site is located within an existing urban environment and would not result in the conversion of farmland to non-agricultural uses or forest land to nonforest uses. The proposed project would not adversely affect agricultural or forestry resources, and no impact would occur.

⁴ California, State of. 2015. *Alameda County Williamson Act FY 2014/2015*. Website: <https://www.acgov.org/cda/planning/landuseprojects/documents/MapofParcelsWilliamsonAct.pdf> (accessed May 24, 2024).

4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen substantially. In Piedmont and the rest of the air basin, exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Within the BAAQMD, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead have been set by both the State of California and the federal government. The State has also set standards for sulfate and visibility. The BAAQMD is under State nonattainment status for ozone and particulate matter standards. The BAAQMD is classified as nonattainment for the federal ozone 8-hour standard and nonattainment for the federal PM_{2.5} 24-hour standard.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? (Less Than Significant Impact)

The applicable air quality plan is the BAAQMD 2017 Clean Air Plan (Clean Air Plan),⁵ which was adopted on April 19, 2017. The Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas (GHG) emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: (1) supports the goals of the

⁵ Bay Area Air Quality Management District. 2017. *Clean Air Plan*. April 19.

Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan.

Clean Air Plan Goals. The primary goals of the Bay Area Clean Air Plan are to: attain air quality standards; reduce population exposure and protect public health in the Bay Area; and reduce GHG emissions and protect climate.

The BAAQMD has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards. The health and hazards thresholds were established to help protect public health. As discussed below, implementation of the proposed project would result in less than significant operation-period emissions and, with implementation of Mitigation Measure AIR-1, the project would result in less than significant construction-period emissions. Therefore, the project would not conflict with the Clean Air Plan goals.

Clean Air Plan Control Measures. The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Control Measures, Transportation Control Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-GHG Pollutants Measures.

Stationary Source Control Measures. The Stationary Source Control Measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by BAAQMD Permit and Inspection programs. Since the project would not include any stationary sources, the Stationary Source Control Measures of the Clean Air Plan are not applicable to the project.

Transportation Control Measures. The BAAQMD identifies Transportation Control Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, toxic air contaminants (TACs), and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The proposed project involves the demolition of an existing gas and auto repair station and construction of a 14-stall EV charging station. As such, the proposed project would promote EVs consistent with BAAQMD initiatives. Therefore, the proposed project would be consistent with the Transportation Control Measures of the Clean Air Plan.

Energy Control Measures. The Clean Air Plan also includes Energy Control Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Since these measures apply to electrical utility providers and local government agencies (and not individual projects), the Energy Control Measures of the Clean Air Plan are not applicable to the project.

Building Control Measures. The BAAQMD has the authority to regulate emissions from certain sources in buildings such as boilers and water heaters, but it has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes to facilitate adoption of best GHG control practices and policies. Therefore, the Building Control Measures of the Clean Air Plan are not applicable to the project.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane (CH₄). Since the project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable to the project.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to enact ordinances that promote urban tree plantings. Since the project does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the project.

Waste Management Control Measures. The Waste Management Control Measures focus on reducing or capturing CH₄ emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The project would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the Water Control Measures are not applicable to the project.

Super-GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the project.

Clean Air Plan Implementation. As discussed above, the proposed project would generally implement the applicable measures outlined in the Clean Air Plan, including Transportation Control Measures. Therefore, the project would not disrupt or hinder implementation of a control measure from the Clean Air Plan and this impact would be less than significant.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less Than Significant with Mitigation Incorporated)

The BAAQMD is currently designated as a nonattainment area for State and national ozone standards and national particulate matter ambient air quality standards. The BAAQMD

nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts and CO impacts of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, grading, paving, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxide (NO_x), reactive organic gases (ROG), directly emitted particulate matter (PM_{2.5} and PM₁₀), and TACs such as diesel exhaust particulate matter.

Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The BAAQMD has established standard measures for reducing fugitive dust emissions (PM₁₀). With the implementation of these Basic Best Management Practices for Construction-Related Fugitive Dust Emissions, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, ROG and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model (CalEEMod) version 2022.1, consistent with BAAQMD recommendations. As described earlier in Chapter 2.0, Project Description, construction of the proposed project is anticipated to begin in fall 2024 and would occur over a 2-month period. Demolition activities are anticipated to occur over an approximately 1-month period, and grading would occur over an approximately 1-month period. An overlap of demolition and grading activities is anticipated. Exterior work, such as foundation installation, construction, and installation of pavements, is expected to occur over a 2-month period. As such, CalEEMod conservatively assumes a total 2-month construction duration. Construction activities would include the demolition of the existing 1,262-square-foot building and 4,546-square feet of asphalt paving on the site, totaling 513 tons of demolition waste, which was included in CalEEMod. Construction of the proposed project would require the export of up to 470 cubic yards of soil, which was also included in CalEEMod. This analysis also assumes the use of Tier 2 construction equipment. Other construction details are not yet known at this time; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used. Construction-related emissions are presented in Table 4.3.A. CalEEMod output sheets are included in Appendix A.

Table 4.3.A: Project Construction Emissions in Pounds Per Day

Project Construction	ROG	NO _x	Exhaust PM ₁₀	Fugitive Dust PM ₁₀	Exhaust PM _{2.5}	Fugitive Dust PM _{2.5}
Average Daily Emissions ¹	0.6	13.7	0.5	1.0	0.4	0.4
BAAQMD Thresholds	54.0	54.0	54.0	BMP	82.0	BMP
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (June 2024).

Note: Since the construction period is less than a year, this analysis utilizes the total annual tons of construction emissions, converts to pounds, and divides the total emissions over the number of working days.

BMP = best management practices

As shown in Table 4.3.A, construction emissions associated with the project would be less than significant for ROG, NO_x, PM_{2.5}, and PM₁₀ exhaust emissions. The BAAQMD requires implementation of the BAAQMD Best Management Practices for Construction-Related Fugitive Dust Emissions to reduce construction fugitive dust impacts to a less than significant level as follows:

Mitigation Measure AIR-1:

In order to meet the Bay Area Air Quality Management District (BAAQMD) fugitive dust threshold, the following BAAQMD Best Management Practices for Construction-Related Fugitive Dust Emissions shall be implemented by the project applicant during the project construction period:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.

- All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City of Piedmont regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

As shown in Table 4.3.A, construction emissions associated with the proposed project would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard and impacts would be less than significant with mitigation incorporated.

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

Mobile-source emissions include ROG and NO_x emissions that contribute to the formation of ozone. Additionally, PM₁₀ emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. The proposed project would serve electric vehicles; therefore, the proposed project would not generate mobile-source emissions.

Energy-source emissions would typically result from activities in buildings for which natural gas is used. Based on information provided as part of the project application materials, the estimated electricity demand associated with the proposed project would be 1,788,500 kilowatt-hours (kWh) per year, which was included in CalEEMod. However, the proposed project would be all-electric and would support recharging for electric vehicles; therefore, the proposed project would not generate any energy- or mobile-source emissions.

Emission estimates for operation of the project were calculated using CalEEMod. The daily and annual emissions associated with project operational trip generation, energy, and area sources are identified in Table 4.3.B for ROG, NO_x, PM₁₀, and PM_{2.5}.

Table 4.3.B: Project Operational Emissions

	ROG	NO _x	PM ₁₀	PM _{2.5}
Pounds per Day				
Mobile-Source Emissions	0.0	0.0	0.0	0.0
Area-Source Emissions	<0.1	0.0	0.0	0.0
Energy-Source Emissions	0.0	0.0	0.0	0.0
Total Emissions	<0.1	0.0	0.0	0.0
BAAQMD Thresholds	54.0	54.0	82.0	54.0
Exceed Threshold?	No	No	No	No
Tons per Year				
Mobile Source Emissions	0.0	0.0	0.0	0.0
Area Source Emissions	<0.1	0.0	0.0	0.0
Energy Source Emissions	0.0	0.0	0.0	0.0
Total Emissions	<0.1	0.0	0.0	0.0
BAAQMD Thresholds	10.0	10.0	15.0	10.0
Exceed Threshold?	No	No	No	No

Source: LSA (June 2024).

BAAQMD = Bay Area Air Quality Management District

As described above, the proposed project would be all-electric and would support recharging for electric vehicles; therefore, the proposed project would not generate any energy- or mobile-source emissions. As shown in Table 4.3.B, the proposed project would generate negligible operational emissions associated with area source emissions. These consist of direct sources of air emissions located at the project site, including architectural coatings, consumer products, and the use of landscape maintenance equipment. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant.

Localized CO Impacts. Emissions and ambient concentrations of CO have decreased dramatically in the Bay Area with the introduction of the catalytic converter in 1975. No exceedances of the State or federal CO standards have been recorded at Bay Area monitoring stations since 1991. The BAAQMD 2022 CEQA Guidelines include recommended methodologies for quantifying concentrations of localized CO levels for proposed transportation projects. A screening-level analysis using guidance from the BAAQMD CEQA Guidelines was performed to determine the impacts of the project. The

screening methodology provides a conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the BAAQMD CEQA Guidelines, a proposed project would result in a less than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable Congestion Management Program (CMP) established by the County congestion management agency for designated roads or highways, as well as the Regional Transportation Plan and local congestion management agency plans.
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnels, parking garages, bridge underpasses, natural or urban street canyons, or below-grade roadways).

Implementation of the proposed project would not conflict with the policies or programs of the Alameda County Transportation Commission. As demonstrated in Table 4.17.A (provided later in Section 4.17, Transportation), the proposed project is anticipated to generate 123 fewer daily trips and fewer trips in the AM and PM peak hours than the existing gasoline station. As such, since the proposed project would result in fewer trips, the project's contribution to peak-hour traffic volumes at intersections in the vicinity of the project site would be well below 44,000 vehicles per hour. Therefore, the proposed project would not result in localized CO concentrations that exceed State or federal standards, and impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations? (Less Than Significant Impact)

Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors to the project site include the single-family residential uses immediately north and east of the project site.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Mitigation Measure AIR-1, described above. With implementation of Mitigation Measure AIR-1, project construction pollutant emissions would be below the BAAQMD significance thresholds. Once the project is constructed, the project would not be a source of substantial operational emissions, as demonstrated through the CalEEMod evaluation, which shows that the proposed project would be below the BAAQMD thresholds of significance for criteria pollutants. Additionally, the proposed project would not be expected to be a significant source of TACs. The proposed project would be all-electric and would support recharging for electric vehicles; therefore, it would not generate any operational air emissions. Therefore, sensitive receptors are not expected to be exposed to

substantial pollutant concentrations during project construction or operation. This impact would be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less Than Significant Impact)

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors, and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.

4.4 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (No Impact)*

There are no known occurring special-status species on the project site. Due to the developed nature of the project site and the presence of buildings and associated hardscape, it is unlikely that the project site would support any special-status species. Therefore, no impact to special-status species would occur with implementation of the proposed project.

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (No Impact)*

The project site is completely developed and does not contain any riparian habitat or other sensitive natural community. Adjacent properties are developed with urban uses and do not contain any

riparian habitat or other sensitive natural community. Therefore, development of the proposed project would not adversely affect any such community, and no impact would occur.

- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (No Impact)*

According to the Natural Resources element of the City of Piedmont General Plan,⁶ the project site is located within a developed area and is not located in an area that supports wetlands, drainages, or water bodies as defined by Section 404 of the Clean Water Act.⁷ The proposed project would not result in the direct removal, filling, or hydrological interruption of such wetlands. Therefore, no impact to federally protected wetlands would occur with the proposed project.

- 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? (No Impact)*

The project site is completely developed and contains no on-site waterways or trees. Additionally, the site is in an urbanized area and is not adjacent to or near any areas of open space. There are no native wildlife nurseries located in the project area. Wildlife species that could occur on the site are those typically associated with urban and suburban areas. Because the project site is within a developed area, there are no major wildlife movement corridors that pass through or are adjacent to the site. Therefore, development of the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species. No impact would occur.

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)*

The City of Piedmont established a Heritage Tree Program to recognize, identify, and preserve special and distinctive trees and to promote awareness of the City's public parks, streets, and medians. No Heritage Trees have been designated on the project site.⁸

The City of Piedmont does not have a Tree Preservation Ordinance that regulates the removal of trees for development projects located on private property. The project is completely developed; a small, landscaped area, which includes a sign and some ornamental shrubs, is provided at the southern corner of the site. There are no trees located on the project site and no trees would be removed as part of the proposed project. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources or trees. No impact would occur.

⁶ City of Piedmont. 2009. op. cit.

⁷ United States Fish and Wildlife Service. n.d. National Wetlands Inventory Wetlands Mapper. Website: <https://www.fws.gov/wetlands/data/mapper.HTML> (accessed June 19, 2024).

⁸ City of Piedmont. 2024. Heritage Tree Program website: https://piedmont.ca.gov/services_departments/public_works/trees/heritage_tree_program (accessed June 19, 2024).

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)*

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that apply to the project site, and no impact would occur.

4.5 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 a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (Less Than Significant with Mitigation Incorporated)

For a cultural resource to be considered a historic resource (i.e., eligible for listing in the California Register of Historical Resources [CRHR]), it generally must be 50 years or older. Under CEQA, historical resources can include pre-contact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts.

As outlined in Chapter 2.0, Project Description, the proposed project would include the demolition of the existing 1,247 square-foot gas station facility built in 1959.⁹ Due to its age, the building constitutes a built environment cultural resource that had not been previously evaluated for inclusion in a national, State, or local register of historic properties. Background research and field survey indicates that the existing building does not appear eligible for inclusion in the California Register of Historical Resources (CRHR) due to a lack of historical significance.¹⁰ The building is not a notable example of Vernacular architecture, and background research did not identify any persons associated with the building important to the past. The building's architect and builder were not identified. As such, the building does not qualify as a historical resource for the purposes of CEQA as defined in PRC Section 21084.1, as defined in PRC Section 5020.1(k), or deemed significant pursuant to criteria set forth in PRC Section 5024.1(g). Therefore, its demolition would not adversely cause a substantial adverse change in the significance of a historical resource. No other potential historic resources were identified at the project site.

Although no archaeological deposits have been recorded at the project site, there is the potential for previously unknown pre-contact archaeological deposits to be unearthed during construction activities. Should project excavation unearth intact archaeological deposits, a substantial adverse change to a historical resource would occur due to the partial or complete destruction of the resource. This destruction would undermine the integrity of the resource, such that it would no longer be eligible for listing in the CRHR. As such, project ground-disturbing activities could have a

⁹ Although the earliest permit was issued in 1928 to construct a service station, a review of the City of Piedmont Housing Record search results indicates that the existing station facility was constructed in 1959.

¹⁰ LSA Associates, Inc. 2024a. *Historical Resource Evaluation of 29 Wildwood Avenue, City of Piedmont, Alameda County, California (LSA Project No. 20241601)*. July.

substantial adverse effect on buried archaeological deposits that qualify as historical resources, as defined in *CEQA Guidelines* Section 15064.5, and could materially impair pre-contact archaeological deposits. Implementation of the following mitigation measure would reduce potential impacts to historic archaeological resources to a less than significant level.

Mitigation Measure CUL-1: Cultural resources materials may include pre-contact resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock, as well as historic resources such as glass, metal, wood, brick, or structural remnants.

The applicant shall inform its contractor(s) of the sensitivity of the project site for archaeological deposits and include the following directive on the project grading plans:

“The subsurface of the construction site is sensitive for archaeological deposits. If archaeological deposits are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist shall assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. Archaeological deposits can include, but are not limited to, shellfish remains; bones, including human remains; flakes of, and tools made from, obsidian, chert, and basalt; mortars and pestles; historical trash deposits containing glass, ceramics, and metal artifacts; and structural remains, including foundations and wells.”

The City shall verify that the language has been included in the grading plans prior to issuance of a grading permit or other permitted project action that includes ground-disturbing activities on the project site.

If the deposits are uncovered on the site and found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recordation of the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods and findings shall be prepared, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate curation facility and used for public interpretive

displays, as appropriate and in coordination with a local Native American tribal representative.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less Than Significant with Mitigation Incorporated)

In accordance with *CEQA Guidelines* Section 15064.5(c)), if the project would affect an archaeological deposit, the lead agency must first determine whether the deposit is a “historical resource” (see *CEQA Guidelines* Section 15064.5(a)). If the deposit is not a historical resource, the lead agency must determine if the deposit is a “unique archaeological resource.”

Based on the significance criteria identified above, the proposed project would have a significant impact on the environment if ground-disturbing activities would cause a substantial adverse change in the significance of a historical or archaeological resource. A substantial adverse change in the significance of an archaeological resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (*CEQA Guidelines* Section 15064.5(b)(1)). For the proposed project, the significance of an archaeological resource would be materially impaired if ground disturbance would alter in an adverse manner those physical characteristics of the resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR. The proposed project could affect previously unidentified archaeological deposits, thereby causing a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5. However, potential impacts would be reduced to a less than significant level with implementation of Mitigation Measure CUL-1.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? (Less Than Significant Impact)

Given the previous disturbance at the site, there is a low potential for the disturbance of archaeological human remains. However, human remains could be identified during site preparation and grading activities and could result in a significant impact to human remains. However, if human remains are encountered at the project site, State Health and Safety Code Section 7050.5 and *State CEQA Guidelines* Section 15064.5(e)(1) state that no further disturbance shall occur to the area of the find until the County Coroner has made a determination of origin and disposition of the human bone pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately and shall make a determination within 2 working days of being notified. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC) by phone within 24 hours and the NAHC shall then immediately determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment of the remains within 48 hours of being granted access to the site. MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 regarding the treatment of human remains would ensure that potential impacts to human remains would be less than significant.

4.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? (Less Than Significant Impact)

The proposed project would result in a small increase in demand for electricity and gasoline. The discussion and analysis provided below is based on data included in the CalEEMod output, which is included in Appendix A.

Construction-Period Energy Use. The proposed project would require demolition, grading, site preparation, building, paving, and architectural coating activities during construction. Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading activities, and construction of the proposed park improvements. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the idling times for construction vehicles would be restricted to 5 minutes or less and construction workers would be required to shut off idle equipment, as required by Mitigation Measure AIR-1. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors that would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant.

Operational Energy Use. Operational energy usage is typically associated with natural gas use, electricity consumption, and gasoline and diesel fuel used for vehicle trips. The proposed project would be all-electric; therefore, the proposed project would not result in natural gas consumption. In addition, as demonstrated in Table 4.17.A (provided later in Section 4.17, Transportation), the proposed project is anticipated to generate 123 fewer daily trips than the existing gasoline station would be all-electric and would support recharging for electric vehicles. Therefore, the proposed project would not increase gasoline or diesel fuel consumption. As such, operational energy use as a result of the proposed project would only be associated with electricity consumption.

Based on information provided as part of the project application materials, the estimated electricity demand associated with the proposed project is 1,788,500 kWh per year. In 2022, California

consumed approximately 287,826 gigawatt-hours (GWh), or 287,826,110,475 kWh.¹¹ Of this total, Alameda County consumed 10,395 GWh, or 10,395,384,395 kWh.¹² Therefore, electricity demand associated with the proposed project would be less than 0.1 percent of Alameda County's total electricity demand.

The proposed project's electricity and natural gas services would be provided by either Pacific Gas and Electric Company (PG&E) or Ava Community Energy (Ava). In 2022, approximately 40 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.¹³ PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand.

Ava offers commercial customers in the City of Piedmont two service options – Bright Choice and Renewable 100. In 2022, approximately 49.4 percent of energy supplied through Ava's Bright Choice service came from renewable sources, including solar, wind, and various forms of bioenergy and 100 percent of Ava's Renewable 100 service came from renewable sources (solar and wind).¹⁴ In addition, Ava's Board of Directors has established the goal of purchasing 100 percent renewable energy for all customers by 2030, which would exceed the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100.¹⁵ Ava's power is delivered to customers by PG&E. Therefore, the energy supplied to the proposed project would come largely from renewable sources in compliance with California's renewable energy goals.

Further, the proposed project would promote the use of EVs and would generate 123 fewer daily trips than the existing gasoline station; therefore, the proposed project is expected to result in a decrease in gasoline and diesel vehicles. As such, the proposed project would facilitate use of alternative and cleaner modes of transportation. Based on the nature of the proposed project, implementation of the proposed project would not result in a substantial increase in electricity or transportation-related energy, such that it would result in a wasteful, inefficient, or unnecessary consumption of energy resources.

Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy. Construction- and operation-period impacts related to consumption of energy resources would be less than significant.

¹¹ California Energy Commission (CEC). 2023. Energy Consumption Data Management Service. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

¹² Ibid.

¹³ PG&E. 2023. *Exploring Clean Energy Solutions*. Website: <https://www.pge.com/en/about/corporate-responsibility-and-sustainability/taking-responsibility/clean-energy-solutions.html> (accessed June 2024).

¹⁴ Ava Community Energy. 2024a. *Our Power Mix*. Website: <https://avaenergy.org/our-power-mix/> (accessed July 2024).

¹⁵ Ava Community Energy. 2024b. *About Us*. Website: <https://avaenergy.org/about/> (accessed July 2024).

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (Less Than Significant Impact)

In 2002, the State Legislature passed SB 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

The most recently adopted CEC energy report is the 2023 Integrated Energy Policy Report. The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC 2023 Integrated Energy Policy Report. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and this impact would be less than significant.

4.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Less Than Significant Impact)*

Fault rupture is generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., within the last 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The Hayward fault is located approximately 1.5 miles east of the project site. There are no mapped faults within or adjacent to the project site, and the project site is not located

within an Alquist-Priolo Zone.¹⁶ Therefore, the proposed project would not directly or indirectly cause substantial adverse effects related to fault rupture. This impact would be less than significant.

ii. Strong seismic ground shaking? (Less Than Significant Impact)

The project site is located in the San Francisco Bay Area, a region of intense seismic activity. Ground shaking is likely to occur within the life of the project as a result of future earthquakes. As noted above, the Hayward Fault is approximately 1.5 mile east of the project site. Other active faults within the area that are likely to produce large earthquakes include the Calaveras fault, located approximately 12 miles east, and San Andreas fault, located approximately 15 miles southwest.¹⁷ Due to the location of the project site in a seismically active area, strong seismic ground shaking at the project site is highly probable during the life of the project. The intensity of ground shaking would depend on the characteristics of the fault, distance from the fault, the earthquake magnitude and duration, and site-specific geologic conditions.

The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, the distance from the epicenter, and local geologic conditions. Although the Hayward fault is the closest fault, any of the regional faults are capable of producing significant ground shaking in the project site. Mapping has been compiled by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) for the likely shaking intensities in the Bay Area that would have a 10 percent chance of occurring in any 50-year period. A large earthquake (magnitude 6.7 or greater) on one of the major active faults in the region would generate violent (MMI 9) ground shaking at the project site.¹⁸

Section 8.02.010 of the Piedmont City Code currently requires projects to comply with the 2022 California Building Code (CBC) (Title 24, California Code of Regulations) or the applicable building code in effect at the time of the building permit application,¹⁹ which provides for stringent construction requirements on projects in areas of high seismic risk based on numerous interrelated factors. It is acknowledged that seismic hazards cannot be completely eliminated, even with implementation of advanced building practices. However, the seismic design standards of the CBC are intended to prevent catastrophic structural failure in the most severe earthquakes currently anticipated. Therefore, compliance with the 2022 CBC, which is required by both the City and the State, would ensure that the potential impacts associated with ground shaking would be less than significant.

¹⁶ California Department of Conservation California Geological Survey. n.d. Earthquake Zones of Required Investigation (map). Website: <https://maps.conservation.ca.gov/cgs/EQZApp/app/> (accessed May 27, 2024).

¹⁷ Ibid.

¹⁸ Metropolitan Transportation Commission and Association of Bay Area Governments. 2018. Probabilistic Earthquake Shaking Hazard Map. Website: mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed June 19, 2024).

¹⁹ City of Piedmont. 2024a. City of Piedmont City Code. Website: https://piedmont.ca.gov/government/charter___city_code (accessed June 19, 2024)

iii. Seismic-related ground failure, including liquefaction? (Less Than Significant Impact)

Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. These soils lose strength during ground shaking and may move both horizontally and vertically. In areas where sloping ground or open slope faces are present, this mobility can result in lateral spreading. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that are relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy.

The Environmental Hazards Element of the City of Piedmont General Plan states that the chances of earthquake induced liquefaction within Piedmont is low.²⁰ However, the project site is located in an area that has been identified by the California Geological Survey (CGS) as being susceptible to seismically induced liquefaction.²¹ The proposed project would be designed and constructed consistent with the most current earthquake resistance standards for Seismic Zone 4 in the CBC, which includes specifications for site preparation, such as compaction requirements for foundations. Compliance with the 2022 CBC, which is required by both the City and the State, would ensure that the potential impacts associated with liquefaction would be less than significant.

iv. Landslides? (No Impact)

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The project site is relatively level and is not located next to any slopes. Furthermore, the project site is not located within an area that would likely be subjected to earthquake-induced landslides.²² Therefore, the proposed project would not expose people or structures to risk as a result of landslides. No impact would occur.

b. Would the project result in substantial soil erosion or the loss of topsoil? (Less Than Significant Impact)

Topsoil is defined as the upper part of the soil profile that is relatively rich in humus and is technically known as the A-horizon of the soil profile.²³ Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project site. As part of construction activities, a total of 0.22 acre of soil would be disturbed during site grading. Due to the fact that the proposed project would involve less than 1 acre of land disturbance, it would not be required to comply with the Construction General Permit.²⁴ However, as described in Section 4.10.a, Piedmont

²⁰ City of Piedmont. 2009. *City of Piedmont General Plan*. April 6.

²¹ California Department of Conservation California Geological Survey, n.d. op. cit.

²² Ibid.

²³ California State Mining and Geology Board, 2014. Surface Mining Reclamation Act Regulations. California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

²⁴ State Water Resources Control Board (SWRCB). 2022. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP), Order No. 2022-0057-DWQ, NPDES No. CAS000002. Website: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf (accessed June 19, 2024).

City Code Section 30.10 requires construction contractors to comply with and undertake the latest Best Management Practices (BMPs) for construction projects adopted by the Alameda County Clean Water Program and incorporate erosion and sediment control plans into the building permit. The erosion control plan would provide the details of the BMPs to be applied on the site during the construction period. BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. Compliance with the City's regulations regarding erosion control during project construction would ensure that the proposed project would result in less than significant impacts related to soil erosion or the loss of topsoil.

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Less Than Significant Impact)*

As discussed in Section 4.7.a, site soils would not be subject to landslides, but they do have potential for liquefaction-induced settlement. However, compliance with the requirements of the CBC would ensure that potential risks to people and structures as a result of liquefaction would be reduced to a less than significant level.

- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? (Less Than Significant Impact)*

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. Soils underlying the project site are composed of Urban land – Tierra complex, 5 to 15 percent slopes, according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey.²⁵ Urban land – Tierra complex consists of about 50 percent Urban land and 38 percent Tierra loam and has a high shrink-swell potential.²⁶ However, compliance with the requirements of the CBC would ensure that potential risks to people and structures as a result of expansive soils would be reduced to a less than significant level.

²⁵ United States Department of Agriculture. n.d. Natural Resources Conservation Service. Web Soil Survey. Website: websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed June 19, 2024).

²⁶ United States Department of Agriculture. 1975. Soil Conservation Service. *Soil Survey of Alameda County, Western Part*. Available online at: https://books.google.com/books?id=fImyyAEACAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false (accessed June 19, 2024).

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (No Impact)*

Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would have no impact related to septic tanks or alternative waste water disposal systems.

- f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less Than Significant with Mitigation Incorporated)*

No paleontological resources or unique geological features are known to exist within or near the project site. According to a search of the University of California Museum of Paleontology (UCMP) at the University of California, Berkeley, 563 paleontological resource sites have been documented in Alameda County, none of which have been recovered from the City. However, the possibility of accidental discovery of paleontological resources during project construction cannot be discounted. Implementation of Mitigation Measure GEO-1, described below, would reduce potential impacts to paleontological resources to a less than significant level.

Mitigation Measure GEO-1

Should paleontological resources be encountered during project subsurface construction activities, the area shall be flagged off, all ground-disturbing activities within 25 feet of the resource shall be stopped, and work shall be redirected away from the resource. A qualified paleontologist who is contracted by the project site manager or applicant shall be immediately contacted to assess the resource and consult with agencies as appropriate to determine if the resource should be collected. For purposes of this mitigation, a "qualified paleontologist" shall be an individual with the following qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least 2 years of professional experience related to paleontology; (3) proficiency in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field.

Significant paleontological resources are those that have adequate condition of preservation and contain diagnostic elements that will make the fossil identifiable. If the paleontological resources are found to be significant and project activities cannot avoid them, the applicant and the applicant's contractors shall comply with measures to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. The qualified paleontologist shall implement the following measures to protect the resource: construction monitoring, recording the fossil locality, data recovery and analysis, a final report, and

accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared by the qualified paleontologist and submitted to the City of Clayton for review. If paleontological materials are recovered, the qualified paleontologist shall also submit this report to a paleontological repository such as the University of California Museum of Paleontology, along with significant paleontological materials.

Implementation of Mitigation Measure GEO-1 would reduce the level of the potential impact through the identification of paleontological resources during construction; the evaluation of unanticipated discoveries; and the recovery of significant paleontological data from those resources that warrant such investigation. This process would recover scientifically consequential information from at-risk resources to offset their potential loss. Therefore, with implementation of Mitigation Measure GEO-1, this impact would be less than significant with mitigation incorporated.

4.8 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less Than Significant Impact)

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂);
- CH₄;
- Nitrous oxide (N₂O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF₆).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO₂, methane, and N₂O, some gases, like HFCs, PFCs, and SF₆, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by 1 unit mass of the GHG to the ratio of heat trapped by 1 unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO₂ equivalents" (CO₂e).

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less Than Significant Impact)

This section discusses the proposed project's potential impacts related to the release of GHG emissions for both construction and project operation.

Construction GHG Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, emissions that would occur during construction were quantified and are disclosed for informational purposes. Using CalEEMod, it is estimated that construction of the proposed project would generate 36.2 metric tons of CO₂e. Construction-related GHG emissions would be temporary in nature and would only occur for the duration of construction.

Operational GHG Emissions. The BAAQMD CEQA Guidelines identify thresholds of significance for use in determining whether a proposed project would have a significant impact related to climate change. These thresholds evaluate a project based on its effect on California's efforts to meet the State's long-term climate goals. Applying this approach, the BAAQMD identifies and provides supporting documentation, outlining the requirements for new land use development projects necessary to achieve California's long-term climate goal of carbon neutrality by 2045. Based on its analysis, the BAAQMD found that new land use development projects need to incorporate design elements to do its "fair share" to implement the goal of carbon neutrality by 2045. If a project is designed and built to incorporate the identified design elements, then it will contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. The document concludes that if a project does not incorporate these design elements, then it should be found to make a significant climate impact because it will hinder California's efforts to address climate change.

According to the BAAQMD CEQA Guidelines, a project would have a less than significant impact related to GHG emissions if it would:

1. Include, at a minimum, the following project design elements:
 - a. Buildings
 - 1) The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

- 2) The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*.
2. Transportation
 - a. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*:
 - 1) Residential projects: 15 percent below the existing VMT per capita
 - 2) Office projects: 15 percent below the existing VMT per employee
 - 3) Retail projects: no net increase in existing VMT
 - b. Achieve compliance with off-street EV requirements in the most recently adopted version of the California Green Building Standards Code (CALGreen) Tier 2.
 3. Or be consistent with a local GHG reduction strategy that meets the criteria under *State CEQA Guidelines* Section 15183.5(b).

The City of Piedmont Climate Action Plan (CAP) 2.0²⁷ does not meet the BAAQMD requirements for a Qualified GHG Reduction Strategy. Therefore, this section evaluates the proposed project's consistency with the BAAQMD's project design element thresholds.

Natural Gas Usage. According to the BAAQMD, a less than significant GHG impact would occur if the project does not include natural gas appliances or natural gas plumbing. The proposed project would be all-electric and would not include natural gas. Since the proposed project would not include natural gas, it would be consistent with this design element.

Energy Usage. The project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*.

As discussed in Section 4.6, Energy, based on information provided as part of the project application materials, the estimated electricity demand associated with the proposed project would be 1,788,500 kWh per year. In 2022, Alameda County consumed 10,395 GWh, or 10,395,384,395 kWh. Therefore, electricity demand associated with the proposed project would be less than 0.1 percent of Alameda County's total electricity demand.

²⁷ Piedmont, City of. 2018. *Piedmont Climate Action Plan 2.0*. March 19. Website: https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_13659739/File/Government/Departments/Planning%20Division/Climate%20Action%20Program/CAP_2.0.pdf?v=Eerb8jEQh&v=Eerb8jEQh (accessed June 2024).

Further, the proposed project would promote the use of EVs and would generate 123 fewer daily trips than the existing gasoline station, resulting in a decrease in gasoline and diesel vehicles. As such, the proposed project would facilitate use of alternative and cleaner modes of transportation. Based on the nature of the proposed project, implementation of the proposed project would not result in a substantial increase in electricity or transportation-related energy such that it would result in a wasteful, inefficient, or unnecessary consumption of energy resources.

Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy. Construction- and operation-period impacts related to consumption of energy resources would be less than significant. As such, the proposed project would be consistent with this design element.

Vehicle Miles Traveled. To meet the BAAQMD's VMT threshold, the project must achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan or meet a locally adopted SB 743 VMT target. As discussed in Section 4.17, Transportation, the OPR published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory). The Technical Advisory indicates that projects generating or attracting fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. As discussed in Section 4.17, Transportation, the proposed project is anticipated to generate 123 fewer trips per day than the existing land use. With a net reduction in daily trips, the project would be considered a small project. Further, the proposed project would be all-electric and would support recharging for electric vehicles, resulting in a decrease in gasoline and diesel vehicle trips. Because the project's trip generation is below an applicable threshold of significance and the project itself promote electric vehicle use, the proposed project would have a less than significant VMT impact. As such, the proposed project would be consistent with this design element.

Electric Vehicle Requirements. This criterion requires that the project achieve compliance with off-street EV requirements in the most recently adopted version of the CALGreen Tier 2 measures. The proposed project involves the demolition of an existing gas and auto repair station and construction of a 14-stall EV charging station. As such, the proposed project would be consistent with this design element.

As demonstrated above, the proposed project would be consistent with the BAAQMD's project design elements related to natural gas, energy, VMT, and EVs. Therefore, the proposed project would be consistent with the BAAQMD's GHG emission thresholds. As such, the proposed project would not result in the generation of GHG emissions that would have a significant impact on the environment. This impact would be less than significant.

b. *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Less Than Significant Impact)*

Applicable plans adopted for the purpose of reducing GHG emissions include the City's CAP 2.0 and the 2022 Scoping Plan. As such, the proposed project was evaluated for consistency with those plans

to demonstrate whether the proposed project would conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions.

CAP 2.0. The City adopted the CAP 2.0 to support current Statewide climate efforts, provide a pathway for Piedmont to reduce GHG emissions 40 percent by 2030, and be on track to reduce emissions 80 percent by 2050. During its July 17, 2023, meeting, the City Council approved amendments to the CAP 2.0 establishing updated GHG reduction goals. The updated goals are as follows: to reduce GHG emissions 50 percent by 2030 and achieve carbon neutrality no later than 2045. The CAP 2.0 includes objectives that were developed in response to the City's GHG inventory. The main objectives fall within seven different areas: transportation, buildings and energy, adaptation, municipal, solid waste, water, and consumption. Measures were developed to support the objectives of the CAP 2.0 and include action items the City and community can take to achieve their goals. The following objectives are applicable to the proposed project:

- **Objective T-4:** Accelerate the adoption of Zero Emissions Vehicles (ZEVs) in Piedmont
- **Objective T-5:** Reduce miles traveled in personal gasoline vehicles

As discussed above, the proposed project involves the demolition of an existing gas and auto repair station and construction of a 14-stall EV charging station. As such, the proposed project would be consistent with Objective T-4 by installing additional EV charging stations, thereby facilitating and promoting the use of EVs. In addition, the proposed project would generate 123 fewer daily trips than the existing gasoline station, resulting in a decrease in VMT in gasoline vehicles consistent with Objective T-5. As such, the proposed project would be consistent with the applicable CAP 2.0 objectives.

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, Executive Order (EO) B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

The 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035 and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

As identified above, the 2022 Scoping Plan contains GHG reduction measures that work toward reducing GHG emissions, consistent with the targets set by EO B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as qualitatively discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed above, the proposed project would not include natural gas. The elimination of natural gas in new development would help projects implement their "fair share" of GHG emission reductions necessary to achieve carbon neutrality by 2045, consistent with State goals. Therefore, the proposed project would contribute to its "fair share" of GHG emission reductions necessary to support achieving the State goals of long-term GHG emission reductions and carbon neutrality by 2045.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to increase zero-emission vehicles and decrease VMT. The proposed project would be all-electric and would support recharging for electric vehicles; therefore, it would meet the CALGreen standards associated with the provision of EV charging facilities and would facilitate and promote the use of EVs by providing EV charging infrastructure. Therefore, the project would promote the use of EVs and reduce gasoline vehicle trips and VMT. As such, the proposed project would not conflict with the transportation and motor vehicle measures.

As demonstrated above, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in EO B-30-15, SB 32, and AB 1279

and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

4.9 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is currently developed with a closed and vacated gas station, minor auto-repair shop, and convenience store. The project site has been developed with a gasoline service station and automotive repair facility since as early as 1939 and developed with the current service station since 1959. The current USTs at the site were installed in 1984. The previous uses as a gas station, minor auto-repair shop, and convenience store have all been discontinued, and all structures above-ground and all infrastructure below-ground (e.g., underground fuel storage tanks) are proposed to be removed. As outlined in Section 2.2.5, removal of the existing USTs would occur prior to commencement of the proposed project.

As a result of the USTs and past automotive use, the project site has been the subject of numerous investigations and oversight by the ACDEH, which is the Certified Unified Program Agency (CUPA) that coordinates and enforces numerous local, State, and federal hazardous materials management and environmental protection programs in Alameda County.

According to the information provided in the Regional Water Quality Control Board (RWQCB) Geotracker online database,²⁸ in August 2010, ACDEH closed the Leaking Underground Storage Tank (LUST) Case No. RO0000495 located at this site as a low-risk site based on an evaluation of petroleum contamination from unauthorized releases of petroleum from USTs and data collected during investigations conducted between 2005 through 2010. Due to residual contamination at the time of closure of LUST Case RO0000495, ACDEH closed the case with site management requirements that limit future use land use to commercial land use.

In 2012, ACDEH opened Cleanup Program Site (CPS) Case No. RO0003154 to evaluate residual contamination with respect to a proposed residential redevelopment at the site. Additional site assessment activities were conducted in 2015 and included collection of soil and groundwater samples in the vicinity of the former waste oil UST, the existing fuel USTs, and within the existing auto repair facility in the vicinity of hydraulic hoists and sumps. Results of the investigation indicated significant contamination in some site soils, including maximum concentrations of total petroleum hydrocarbons (TPH) as gasoline of 1,900 milligrams per kilogram (mg/kg), TPH as diesel of 220 mg/kg, TPH as motor oil of 1,000 mg/kg, TPH as hydraulic oil of 1,400 mg/kg, and lead beneath the building of 2,000 mg/kg. Petroleum was also detected in groundwater at maximum concentrations of 3,000 micrograms per liter (µg/L) of total petroleum hydrocarbons as diesel (TPH-d), 3,700 µg/L total petroleum hydrocarbons as gasoline (TPH-g), 9,400 µg/L as total petroleum hydrocarbons as motor oil (TPH mo), 5.3 µg/L benzene, 3.3 µg/L methyl tert-butyl ether (MTBE) and 2.7 µg/L of naphthalene. With the exception of the soil samples collected beneath the building, the results of the 2015 investigation were generally consistent with data used to evaluated closure of LUST Case RO0000495 in 2010.

In 2021, ACDEH was notified by the property owner that the proposed residential redevelopment was no longer being considered and the site would remain an active service station. Therefore, ACDEH administratively closed CPS Case No. RO0003154 associated with proposed residential redevelopment, with requirements that if a change in land-use or redevelopment were proposed, ACDEH would require additional evaluation of residual contamination relative to the proposed redevelopment under a new CPS case. As a result of the proposed project, ACDEH has reopened the CPS case to evaluate site conditions relative to potential impacts from past site uses to affect future on-site construction workers, utility workers, and EV charging station users, and for potential migration impacts to off-site receptors via migration of soil vapor along planned utility lines.

In 2021, a Phase I Initial Site Assessment was prepared by Partner Engineering and Science to better understand the recognized environmental conditions on the project site. Following the Phase I Initial Site Assessment, Partner Engineering and Science conducted a Phase II Subsurface Investigation at the subject property to evaluate the potential impact of petroleum hydrocarbons, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and/or metals to soil, soil gas, and/or groundwater as a consequence of a release or releases from the on-site gasoline service station and automotive repair operations.²⁹ The Phase II Subsurface Investigation Report collected 19 soil

²⁸ State Water Resources Control Board (SWRCB). 2024. Geotracker Database. Website: <https://geotracker.waterboards.ca.gov/> (accessed June 19, 2024).

²⁹ Partner Engineering and Science. 2022. Phase II Subsurface Investigation Report for 29 Wildwood Avenue Caulfield Bridge Project. February 2.

samples, 3 groundwater samples, and 6 soil gas samples from the project site. The results of these investigations were as follows:

- None of the analyzed soil samples contained detectable concentrations of TPH, PCBs, VOCs, or metals exceeding regulatory screening criteria, indicating no significant release or releases from the current gasoline service station and automotive repair operations.
- TPH-d was detected in one of the analyzed groundwater samples at a concentration exceeding regulatory screening criteria; however, the groundwater beneath the subject property would not be used as a source of drinking water as part of the proposed project and would likely not represent a significant threat to human health or the environment.
- Benzene was detected in two soil gas samples above applicable regulatory screening criteria. The source of these benzene impacts is unknown; however, it is likely related to the historical and/or current on-site operations at the subject property.

The Phase II Site Investigation concluded that although soil gas impacts were above applicable regulatory screening criteria, the levels appear to be within the acceptable range for the commercial/industrial occupancy of the project site. Given the concentrations detected and the commercial/industrial occupancy of the project site, adverse impacts to the current and/or future occupants were unlikely to be significant.³⁰

State UST regulations require the removal of tanks and associated fuel dispensing features upon a station's permanent closure. As outlined in Section 2.2.5, removal of the existing USTs at the project site would occur prior to commencement of the proposed project. Tank removal would be conducted in accordance with the requirements of the UST removal permit and under the oversight of ACDEH. UST removal activities would include removal of the existing canopy to provide access to the existing USTs; draining the USTs; removal of the three USTs, two fuel dispenser islands and associated piping; sampling of excavated areas; and removal of soil with evidence of petroleum products and backfilling excavations with clean fill. As part of the UST removal, the project sponsor will be required to prepare and implement a Health and Safety Plan, Soil Management Plan, Stormwater Pollution Prevention Plan, Air Monitoring Plan, Traffic Control Plan and Construction Management Plan.

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less Than Significant Impact)

Hazardous materials are chemicals that could potentially cause harm during an accidental release and are defined as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer. Hazardous substances include all chemicals regulated under the United States Department of Transportation (DOT) "hazardous materials" regulations and the United States Environmental Protection Agency (EPA) "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The severity of any such exposure is dependent upon the type, amount, and characteristics of the hazardous

³⁰ Partner Engineering and Science. 2022. Op. cit.

material involved; the time, location, and nature of the event; and the sensitivity of the individual or environment affected.

Construction. Potentially hazardous materials, such as construction materials, fuels, lubricants, and solvents, would be used during the demolition, grading and site preparation, and construction phases of the proposed project. However, the amount of hazardous chemicals present during construction would be minor and would be used in compliance with existing government regulations.

Construction of the proposed project would also require demolition of existing site structures, removal of hydraulic lifts located inside the station building, and potential removal of any additional residual contaminated soil remaining following removal of the existing USTs. Demolition of the existing site structures would require further investigation to determine if lead-based paint (LBP) and asbestos-containing materials (ACM) are present. If these hazardous building materials were not appropriately abated and disposed of, demolition of existing structures could result in the release of these hazardous building materials into the environment and exposure of construction workers and the public.

The removal of hazardous building materials prior to demolition of structures is governed by federal and State laws and regulations. Federal regulations require that LBP be removed prior to demolition if the paint is loose and peeling. Loose and peeling paint must be disposed of as a State and/or federal hazardous waste if the concentration of lead exceeds applicable waste thresholds. State and federal construction worker health and safety regulations require air monitoring and other protective measures during demolition activities where lead-based paint is present, as well as notification to the California Division of Occupational Safety and Health (DOSH) for abatement activities.

Workers who conduct hazardous materials abatement and demolition activities must be trained in accordance with Occupational Health and Safety Administration (OSHA) and California OSHA (Cal-OSHA) requirements. Hazardous building materials removed during construction must be transported in accordance with DOT regulations and disposed of in accordance with the federal Resource Conservation and Recovery Act (RCRA), the California Code of Regulations, and/or the California Universal Waste Rule at a facility permitted to accept the wastes. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. If asbestos is identified, the Bay Area Air Quality Management District (BAAQMD) Regulation 11-2-401.3 requires notification to be made to BAAQMD prior to demolition activities. Other hazardous building materials, such as electrical equipment and fluorescent light ballasts containing PCBs, and fluorescent tubes or thermostats containing mercury, must be removed from buildings prior to demolition and disposed of in accordance with the California Universal Waste Rule and other federal and State regulations. Compliance with these regulations would ensure that demolition and removal of existing structures on the project site would be less than significant.

As outlined in Section 2.2.5, removal of the existing USTs at the project site would occur separate from and prior to commencement of the proposed project. Contaminated soil encountered during

removal of the UST, dispenser island and piping would be removed as part of the UST removal. Prior to redevelopment, additional subsurface investigation activities will be required to evaluate chemicals of concern (COCs) in soil, groundwater and/or soil vapor from potential release(s) to the subsurface from the auto repair facility and management of hazardous waste during the operation of the site as a service station. Depending on the results of the investigations, additional remedial activities may be required to protect construction workers during demolition and redevelopment of the site, future site occupants, and the adjacent community.

The project sponsor will be required to submit investigation work plans, investigation reports, and Remedial Action Implementation Plan to Alameda County Environmental Health Department (ACEHD) for review and approval. Coordination of implementation of the remediation work with construction of the proposed project will be dependent on the extent of contamination, risk to human health, and the redevelopment plans and schedule. In addition to the Remedial Action Implementation Plan, the project sponsor will be required to submit a Health and Safety Plan, Soil Management Plan, Stormwater Pollution Prevention Plan, Air Monitoring Plan, Traffic Control Plan and Construction Management Plan to the City of Piedmont and ACEHD for review and approval.

During construction of proposed improvements, hazardous materials (e.g., fuel, oils, and paints) would be routinely transported, stored, and used at the project site. As described in detail under Section 4.10, Hydrology and Water, management of hazardous materials during construction activities would be subject to the requirements of the Piedmont City Code, which requires implementation of BMPs that include hazardous materials storage requirements. For example, construction site operators must store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

Compliance with existing regulations, including the requirements of ACDDEH, during construction would ensure that potential impacts associated with hazardous material use, transport, and disposal would be less than significant.

Operation. The proposed project would result in the redevelopment of the project site with an EV charging facility that would include a total of three covered charging areas. Normal operations would not introduce potentially hazardous materials. Potentially hazardous materials such as fuels and solvents may be used during routine maintenance activities during operation of the proposed project. California law requires all facilities that use or store more than certain quantities of hazardous materials on site to file hazardous materials business plans that list and map the location of on-site hazardous materials storage and use and that describe procedures in the event of an accident. Operation of the proposed project would not produce hazardous emissions or require handling, transport, or disposal of acutely hazardous materials, substances, or waste. Therefore, this impact would be less than significant.

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

Exposure to hazardous materials during the construction and operation of the proposed on-site uses could result from: (1) the improper handling or use of hazardous substances; (2) a transportation

accident; or (3) inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake).

Construction. As described above, construction of the proposed project would require demolition and removal of existing structures and may require removal of residual contaminated soil from the project site, as well as use of hazardous materials (e.g., oils, fuels, solvents, paints) associated with construction of proposed improvements. An accidental release of these hazardous materials during project construction could result in exposure of construction workers, the public, and/or the environment to hazardous materials.

In accordance with the Piedmont City Code and the Alameda County Clean Water Program, the proposed project would be required to implement BMPs to reduce the risk of spills or leaks from reaching the environment, including procedures to address minor spills of hazardous materials. Measures to control spills, leakage, and dumping must be addressed through structural as well as nonstructural BMPs. For example, equipment and materials for cleanup of spills must be available on site, and spills and leaks must be cleaned up immediately and disposed of properly. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

The transportation of hazardous materials is subject to both RCRA and DOT regulations. Hazardous materials would be transported by a licensed hazardous waste hauler and disposed of at facilities that are permitted to accept such materials. If a discharge or spill of hazardous materials occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and contain the spill), and is responsible for the discharge cleanup.

As described above, consistent with regulatory requirements, the project sponsor would prepare and implement a Health and Safety Plan, Soil Management Plan, Stormwater Pollution Prevention Plan, Air Monitoring Plan, Traffic Control Plan, and Construction Management Plan to ensure contaminated soils and materials are appropriately handled, removed from the site, and disposed of in compliance with federal, State, and local regulations. Compliance with these regulatory requirements would ensure that impacts associated with the accidental release of hazardous materials during project construction would be less than significant.

Operation. The proposed project would not involve storage or use of hazardous materials (except for small quantities for routine maintenance as described above) or generation of significant hazardous wastes. In addition, as described above, the project sponsor would remove the existing USTs, as required by and with oversight from ACDEH, prior to and separate from the proposed project. As such, potential significant impacts related to a foreseeable upset associated with operation of the proposed EV charging facility would not be expected. Further, as described above, the Phase II Subsurface Investigation prepared in 2022 concluded that although soil gas impacts were above applicable regulatory screening criteria, the levels appear to be within the acceptable range for the commercial/industrial occupancy of the project site. This impact would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Less Than Significant)

The Wildwood Children's School is located at 8 Wildwood Avenue and is directly adjacent to the southeast corner of the project site. No other schools are identified within 0.25 mile of the project site. As described in Sections 4.9.a and 4.9.b, the project sponsor would be required to prepare and implement a Health and Safety Plan, Soil Management Plan, Stormwater Pollution Prevention Plan, Air Monitoring Plan, Traffic Control Plan, and Construction Management Plan to ensure contaminated soils and materials are appropriately handled, removed from the site, and disposed of in compliance with federal, State, and local regulations. In addition, operation of the proposed project would not involve storage or use of hazardous materials (except for small quantities for routine maintenance as described above) or generation of significant hazardous wastes. Compliance with these regulatory requirements would ensure that impacts associated with the emission or handling of hazardous materials within 0.25 mile of an existing or proposed school would be less than significant.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Less Than Significant)

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop, at least annually, an updated list of hazardous materials release sites known as the Cortese List. The project site is currently regulated by ACDEH and identified as "Shell Redevelopment" (CPS Case No. RO0003154). The project site is therefore included on lists of hazardous materials release sites compiled pursuant to Government Code Section 65962.5.

The project site is currently listed in the RWQCB Geotracker online database as an open "Cleanup Program Site."³¹ Cleanup Program Sites include all "non-federally owned" sites that are regulated under the SWRCB's Site Cleanup Program and/or similar programs conducted by each of the nine RWQCBs. The project site is overseen by ACDEH, which is the CUPA that coordinates and enforces numerous local, State, and federal hazardous materials management and environmental protection programs in the county.

As discussed above, the disturbance of soil impacted with hazardous materials could result in a release of hazardous materials into the environment. ACDEH provides and would continue to provide oversight of the project site, including the proposed redevelopment. The project sponsor would be required to prepare and implement the necessary plans for proposed construction, as well as provide ongoing monitoring, if required by ACDEH. Compliance with these regulatory requirements would ensure that the proposed project would not create a significant hazard to the public or the environment as a result of being located on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5. This impact would be less than significant.

³¹ State Water Resources Control Board (SWRCB). 2024. Geotracker Database. Website: <https://geotracker.waterboards.ca.gov/> (accessed June 19, 2024).

- e. *Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (No Impact)*

The proposed project is not located within 2 miles of a public airport, and the project site is not located in an airport land use plan area. The closest airport to the project site is Oakland International Airport, which is approximately 12 miles away. Therefore, the proposed project would not result in a safety hazard or excessive noise for people accessing, residing, or working at the project site. No impact would occur.

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less Than Significant Impact)*

The Piedmont Police Department (PPD) coordinates the response of disaster service workers within the city during a major disaster or unusual occurrence. According to the PPD *Emergency Operations Procedures*, the City has established the following evacuation routes:

- Moraga Avenue to State Highway 13 or Pleasant Valley Avenue;
- Oakland Avenue to Grand Avenue or Bayo Vista Avenue;
- Crocker Avenue to Mandana Avenue;
- Hampton Road to Estates Drive onto Park Boulevard;
- LaSalle Avenue to Mountain Boulevard;
- Wildwood Avenue to Winsor Avenue or Grand Avenue; and
- Blair Avenue to Harbord Drive.³²

The proposed project site is located at the intersection of Wildwood Avenue and Grand Avenue and is therefore along a City-identified evacuation route. However, the proposed project would not reduce the number of traffic lanes on any adjacent streets and would not alter the existing street grid; therefore, it would not alter or obstruct emergency evacuation routes or the response plan. Further, as described in Section 4.17, the proposed project would generate fewer vehicle trips than the existing land use, thereby reducing the total number of vehicles on adjacent roadways during project operation. Thus, the proposed project would not be expected to impair the function of nearby emergency evacuation routes or response plan. This impact would be less than significant.

- g. *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (No Impact)*

According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within any State Responsibility Areas (SRAs) for fire service and is not within a very high fire hazard severity zone,³³ nor is the project site located in a fire hazard area as designated in the

³² City of Piedmont. 2023. *2023-2031 Housing Element Implementation Project, Draft Environmental Impact Report, SCH# 2022020362*. November.

³³ California Department of Forestry and Fire Protection (CAL FIRE). n.d. FHSZ Viewer. Website: <https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/> (accessed June 19, 2024).

City of Piedmont General Plan.³⁴ Therefore, the proposed project would not expose people or structures to a significant loss, injury, or death involving wildland fires. No impact would occur.

³⁴ City of Piedmont. 2009. Op. cit.

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (Less Than Significant Impact)

The SWRCB and nine RWQCBs regulate water quality of surface water and groundwater bodies throughout California. In the Bay Area, including the project site, the San Francisco Bay Regional Water Quality Control Board (Water Board) is responsible for implementing the Water Quality Control Plan (Basin Plan). The Basin Plan establishes beneficial water uses for waterways and water bodies within the region. Section 303(d) of the federal Clean Water Act (CWA) requires that states identify water bodies including bays, rivers, streams, creeks, and coastal areas that do not meet water quality standards and the pollutants that are causing the impairment. Total Maximum Daily Loads (TMDLs) describe the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL establishes limits for pollutant discharges into impaired water bodies.

Operation. Project operations are subject to the California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, Order No. R2-2022-0018, as amended by Order No. R2-2023-0019, NPDES Permit No. CAS612008 (Municipal Regional Stormwater NPDES Permit [MRP]). The MRP prohibits

discharges, sets limits on pollutants being discharged into receiving waters, and requires implementation of technology-based standards. The MRP requires co-permittees to develop and implement standard design and post-development BMP guidance to guide application of Low Impact Development (LID) BMPs to the maximum extent practicable.

MRP Provision C.3 addresses post-construction stormwater management requirements for regulated projects. Regulated projects include new development and redevelopment projects that create or replace 5,000 square feet or more of impervious surface and special land use categories that create or replace 5,000 square feet or more of impervious surface. Provision C.3 requires regulated projects to implement LID source control, site design, and stormwater treatment. LID employs principles such as preserving and recreating natural landscape features and minimizing impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention areas, bioswales, and planter/tree boxes.

MRP Provision C.3.g pertains to hydromodification management, which requires certain regulated projects to ensure that stormwater discharges from the project site do not cause an increase in the erosion potential of the receiving stream over the existing condition. Provision C.3.g provides various exceptions from hydromodification management requirements, including if the post-project impervious surface area is less than or the same as the pre-project impervious surface area or is less than 1 acre. Because the proposed project would reduce the extent of impervious surface at the site, it would not be considered a regulated project and would not be required to comply with MRP Provision C.3g.

The City of Piedmont is a member of the Alameda County Clean Water Program, which provides stormwater management for the area including the project site. The 9,691-square-foot (0.22-acre) project site is currently developed and includes a total of approximately 9,200 square feet (95 percent) of impervious surfaces. The proposed project would reduce the amount of impervious surface on the site to 8,096 square feet and provide 1,595 square feet of previous area, including landscaping and bio-retention. Therefore, the proposed project would comply with the provisions of the MRP. Water quality impacts associated with operation of the proposed project would be less than significant.

Construction. Runoff water quality is regulated by the NPDES Program (established through the federal CWA). The NPDES program objective is to control and reduce pollutant discharges to surface water bodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES Program is administered by the Water Board. According to the water quality control plans of the Water Board, any construction activities, including grading, that would result in the disturbance of 1 acre or more would require compliance with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities

(Construction General Permit), Order No. 2022-0057-DWQ, NPDES No. CAS000002.³⁵ The project site is approximately 0.22 acre and, as such, would not be required to comply with the Construction General Permit.

However, Piedmont City Code Section 30.10 requires construction contractors to comply with and undertake the latest BMPs for construction projects adopted by the Alameda County Clean Water Program and incorporate erosion and sediment control plans into the building permit. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. BMP implementation must be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association's *Stormwater Best Management Handbook: Construction* or other BMPs shown to provide equivalent or better protection.

Construction activities associated with the proposed project would cause disturbance of soil during excavation work, which could adversely impact water quality. Contaminants from construction vehicles and equipment and sediment from soil erosion could increase the pollutant load in runoff being transported to receiving waters during project construction. Compliance with the City of Piedmont City Code, which requires preparation and implementation of erosion and sediment control plans, would ensure construction impacts related to surface water quality standards, waste discharge requirements, and surface water quality would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less Than Significant Impact)

The City of Piedmont lies within the East Bay Plain Subbasin for which the East Bay Municipal Utility District (EBMUD) serves as the Groundwater Sustainability Agency (GSA). Water supply in Piedmont is also provided by EBMUD. The majority of the water delivered by EBMUD originates from the Mokelumne River watershed, and the remaining water originates as runoff from the protected watershed lands and reservoirs in the East Bay Hills. As described further in Section 4.19.b, the proposed project would not significantly increase water demand at the site, and because the City's municipal water supply does not come from groundwater, water use during operation of the proposed project would not affect groundwater.

Construction of the proposed project would require excavation for utility lines, canopy footings, and bioretention basins. Therefore, dewatering of groundwater may be required during construction activities involving excavation. Release of dewatered groundwater to surface waters can introduce total dissolved solids and other constituents to surface waters and could cause degradation of the receiving water quality. In the event that groundwater is encountered during construction and groundwater dewatering is necessary, any groundwater dewatering during excavation would be conducted in accordance with the requirements of the Construction General Permit, which allows

³⁵ State Water Resources Control Board (SWRCB). 2022. NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002).

the discharge of dewatering effluent if the source of the water is uncontaminated groundwater and is properly filtered or treated using appropriate technology. Any necessary dewatering for project construction would be localized and temporary and would not result in the lowering of surrounding groundwater levels. Development of the proposed project would result in an increase in pervious surfaces on the project site, which would improve groundwater recharge compared to existing conditions. Therefore, the proposed project would not result in a significant decrease in groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the local groundwater table level.

For the reasons listed above, impacts related to the decrease of groundwater supplies or interference with groundwater recharge would be less than significant.

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i. Result in substantial erosion or siltation on- or off-site;*
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. Impede or redirect flood flows? (Less Than Significant Impact)*

The proposed project would not alter the course of a stream or river. The project site is located in an urbanized and developed area and would not substantially alter the existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site. Furthermore, compliance with construction- and operation-phase stormwater requirements, as described in Section 4.10.a, above, would further ensure that development of the project would not result in substantial erosion or siltation on or off site. This impact would be less than significant.

- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? (No Impact)*

According to the City of Piedmont General Plan, there are no Federal Emergency Management Agency (FEMA) designated flood plains in Piedmont;³⁶ therefore, the project site is not located within a FEMA-designated 100-year or 500-year floodplain. In addition, there are no levees protecting the site from flooding and, as a result, no risk of failure. The project site and surrounding areas are generally level and would not be subject to mudflows. The project site is not located in an area mapped by the California Emergency Management Agency as being potentially inundated by a tsunami³⁷ and no seismically induced seiche waves have been documented in the San Francisco Bay

³⁶ City of Piedmont. 2009. Op. cit.

³⁷ California Department of Conservation (DOC). 2023. *California Tsunami Maps*. Website: <https://www.conservation.ca.gov/cgs/tsunami/maps> (accessed June 19, 2024).

throughout history.³⁸ Therefore, there would be no impacts related to the release of pollutants in the event of inundation due to flood hazard, tsunamis, or seiches.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less Than Significant Impact)

In the San Francisco Bay Area, including the project site, the Water Board is responsible for implementation of the Basin Plan, which establishes beneficial water uses for waterways and water bodies within the region. As previously discussed, the proposed project would comply with existing NPDES permit requirements, including the MRP, and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff, in accordance with City requirements and the Alameda County Clean Water Program. Compliance with these regulatory requirements would ensure that the proposed project would not degrade or alter water quality, thereby causing the receiving waters to exceed the water quality objectives or impair the beneficial use of receiving waters. As such, the proposed project would not result in water quality impacts that would conflict with the Basin Plan. Construction and operational impacts related to a conflict with the Basin Plan would be less than significant.

The project site is located within the East Bay Plain Subbasin, a mapped Division of Water Rights (DWR) groundwater basin boundary. The East Bay Plain Subbasin is designated as a medium-priority basin under DWR's 2019 Phase 1 Basin Prioritization.³⁹ As a DWR-designated medium-priority basin, the East Bay Plain Subbasin is subject to the requirements of the Sustainable Groundwater Management Act (SGMA). EMBUD and the City of Hayward, the GSAs for the East Bay Plain Subbasin, have developed a Groundwater Sustainability Plan.⁴⁰ As discussed in Section 4.10.b, the proposed project would not interfere with groundwater recharge in the vicinity of the project site. Therefore, the proposed project would not conflict with or obstruct the implementation of a sustainable groundwater management plan, and this impact would be less than significant.

³⁸ Association of Bay Area Governments and Metropolitan Transportation Commission. 2013. *Plan Bay Area*. July 18.

³⁹ California Department of Water Resources. 2019. SGMA Basin Prioritization Dashboard. Website: <https://gis.water.ca.gov/app/bp-dashboard/final/> (accessed June 19, 2024).

⁴⁰ Luhdorff & Scalmanini Consulting Engineers et al. 2022. *East Bay Plain Subbasin Groundwater Sustainability Plan*. January. Website: <https://www.ebmud.com/water/about-your-water/water-supply/groundwater-sustainability-agencies/east-bay-plain-subbasin-gsp-documents> (accessed June 19, 2024).

4.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community? (No Impact)

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying area. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The project site is located in an urban area in Piedmont and is surrounded by commercial and residential uses. The proposed project would result in the redevelopment of the project site with an EV charging facility. The proposed project would not require the construction of any new infrastructure that would divide an established community and would not remove any means of access. The proposed project would not result in a physical division of an established community or adversely affect the continuity of land uses in the vicinity; therefore, no impact would occur.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (Less Than Significant Impact)

As previously discussed, the City of Piedmont is the Lead Agency for environmental review. The project site has a General Plan land use designation of Mixed Use and is within the Zone D zoning district. According to Division 17.26 of the City Code, Zone D is established to regulate and control commercial and mixed-use commercial/residential development, where pedestrian-oriented commercial development will serve the neighborhood, consistent and in harmony with the character of the neighborhood and adjacent residential areas. Commercial uses that will serve the neighborhood are those uses which neighbors would be expected to use on a regular basis. They do not include uses that would be expected to draw the major portion of their clientele from outside the neighborhood.

The proposed project would result in the demolition of the existing gas station and redevelopment of the project site with an EV charging facility. The proposed project would require a Conditional Use Permit for the new use as an EV charging hub; a Non-Residential Sign Design Review Permit and Design Review Permit for the construction of canopies, signage, kiosks, fencing and accessory

equipment and features; and a variance to allow for the construction of a proposed canopy structure within the 10-foot street-yard setback along Wildwood Avenue.

It should be noted that according to CEQA, policy conflicts do not, in and of themselves, constitute a significant environmental impact. Policy conflicts are considered to be environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this IS under specific topical sections. The proposed project would not result in any direct physical impacts that cannot be mitigated to a less than significant level.

Although the proposed project would require a variance to allow for the construction of the proposed canopy structure within the setback, the proposed project would not conflict with any policy or goal in the City's General Plan or zoning regulations that were adopted for the purpose of avoiding or mitigating an environmental effect, and this impact would be less than significant.

4.12 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 that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

There are no known mineral resources within Piedmont according to the Natural Resources Element of the City of Piedmont General Plan.⁴¹ Therefore, the proposed project would not result in the loss of availability of a known mineral resource of value to the region or residents of the State, and no impact would occur.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Refer to Section 3.12.a. The proposed project would not result in the loss of availability of any known locally important mineral resource recovery sites. No impact would occur.

⁴¹ City of Piedmont. 2009. Op. cit.

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA), and this scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements which better represent how humans are more sensitive to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} , the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally

exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Regulatory Framework. A project would result in a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Piedmont.

In order to assess potential noise impacts, the Piedmont City Code⁴² sets for the applicable operational noise standard and appropriate construction hours. According to Chapter 8 of the Piedmont City Code, which adopts the applicable noise measures included in the 2022 California Residential Code, machinery that generates perceptible noise is required to include mitigating equipment which reduces the sound at the edge of the property to no more than 50 dBA.

According to Chapter 12 of the City's Municipal Code, operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition activities between the hours of 6:00 p.m. and 8:00 a.m. each day, Sunday evening through Saturday morning, and between the hours of 6:00 p.m. and 9:00 a.m. Saturday evening through Sunday morning is specifically prohibited.

Existing Setting. Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The project site is surrounded by a mix of residential and commercial uses as well as a synagogue to the north. The closest sensitive receptor is the residence adjacent to the northern part of the project boundary.

Existing noise sources at the project site are primarily associated with traffic on surrounding roadways, including Grand Avenue and Wildwood Avenue.

To assess existing noise levels, LSA conducted three long-term noise measurements in the vicinity of the project site. The long-term (24-hour) noise level measurements were conducted on June 13 through June 14, 2024, using three Larson Davis Spark 706RC Dosimeters. Table 4.13.A provides a summary of the measured hourly noise levels, broken down to daytime and nighttime at location from the long-term noise level measurements. As shown in Table 4.13.A, the measured noise levels range from 55.6 dBA Leq to 62.7 dBA Leq at the noise measurement location along the norther property line of the project. Noise measurement sheets are provided in Appendix B. Figure 4.13-1 shows the long-term monitoring locations.

⁴² City of Piedmont. 2024a. op. cit.



FIGURE 4.13-1

LSA

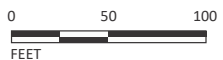
LEGEND



Project Location



LT-1 Long-term Noise Monitoring Location



SOURCE: Google Earth 2024

I:\20241601\G\Noise_Locs.ai (7/3/2024)

29 Wildwood Avenue Electric Vehicle Charging Station
Noise Monitoring Locations

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Table 4.13.A: Long-Term 24-Hour Ambient Noise Monitoring Results

Location		Daytime Noise Levels ¹ (dBA L _{eq})	Nighttime Noise Levels ² (dBA L _{eq})
LT-1	Approximately 60 feet east of the Grand Avenue centerline along the northern property line adjacent to 1246 Grand Avenue.	55.6 - 62.0	55.8 - 62.7
LT-2	Approximately 20 feet southeast of the Wildwood Avenue in front of the home at 12 Wildwood Avenue.	55.2 – 59.9	46.4 – 55.3

Source: Compiled by LSA (2024).

Note: Noise measurements were conducted from June 13 to June 14, 2024.

¹ Daytime Noise Levels = noise levels during the hours from 7:00 a.m. to 10:00 p.m.

² Nighttime Noise Levels = noise levels during the hours from 10:00 p.m. to 7:00 a.m.

dBA = A-weighted decibels

ft = foot/feet

L_{eq} = equivalent continuous sound level

- a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **(Less Than Significant with Mitigation Incorporated)***

Construction-Period Impacts. Construction of the proposed project could include demolition and construction activities that would result in a temporary increase in ambient noise levels in the project site vicinity. Maximum construction noise levels would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. Project construction would occur for approximately 3 to 4 months. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table 4.13.B lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Table 4.13.B: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L _{max}) at 50 Feet ¹
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

¹ Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.

L_{max} = maximum instantaneous sound level

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site for the proposed project, which would incrementally increase noise levels on roads leading to the site. As shown in Table 4.13.B, there would be a relatively high single-event noise exposure potential at a maximum level of 85 dBA L_{max} with trucks passing from 50 feet.

The second type of short-term noise impact is related to noise generated during excavation, grading, and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 4.13.B lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Average maximum noise levels range up to 86 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

As identified above, the project site is surrounded by residential and commercial uses as well as a synagogue. The closest sensitive receptor is the residence adjacent to the northern part of the project boundary, 57 feet from the center of the project. The 7-foot distance would decrease the noise level by approximately 2 dBA compared to the noise level measured at 50 feet from the construction activity. Therefore, the closest off-site residences may be subject to short-term construction noise levels of 87 dBA L_{max} when construction is occurring at the center of the project site.

Construction noise is temporary and would stop once project construction is completed. Further, the proposed project must comply with the construction hours specified in the Piedmont City Code, which prohibits construction activities between the hours of 6:00 p.m. and 8:00 a.m. each day, Sunday evening through Saturday morning, and between the hours of 6:00 p.m. and 9:00 a.m. Saturday evening through Sunday morning. Compliance with the Piedmont City Code would ensure construction-related noise would not be generated during the more sensitive nighttime hours.

Implementation of Mitigation Measure NOI-1, which requires implementation of Best Management Practices for construction noise and compliance with the Piedmont City Code would reduce construction noise impacts to a less than significant level.

- Mitigation Measure NOI-1:** The project contractor shall implement the following measures during construction of the project:
- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
 - Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
 - Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.

- Construction haul trucks and materials delivery traffic shall avoid residential areas whenever feasible.
- Prohibit extended idling time of internal combustion engines by either shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.
- Ensure that all general construction related activities are restricted to between the hours of 8:00 a.m. and 6:00 p.m. on Monday through Saturday and between the hours of 9:00 a.m. and 6:00 p.m. on Sundays.
- Designate a “disturbance coordinator” at the City of Piedmont who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem, and ensure noise levels do not exceed noise ordinance standards.

With implementation of Mitigation Measure NOI-1, which requires implementation of BMPs for construction noise (including equipment mufflers and placement of noise equipment away from sensitive receptors) and compliance with the Piedmont City Code, potential impacts associated with construction noise would be less than significant with mitigation incorporated.

Long-Term Noise Impacts. The project would generate long-term noise impacts from both traffic and stationary noise sources, as discussed below.

Traffic Noise Impacts. As identified above, existing noise sources at the project site are primarily associated with traffic on surrounding roadways, including Grand Avenue and Wildwood Avenue. According to the City’s General Plan, the project site is subject to a traffic noise contour of approximately 65 dBA L_{dn} from Grand Avenue. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer.

Implementation of the proposed project would result in a decrease in new daily trips on local roadways in the project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level. This analysis assumes that the proposed project would decrease vehicle traffic by approximately 123 net average daily trips as described in Section 4.17, Transportation.

According to the City of Piedmont General Plan, Grand Avenue carries approximately 8,000 average daily trips.⁴³ Project trips would represent a small decrease in noise levels, approximately 0.067 dBA L_{dn} based on the following equation:

$$\text{Change in (dBA)} = 10 * \log_{10} \left(\frac{\text{Current Volume}}{\text{Future Volume}} \right)$$

Therefore, based on the existing traffic noise levels at the project site and the decrease in traffic noise levels associated with the proposed project, traffic noise impacts would be less than significant.

Stationary Noise Impacts. Implementation of the proposed project would generate various on-site stationary noise sources, including charging dispensers, power cabinets, switchgear (distribution panel and transformer), air pump, and charging station activities. While it is expected that operation of the former automotive repair shop, which requires the use of equipment such as impact wrenches, compressors and car lifts, would have generated higher noise levels than the proposed project, the proposed project would include installation of equipment along the northern property line that could generate noise at the neighboring property.

As shown in Table 4.13.A, existing hourly noise levels, without the operation of the previous gas station and automotive repair shop, exceed the City's noise level standard of 50 dBA L_{eq}. When ambient noise levels exceed the local jurisdiction noise standards, an impact would occur if the operation of the project would create a readily perceptible increase in noise which is typically defined as a 3 dBA increase. Operation of EV charging equipment would be required to comply with Section 8.02.020 of the Piedmont City Code, which requires machinery to include mitigating equipment to reduce the sound at the edge of the property. In compliance with the Piedmont City Code, the project sponsor would be required to design the mechanical equipment such that a 3 dBA increase would not occur at the residential uses to the north. This can be achieved through methods such as equipment selection or noise reduction features such as equipment enclosures or property line barriers. Compliance with the Piedmont City Code would ensure that noise associated with operation of equipment at the project site would be below established thresholds. Therefore, stationary noise impacts would be less than significant.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels? (Less Than Significant Impact)

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure.

⁴³ City of Piedmont. 2009. op. cit.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), rail activity, and occasional traffic on rough roads.

The roadways surrounding the project area, including Grand Avenue, Wildwood Avenue, and the existing driveways, are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur and, therefore, no vibration impact analysis of on-road vehicles is necessary.

The following vibration impact analysis will assess the potential for structural damages using vibration levels in PPV (in/sec) because vibration level in PPV is best used to characterize potential for damage.

Construction Vibration. Construction of the proposed project could result in the generation of groundborne vibration. The *FTA Transit Noise and Vibration Impact Assessment Manual*⁴⁴ (FTA Manual) indicate that for a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 in/sec in PPV.

Table 4.13.C shows the PPV and VdB values at 25 feet from the construction vibration source. As shown in Table 4.13.C, bulldozers, and other heavy-tracked construction equipment (expected to be used for this project) generate approximately 0.089 PPV in/sec of ground-borne vibration when measured at 25 feet, based on the FTA Manual. The distance to the nearest buildings for potential vibration damage analysis is measured between the nearest off-site buildings and the project construction boundary (assuming the construction equipment would be used at or near the project setback line).

Outdoor site preparation for the proposed project is expected to include the use of bulldozers and loaded trucks. The greatest levels of vibration are anticipated to occur during the site preparation phase. All other phases are expected to result in lower vibration levels.

⁴⁴ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. Office of Planning and Environment. Report No. 0123. September.

Table 4.13.C: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L _v at 25 feet	
	PPV (in/sec)	L _v (VdB) ^a
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).

^a RMS vibration velocity in decibels (VdB) is 1 μin/sec.

μin/sec = micro-inches per second

FTA = Federal Transit Administration

in/sec = inches per second

L_v = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity decibels

The formula for vibration transmission is provided below.

$$PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$$

For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer, which would generate 0.089 PPV (in/sec) at 25 feet. The closest surrounding buildings to the project site include a single-family residence at 1246 Grand Avenue and a single-family residence at 31 Wildwood Avenue, adjacent to the northern boundary of the project site. Should construction activities occur within 15 feet of the residences to the north, vibration levels of 0.2 PPV (in/sec) or more could occur. This vibration level at the nearest building from construction equipment would exceed the FTA threshold 0.2 in/sec PPV for building damage.

As a Standard Condition of Approval, the City requires the following:

Sound and Vibration Mitigation Plan and Review. As required by the Director of Public Works, the Property Owner shall submit a plan prepared by a licensed engineer of the Property Owner's choice that fully assesses the existing site conditions for the mitigation and monitoring of vibration and decibel levels at the Project during construction (including being periodically present at the construction site during excavation and foundation work). If, in the Engineer's sole discretion, such monitoring indicates that the sound or vibration levels exceed those anticipated in the Property Owner's Construction Management Plan and/or the Sound and Vibration Mitigation Plan, all work on the Project may be immediately stopped by the City and may not resume until the City Engineer is fully assured that the sound and vibration transmissions generated by work on the Project can be maintained at or below a reasonable level and duration.

- **Peer Review.** The City, at the Property Owner's sole expense, shall retain an independent engineering consultant to perform a peer-review of the Property Owner's Sound and Vibration Mitigation Plan and advise the City in connection with the Property Owner's proposals. The City Engineer shall select this independent engineering consultant, whose services shall be provided for the sole benefit of the City and whose reports and recommendations can be relied upon only by the City. The independent engineering consultant shall also review the building plans during the permit approval process and may provide periodic on-site observations during excavation and construction as deemed necessary by the City Engineer. The Property Owner shall provide payment for this at the time of the Building Permit submittal.

Compliance with this Standard Condition of Approval, which requires further evaluation of potential vibration levels during construction and development and implementation of a vibration monitoring and construction contingency plan to reduce vibration levels, would ensure that potential impacts associated with construction vibration would be less than significant.

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (**Less Than Significant Impact**)*

The closest airport to the project site is the Oakland International Airport, located approximately 12 miles southeast of the project site. The project site is not located within the 55 dBA L_{dn} noise contour and is not located within the vicinity of a private airstrip. Although aircraft-related noise may be audible on the project site, the proposed project would not expose people residing or working in the project area to excessive noise levels due to the proximity of a public airport. This impact would be less than significant.

4.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Less Than Significant Impact)*

The proposed project would result in the demolition of the existing gas and auto repair shop and construction of a 14-stall EV charging facility. As noted in Section 1.0, Project Information, the proposed facility would be managed off site by a customer service manager and EV chargers would be monitored remotely. Occasional maintenance of site facilities, EV chargers, and landscaping would be conducted. The project site is designated as Mixed Use, which is intended to provide primarily for commercial uses, with some residential use also allowed.

The proposed project would not result in direct population growth, as the use proposed is not residential and would not introduce a residential population on site, nor would the proposed project require a significant number of new employees. Therefore, the proposed project would not generate growth beyond that anticipated in the City's General Plan and the proposed project would not directly or indirectly induce population growth. This impact would be less than significant.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)*

The proposed project is currently developed with a gas station and auto repair shop; no housing is currently located on the project site. Therefore, the proposed project would not result in the displacement of housing and would not require the construction of replacement housing elsewhere. No impact would occur.

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection? (Less Than Significant Impact)

The Piedmont Fire Department (PFD) would provide fire protection services to the proposed project. The PFD provides fire, paramedic advanced life support/emergency medical, and emergency services to all areas within the city limits. The PFD fire station is located at 120 Vista Avenue, approximately 1 mile northeast of the project site.⁴⁵ Planned growth under the General Plan would increase calls for fire protection service in Piedmont. The proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. The proposed project could result in an incremental increase in demand for fire protection service due to the increase in daytime population at the project site and the potential for accidental hazardous materials releases or fires that could be associated with emergency situations at the charging facility. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access. In addition, the project applicant would be required to submit plans to PFD for review and approval prior to the issuance of building permits to ensure the project would conform to applicable building and fire codes.

The PFD would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would not be required. The proposed project would not result in a significant impact on the physical

⁴⁵ City of Piedmont. 2009. Op. cit.

environment due to the incremental increase in demand for fire protection and life safety services. The incremental increase in demand for services is not expected to adversely affect existing responses times to the site or within the city. Therefore, construction and operation of the proposed project would have a less than significant impact on fire protection and safety services and facilities.

ii. Police protection? (Less Than Significant Impact)

The PPD provides police protection services to the surrounding project area and project site. The PPD headquarters are located in the Piedmont Veterans Memorial Building at 403 Highland Avenue, approximately 1 mile northeast of the project site. Planned growth under the General Plan would increase calls for police protection service in the city. The proposed project is consistent with the site's General Plan designation and does not represent unplanned growth. Therefore, the proposed project is not expected to increase the demand for police protection services as it is consistent with the City's General Plan.

The PPD would continue to provide services to the project site and would not require additional officers to serve the project site, and the construction of new or expanded police facilities would not be required. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional police facilities or services. This impact would be less than significant.

iii. Schools? (Less Than Significant Impact)

The proposed project does not include any residential uses and therefore would not directly affect student population. Additionally, the proposed facility would be managed off site by a customer service manager and EV chargers would be monitored remotely; no new employees would be required. Therefore, the proposed project would not result in a substantial increase in the number of school-age children in the area, and this impact would be less than significant.

v. Parks? (Less Than Significant Impact)

The proposed project does not include any residential uses and would not generate a direct need for additional park space. As noted above, no new employees would be required to serve the proposed EV charging facility; therefore, the proposed project would not result in an increase in demand for parks. Therefore, the proposed project would have a less than significant impact related to parks.

vi. Other public facilities? (Less Than Significant Impact)

Development of the proposed project would not increase demand for other public services, including libraries, community centers, and public health care facilities. As previously discussed, the proposed project does not include development of residential uses and would not require any new employees who might move to Piedmont to serve the proposed project. Therefore, the proposed project would not result in an increased demand for public facilities, and this impact would be less than significant.

4.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (No Impact)*

The proposed project would include the demolition of the existing gas station and auto repair shop and redevelopment of the site with an EV charging facility. As such, the proposed project would not directly generate population growth that would result in an increase in the use of existing neighborhood and regional parks or other recreational facilities. Therefore, no impacts to parks or recreational facilities would occur as a result of the proposed project.

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (No Impact)*

Refer to Section 3.16.a. The proposed project consists of redevelopment of an existing gas station and auto repair shop site with an EV charging facility. The proposed project does not include recreational facilities and would not require the expansion of existing recreational facilities or construction of additional recreational facilities elsewhere, which might have an adverse physical effect on the environment. No impact would occur.

4.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (Less Than Significant Impact)*

The project's potential conflict with a program plan, ordinance, or policy addressing the circulation system is described below.

Roadway Analysis. As described in the Trip Generation and Vehicle Miles Traveled Analysis⁴⁶ (Appendix C), the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (2021)⁴⁷ provides trip generation rates for many land uses, including gasoline stations. Furthermore, the ITE *Trip Generation Handbook*, 3rd Edition (2017)⁴⁸ provides information regarding the rate of trips to a land use already on the roadway network and diverting to the land use as drivers pass by.

Trip generation data for EV charging stations were not provided in the *Trip Generation Manual*. Therefore, an independent data collection company was contracted to survey three EV charging stations for 3 days each. An average trip generation rate per charging position was calculated from the surveyed trip generation data.

Pass-by trips were calculated using methodology provided in the *Trip Generation Handbook*. Survey data identified that 58 percent of trips in the AM peak hour and 42 percent of trips in the PM peak hour to gasoline stations are by vehicles already traveling on the adjacent street. The lower value of 42 percent was applied to daily trips. Survey data collected at the EV charging stations by the independent data collection company found that the occurrence of pass-by trips to the EV charging stations was slightly lower than pass-by trips to the gasoline stations. In the AM peak hour, 47 percent of vehicles were already on the adjacent roads. In the PM peak hour, 39 percent of

⁴⁶ LSA Associates, Inc. 2024b. *Trip Generation and Vehicle Miles Traveled Analysis for 29 Wildwood Avenue, Piedmont, California*. June 14.

⁴⁷ Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual*, 11th Edition.

⁴⁸ ITE. 2017. *Trip Generation Handbook*, 3rd Edition.

vehicles were already on the adjacent roads. Throughout the day, 41 percent of vehicles were already on the adjacent roads.

Table 4.17.A summarizes the trip generation and pass-by trip data and compares traffic generated by the existing land use and the project. As Table 4.17.A indicates, the proposed project is anticipated to generate 123 fewer daily trips and fewer trips in the AM and PM peak hours than the existing gasoline station, even accounting for lower pass-by trip frequency at EV charging stations.

Table 4.17.A: Trip Generation Comparison

Land Use (ITE Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Gasoline/Service Station (944) ¹		Positions	172.01	5.14	5.14	10.28	6.96	6.95	13.91
EV Charging Station ²		Positions	33.43	0.90	0.80	1.70	0.93	0.96	1.89
Existing Land Uses									
Gasoline/Service Station	4	Positions	688	21	21	42	28	28	56
Pass-by Trips ³			(289)	(12)	(12)	(24)	(12)	(12)	(24)
Net Existing Trip Generation			399	9	9	18	16	16	32
Proposed Project Trip Generation									
EV Charging Station	14	Positions	468	13	11	24	13	13	26
Pass-by Trips ²			(192)	(6)	(5)	(11)	(5)	(5)	(10)
Net Proposed Trip Generation			276	7	6	13	8	8	16
Net Trip Generation (Proposed - Existing)			(123)	(2)	(3)	(5)	(8)	(8)	(16)

¹ Trip rates based on the ITE *Trip Generation Manual*, 11th Edition (2021).

² Trip rates and pass-by trips based on surveys of the following 3 EV charging facilities on August 29–31, 2023.

(1) Fountain Valley (9380 Warner Avenue), (2) Westminster (1025 Westminster Mall), and (3) Santa Monica (1425 Santa Monica Boulevard).

³ Pass-by rates based on the ITE *Trip Generation Handbook*, 3rd Edition (2017).

ADT = average daily traffic

EV = electric vehicle

ITE = Institute of Transportation Engineers

The 2023 Alameda County CMP states that projects are reviewed if they will cause a net increase of 100 or more PM peak-hour vehicle trips. The proposed project is below this threshold for review. Because the project would generate fewer trips than the existing land use and is below the threshold for review established in the CMP, it is determined that the project does not have the potential to significantly affect roadway operations compared to existing land uses.

Transit, Pedestrian, and Bicycle Facilities. Due to the automobile-centered nature of the proposed project, it is not expected to generate significant transit, pedestrian, and bicycle trips, internal or external, to the project site. The proposed project would not preclude, modify, or otherwise affect existing or proposed transit, pedestrian, or bicycle projects or policies identified by the City. Therefore, the proposed project would not conflict with a program plan, ordinance, or policy addressing transit, pedestrian, or bicycle facilities.

For the reasons described above, this impact would be less than significant.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)? (Less Than Significant Impact)

As described in the Trip Generation and Vehicle Miles Traveled Analysis⁴⁹ (Appendix C), the City of Piedmont has not adopted revised traffic impact guidelines or separate VMT analysis guidelines. However, simultaneous with adoption of CEQA rule changes, the Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory).

The Technical Advisory includes a discussion of the use of screening thresholds to quickly identify when a project should be expected to cause a less than significant impact without conducting a detailed study. One of the recommendations is to screen small projects. The Technical Advisory specifically indicates that projects generating or attracting fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. This value may be arbitrarily low in this set of recommendations; however, Table 4.17.A shows that the project is anticipated to generate 123 fewer trips per day than the existing land use. With a net reduction in daily trips, the project would be considered a small project. Because the project's trip generation is below an applicable threshold of significance (i.e., the screening threshold), the proposed project would not conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b). Further, the proposed project would be all-electric and would provide EV charging infrastructure, thereby facilitating and promoting the use of EVs over gasoline vehicles. Therefore, the transportation impact for the purposes of CEQA would be less than significant.

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

Vehicular access into and out of the proposed EV charging facility would be provided via two existing driveways, one on Wildwood Avenue and one on Grand Avenue. Existing sidewalks on both Wildwood Avenue and Grand Avenue would be reconstructed to conform to the redeveloped driveway approaches. Site driveways are required to comply with City design standards that are verified through the City's review process. In addition, as part of the City's review process, the PFD would review and comment on the project design plans to ensure that emergency access requirements are met. Because the proposed project would maintain existing site access, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible use. This impact would be less than significant.

d. Would the project result in inadequate emergency access? (Less Than Significant Impact)

The proposed project would not result in the alteration of any access points; therefore, emergency vehicle access to the overall site would remain unchanged. Emergency vehicles, including fire trucks

⁴⁹ LSA. 2024. *Trip Generation and Vehicle Miles Traveled Analysis for 29 Wildwood Avenue, Piedmont, California*. June 14.

and ambulances, would be able to access the proposed EV charging facility via either site driveway. This impact would be less than significant.

4.18 TRIBAL 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 a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or*
- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (**Less Than Significant Impact**)*

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process and equates significant impacts to “tribal cultural resources” with significant environmental impacts. PRC Section 21074 states that “tribal cultural resources” are:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:
 - Included or determined to be eligible for inclusion in the CRHR.

- Included in a local register of historical resources as defined in subdivision (k) of PRC Section 5020.1.
- 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A “historical resource” (PRC Section 21084.1), a “unique archaeological resource” (PRC Section 21083.2(g)), or a “nonunique archaeological resource” (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the CRHR.

The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency’s notification list for CEQA projects. Within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project, should a tribe have previously requested to be on the agency’s notification list. California Native American tribes must be recognized by the California Native American Heritage Commission as traditionally and culturally affiliated with the project site, and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the lead agency.

The purpose of consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an Environmental Impact Report (PRC Sections 21080.3.1, 21080.3.2, and 21082.3).

The City sent a letter describing the project and maps depicting the project site via email on June 11, 2019, to the Native American contact who had previously requested to be contacted by the City for potential consultation pursuant to AB 52. The City did not receive any requests for consultation during the 30-day notification period. Therefore, the City considers the AB 52 consultation process to be concluded.

As noted in Section 3.5, Cultural Resources, the project site is not listed on, or eligible for listing on, the CRHR. Additionally, the City, as Lead Agency, has not determined that there are any existing resources significant to Native American tribes within the project site. Therefore, this impact would be less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Less Than Significant Impact)*

The project site is located in an urban area with existing utilities and infrastructure. The proposed project would remove existing sewer and water laterals, some electrical conduit and some of the existing fiber optic conduit. Existing sewer and water mains, gas distribution lines, electrical distribution lines, and storm drain within the adjacent public right-of-way and within the southernmost portion of the project site would remain in place. The proposed project would connect directly to existing mains, which have sufficient capacity to accommodate the proposed project. The proposed project would not require the construction of new water treatment facilities or the expansion of existing facilities, other than those already planned. Therefore, the impact of the proposed project on water infrastructure would be less than significant.

An existing electrical line that runs through the project site would continue to provide electricity to the project site. This electrical line would be connected to new electrical conduit to serve the proposed EV charging stations within the project site. The project site is currently served by telecommunication facilities and would not require any new construction for telecommunication service. Trench drains would be installed to direct stormwater runoff from the site to the proposed bioretention areas. In addition, on-site drainage would be designed consistent with the Alameda County NPDES C.3 requirements for LID.

Therefore, because the proposed project would connect to existing utility services within or adjacent to the project site and there is sufficient excess capacity within those systems to accommodate project demands, this impact would be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less Than Significant Impact)

Water service to the city of Piedmont is provided by the EBMUD, a privately owned utility. Approximately 90 percent of the EBMUD water supply originates from the melting snowpack of the Sierra Nevada. The other 10 percent of the EBMUD's water comes from runoff on protected East Bay Area watershed lands. The water is treated at one of six water treatment plants (WTPs) before delivery to customers.

EBMUD's water service system consists of a network of reservoirs, aqueducts (pipelines), WTPs, pumping plants, and other distribution facilities and pipelines that convey Mokelumne River water from Pardee Reservoir to EBMUD customers.⁵⁰ The water distribution network includes 4,200 miles of pipe, 131 pumping plants, and 167 water distribution reservoirs. EBMUD has water rights for up to 325 million gallons per day (mgd) from the Mokelumne River watershed.⁵¹ EBMUD's secondary water supply comes from local runoff from the East Bay area watersheds, which is stored in the terminal reservoirs within EBMUD's service area. Water from local runoff is dependent on hydrologic conditions and terminal reservoir storage availability. Local runoff supplies the East Bay, averaging 23 MGD during normal hydrologic years.⁵²

Because the proposed project is consistent with the current land use and zoning designations for the site, development of the project would be considered consistent with the growth assumptions utilized to estimate EBMUD's projected water demands. Thus, existing water supply entitlements are sufficient and no additional water supply entitlements are necessary.

The Urban Water Management Plan (UWMP), which identifies water system improvements necessary to meet future water demand, did not identify any deficiencies in the vicinity of the project site. The existing water system infrastructure has adequate capacity to serve the proposed project. In addition, the proposed project would be required to coordinate with the PFD to assess fire flow requirements and comply with them as part of the project. Based on the above, sufficient water supply exists to support the proposed project, and implementation of the project would not require new or expanded entitlements for water supplies. Impacts related to water supply would be less than significant.

⁵⁰ East Bay Municipal Utility District (EBMUD). 2021. *Urban Water Management Plan 2020*. June. Website: <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan> (accessed June 19, 2024).

⁵¹ Ibid.

⁵² Ibid.

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (No Impact)*

The City of Piedmont owns and maintains its own sewage collection system, consisting of 47 miles of collection pipes ranging in size from 6 inches to 21 inches in diameter and built mainly between 1900 and 1940. Wastewater collected from Piedmont is discharged through the city of Oakland to the EBMUD Special District No. 1 interceptor, where the interceptor transports the flows to the EBMUD Main Wastewater Treatment Plant (MMWTP) near the foot of the Bay Bridge.⁵³ The average flow into the MMWTP from throughout the service area is about 75 mgd. The MMWTP is designed for a secondary treatment capacity of 168 mgd during wet weather events. The proposed project would not generate domestic wastewater and therefore would not cause the MMWTP to violate any wastewater treatment requirements. No impact would occur.

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The City of Piedmont contracts with Republic Services, Inc., which is a waste disposal company whose services include nonhazardous solid waste collection, waste transfer, and waste disposal, recycling, and energy services. According to the California Department of Resources Recycling and Recovery (CalRecycle), in 2019, the majority of solid waste from Piedmont was disposed of at the Keller Canyon Landfill.⁵⁴

The Keller Canyon Landfill has a total capacity of 75 million cubic yards and a remaining capacity of 63.4 million cubic yards, and can accept 3,500 tons per day.⁵⁵ On average, auto dealers and service stations generate approximately 0.9 pound per 100 square feet per day.⁵⁶ Therefore, the proposed project would generate approximately 87 pounds of solid waste per day, or 15 tons per year. However, it should be noted that this is a conservative estimate,⁵⁷ and the actual solid waste generation would likely be less. As noted above, the Keller Canyon Landfill has adequate capacity to serve the proposed project. As such, the project would be served by a landfill with sufficient capacity

⁵³ City of Piedmont. 2023. *2023-2031 Housing Element Implementation Project, Draft Environmental Impact Report, SCH# 2022020362*. November.

⁵⁴ California Department of Resources Recycling and Recovery (CalRecycle). 2024. Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility. Website: <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility> (accessed June 19, 2024).

⁵⁵ CalRecycle. 2004. SWIS Facility/Site Activity Details. Keller Canyon Landfill (07-AA-0032). Website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228> (accessed June 19, 2024).

⁵⁶ CalRecycle. 2019. Estimated Solid Waste Generation Rates. Website: <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates> (accessed June 19, 2024).

⁵⁷ This estimate of solid waste generation is based on rates for auto dealers and service stations. Actual solid waste generation would likely be less as the proposed project would only include, aside from the EV charging sites, a public seating area with a picnic table, bench, and recycling bins.

to accommodate the project's waste disposal needs, and impacts associated with the disposition of solid waste would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (Less Than Significant Impact)

Alameda County has three mandatory recycling ordinances with which the City of Piedmont must comply. The purpose of these ordinances is to reduce the amount of easily recyclable and compostable materials deposited in landfills from businesses, institutions, single-family and multifamily properties, and self-haulers. The ordinances are designed to help the State reach the long-term goal of reducing waste by ensuring that 75 percent of recyclables and compostables are diverted from the landfill by 2025. Piedmont currently has a diversion rate of 75 percent. The City's Climate Action Plan 2.0 outlines the City's goal of diverting 85 percent of waste going to the landfill by 2030.⁵⁸

In addition, projects required by the California Green Building Standards Code (newly constructed residential projects or projects increasing a building's conditioned area, volume, or size) or having a building permit valuation greater than or equal to \$50,000 are required to divert at least 65 percent of the debris generated by the project from going to a landfill. This includes all construction, demolition, and/or renovation projects within Piedmont. Although not required, the City encourages projects with a valuation of less than \$50,000 to recycle at least 65 percent of the debris generated.

The proposed project would comply with all federal, State, and local solid waste statutes and/or regulations related to solid waste, including the City's construction and demolition debris waste reduction and recycling requirements. Also refer to Section 3.19.d. Therefore, the proposed project would result in a less than significant impact related to solid waste regulations.

⁵⁸ City of Piedmont. 2024. "Waste Diversion Rates" website: https://piedmont.ca.gov/services___departments/public_works/recycling_organic_waste_garbage/solid_waste_data (accessed June 19, 2024).

4.20 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? (No Impact)

According to CAL FIRE, the project site is not located within any SRA for fire service and is not within a very high fire hazard severity zone.⁵⁹ As previously discussed in Section 4.9.f. under Hazards and Hazardous Materials, the proposed project would design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards associated with vehicular access, resulting in the provision of adequate vehicular access that would provide for adequate emergency access and evacuation. The proposed project would not alter or block adjacent roadways, and implementation of the proposed project would not be expected to impair the function of nearby emergency evacuation routes. In addition, operation of the proposed project would not cause permanent alterations to vehicle circulation routes and patterns nor impede public access or travel upon public rights-of-way. Therefore, the proposed project would not substantially impairing an adopted emergency response plan or emergency evacuation plan. No impact would occur.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (No Impact)

Refer to Section 4.20.a. As noted in Section 2.0, Project Description, the project site is generally level, and is bound by existing development on all sides. Therefore, the proposed project would not

⁵⁹ California Department of Forestry and Fire Protection (CAL FIRE). n.d. FHSZ Viewer. Website: <https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/> (accessed June 19, 2024).

exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire and no impact would occur.

- c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)*

Refer to Section 4.20.a. The proposed project is not located within an SRA for fire service and is not within a very high fire hazard severity zone. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure and no impact would occur.

- d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (No Impact)*

Refer to Section 4.20.a. The project would have no impact related to exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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? (Less Than Significant with Mitigation Incorporated)*

As described in Section 4.4, Biological Resources, due to the developed nature of the project site and the presence of buildings and associated hardscape, the project site does not support any special-status species, sensitive natural communities, riparian habitat, wetlands, or other biological resources. Therefore, impacts to biological resources would be less than significant. Implementation of Mitigation Measures CUL-1 and GEO-1 would ensure that potential impacts to historic and archaeological resources that could be uncovered during construction activities would be reduced to a less than significant level. Therefore, with the incorporation of mitigation measures, development of the proposed project would not: (1) degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife species population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major periods of California history. This impact would be 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)? (Less Than Significant with Mitigation Incorporated)

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts.” Section 15130 of the CEQA Guidelines requires evaluation of potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of “reasonably foreseeable probable future” projects, per CEQA Section 15355. Cumulative impacts can result from a combination of the proposed project together with other closely related projects that cause an adverse change in the environment. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

The proposed project’s impacts would be individually limited and not cumulatively considerable, because these impacts are either temporary in nature (i.e., limited to the construction period) or are limited to the project site (i.e., potential discovery of unknown cultural or paleontological resources). The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures for the topics of air quality, cultural resources, geology and soils, and noise. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics. For the topic of air quality, potentially significant impacts to air quality standards associated with project construction would be reduced to less than significant levels with implementation of Mitigation Measure AIR-1. For the topic of cultural resources, potentially significant impacts to archaeological resources would be reduced to less than significant levels with implementation of Mitigation Measure CUL-1. For the topic of geology and soils, potentially significant impacts related to paleontological resources would be reduced to less than significant levels with implementation of Mitigation Measure GEO-1. For the topic of noise, implementation of Mitigation Measure NOI-1 and compliance with the City’s Standard Condition of Approval would ensure that construction noise and vibration impacts are reduced to a less than significant level.

For the topics of aesthetics, agricultural and forestry resources, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire, the project would have no impacts or less than significant impacts; therefore, the project would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed project would be reduced to a less than significant level through the implementation of the mitigation measures recommended in this document.

When future development proposals are considered by the City, these proposals would undergo environmental review pursuant to CEQA, and when necessary, mitigation measures would be adopted as appropriate. In most cases, this environmental review and compliance with project conditions of approval, relevant policies and mitigation measures, and the General Plan and

compliance with applicable regulations would ensure that significant impacts would be avoided or otherwise mitigated to less than significant levels.

Implementation of these measures would ensure that the impacts of the project and other projects in the vicinity would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be less than significant with mitigation incorporated.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (No Impact)

The proposed project would not result in any environmental effects that would cause substantial direct or indirect adverse effects to human beings.

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APPENDIX A

CALEEMOD OUTPUT SHEETS



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29 Wildwood Avenue Electric Vehicle Charging Station Custom Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Demolition (2024) - Unmitigated
 - 3.3. Site Preparation (2024) - Unmitigated
 - 3.5. Grading (2024) - Unmitigated
 - 3.7. Building Construction (2024) - Unmitigated

3.9. Paving (2024) - Unmitigated

3.11. Architectural Coating (2024) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	29 Wildwood Avenue Electric Vehicle Charging Station
Construction Start Date	10/7/2024
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.90
Precipitation (days)	41.0
Location	29 Wildwood Ave, Piedmont, CA 94610, USA
County	Alameda
City	Piedmont
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1504
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.24

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
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Parking Lot	14.0	Space	0.22	0.00	1,595	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	20.5	16.2	0.03	0.68	2.31	2.99	0.63	1.06	1.69	—	3,011	3,011	0.12	0.07	3,037
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	1.50	1.22	< 0.005	0.05	0.11	0.16	0.05	0.05	0.10	—	217	217	0.01	< 0.005	219
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.27	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	35.9	35.9	< 0.005	< 0.005	36.2

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	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.71	20.5	16.2	0.03	0.68	2.31	2.99	0.63	1.06	1.69	—	3,011	3,011	0.12	0.07	3,037
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.07	1.50	1.22	< 0.005	0.05	0.11	0.16	0.05	0.05	0.10	—	217	217	0.01	< 0.005	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.01	0.27	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	35.9	35.9	< 0.005	< 0.005	36.2

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	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000	1,000	0.16	0.02	1,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000	1,000	0.16	0.02	1,009
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000	1,000	0.16	0.02	1,009
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165	165	0.03	< 0.005	167

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	CO2e
--------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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	—	1,000	1,000	0.16	0.02	1,009
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Waste	—	—	—	—	—	—	—	—	—	—	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	1,000	1,000	0.16	0.02	1,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Area	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,000	1,000	0.16	0.02	1,009
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Waste	—	—	—	—	—	—	—	—	—	—	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	1,000	1,000	0.16	0.02	1,009
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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	—	1,000	1,000	0.16	0.02	1,009
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Waste	—	—	—	—	—	—	—	—	—	—	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	1,000	1,000	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
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	—	165	165	0.03	< 0.005	167
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	0.01
Waste	—	—	—	—	—	—	—	—	—	—	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	165	165	0.03	< 0.005	167

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	7.10	5.63	0.01	0.30	—	0.30	0.28	—	0.28	—	852	852	0.03	0.01	855
Demolition	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.39	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	46.7	46.7	< 0.005	< 0.005	46.9
Demolition	—	—	—	—	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.73	7.73	< 0.005	< 0.005	7.76
Demolition	—	—	—	—	—	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.37	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.9	81.9	< 0.005	< 0.005	83.0
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
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	22.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	4.59
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
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	1.23
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	0.76
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	0.20

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	7.05	5.99	0.01	0.24	—	0.24	0.23	—	0.23	—	858	858	0.03	0.01	861
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.35	2.35	< 0.005	< 0.005	2.36
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.39	0.39	< 0.005	< 0.005	0.39
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.0	41.0	< 0.005	< 0.005	41.5
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	0.11
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	0.02
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
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

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	13.0	9.79	0.02	0.37	—	0.37	0.34	—	0.34	—	1,713	1,713	0.07	0.01	1,719
Dust From Material Movement	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.53	0.40	< 0.005	0.02	—	0.02	0.01	—	0.01	—	70.4	70.4	< 0.005	< 0.005	70.6
Dust From Material Movement	—	—	—	—	—	0.09	0.09	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.7	11.7	< 0.005	< 0.005	11.7
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.4	61.4	< 0.005	< 0.005	62.3
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
Hauling	0.01	0.36	0.14	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	—	281	281	0.01	0.04	295
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.54	2.54	< 0.005	< 0.005	2.58
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

Hauling	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	12.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	0.43
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	2.01

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	10.8	8.10	0.01	0.38	—	0.38	0.35	—	0.35	—	1,305	1,305	0.05	0.01	1,309
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.44	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	53.6	53.6	< 0.005	< 0.005	53.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.08	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.88	8.88	< 0.005	< 0.005	8.91
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	166
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.78	6.78	< 0.005	< 0.005	6.88
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	1.14
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
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

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.22	5.75	4.58	0.01	0.25	—	0.25	0.24	—	0.24	—	823	823	0.03	0.01	826
Paving	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.08	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	11.3
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	1.87
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.64	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	< 0.005	0.01	145
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	2.01
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

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	0.33
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
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

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	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectu ral Coatings	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	1.84
Architectu ral Coatings	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	0.30
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	166
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.26	2.26	< 0.005	< 0.005	2.29
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	0.38
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
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

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	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	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	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	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	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	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	0.00	0.00

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	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,000	1,000	0.16	0.02	1,009
Total	—	—	—	—	—	—	—	—	—	—	—	1,000	1,000	0.16	0.02	1,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1,000	1,000	0.16	0.02	1,009
Total	—	—	—	—	—	—	—	—	—	—	—	1,000	1,000	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	165	165	0.03	< 0.005	167
Total	—	—	—	—	—	—	—	—	—	—	—	165	165	0.03	< 0.005	167

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	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
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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	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	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	< 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	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	0.05
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	0.01
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	0.01

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	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	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	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	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	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	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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	10/7/2024	11/1/2024	5.00	20.0	—
Site Preparation	Site Preparation	10/11/2024	10/11/2024	5.00	1.00	—
Grading	Grading	10/14/2024	11/1/2024	5.00	15.0	—
Building Construction	Building Construction	11/4/2024	11/22/2024	5.00	15.0	—
Paving	Paving	11/25/2024	11/29/2024	5.00	5.00	—
Architectural Coating	Architectural Coating	12/2/2024	12/6/2024	5.00	5.00	—

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 2	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 2	1.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backh oes	Diesel	Tier 2	2.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 2	1.00	8.00	84.0	0.37

Grading	Graders	Diesel	Tier 2	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Tier 2	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 2	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Tier 2	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 2	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

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	10.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.30	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	3.93	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	20.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	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

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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	575

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	513	—
Site Preparation	—	—	0.50	0.00	—
Grading	—	470	7.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.22

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Parking Lot	0.22	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	204	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	575

5.10.3. Landscape Equipment

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	1,788,500	204	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	18,121

5.13. Operational Waste Generation

5.13.1. Unmitigated

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
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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
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.16. 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
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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8. User Changes to Default Data

Screen	Justification
Land Use	The proposed project involves construction of a 14-stall electric vehicle (EV) charging station.
Construction: Construction Phases	Construction of the proposed project is anticipated to begin in fall 2024 and would occur over a two month period. Demolition activities are anticipated to occur over an approximately one month period and grading would occur over an approximately one month period. An overlap of demolition and grading activities is anticipated. Exterior work such as foundation installation, construction, and installation of pavements is expected to occur over a two month period. This schedule conservatively assumes a total 2-month construction duration.
Construction: Off-Road Equipment	Assuming the use of Tier 2 construction equipment.
Construction: Trips and VMT	Assuming up to 20 one-way worker trips per day for the building construction and architectural coating phases since the CalEEMod default was zero.
Operations: Energy Use	Electricity consumption was provided by Shell.

APPENDIX B

NOISE MEASUREMENT SHEETS



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Noise Measurement Survey – 24 HR

Project Number: 20241601

Project Name: 29 Wildwood EV

Test Personnel: Dana Kwan

Equipment: Spark 706RC (SN:17119)

Site Number: LT-1 Date: 6/13/24

Time: From 4:00 p.m. To 4:00 p.m.

Site Location: On a chain link fence along the northwest border of the project site, approximately 60.9 feet from the center of the Grand Avenue center turn bay

Primary Noise Sources: Vehicle traffic from Grand Avenue (primary), vehicle traffic from Wildwood Avenue (secondary), neighborhood and retail noises (secondary)

Comments: _____

Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L _{eq}	L _{max}	L _{min}
4:00 PM	6/13/24	61.0	75.4	50.4
5:00 PM	6/13/24	61.2	78.5	48.8
6:00 PM	6/13/24	60.3	72.5	49.0
7:00 PM	6/13/24	60.6	82.5	47.6
8:00 PM	6/13/24	58.8	73.3	47.4
9:00 PM	6/13/24	58.3	73.4	47.8
10:00 PM	6/13/24	57.1	73.4	46.2
11:00 PM	6/13/24	54.1	70.2	45.0
12:00 AM	6/14/24	53.4	75.4	42.0
1:00 AM	6/14/24	50.4	70.6	39.8
2:00 AM	6/14/24	52.7	66.9	38.5
3:00 AM	6/14/24	52.7	72.9	38.9
4:00 AM	6/14/24	48.5	68.4	42.0
5:00 AM	6/14/24	52.5	69.9	42.0
6:00 AM	6/14/24	56.2	71.2	42.6
7:00 AM	6/14/24	62.3	89.6	46.2
8:00 AM	6/14/24	60.9	71.8	47.9
9:00 AM	6/14/24	61.0	77.1	49.0
10:00 AM	6/14/24	60.4	73.3	48.2
11:00 AM	6/14/24	60.3	75.2	49.3
12:00 PM	6/14/24	61.1	84.0	49.8
1:00 PM	6/14/24	59.6	74.1	48.7
2:00 PM	6/14/24	60.5	77.4	48.5
3:00 PM	6/14/24	60.7	82.6	47.3

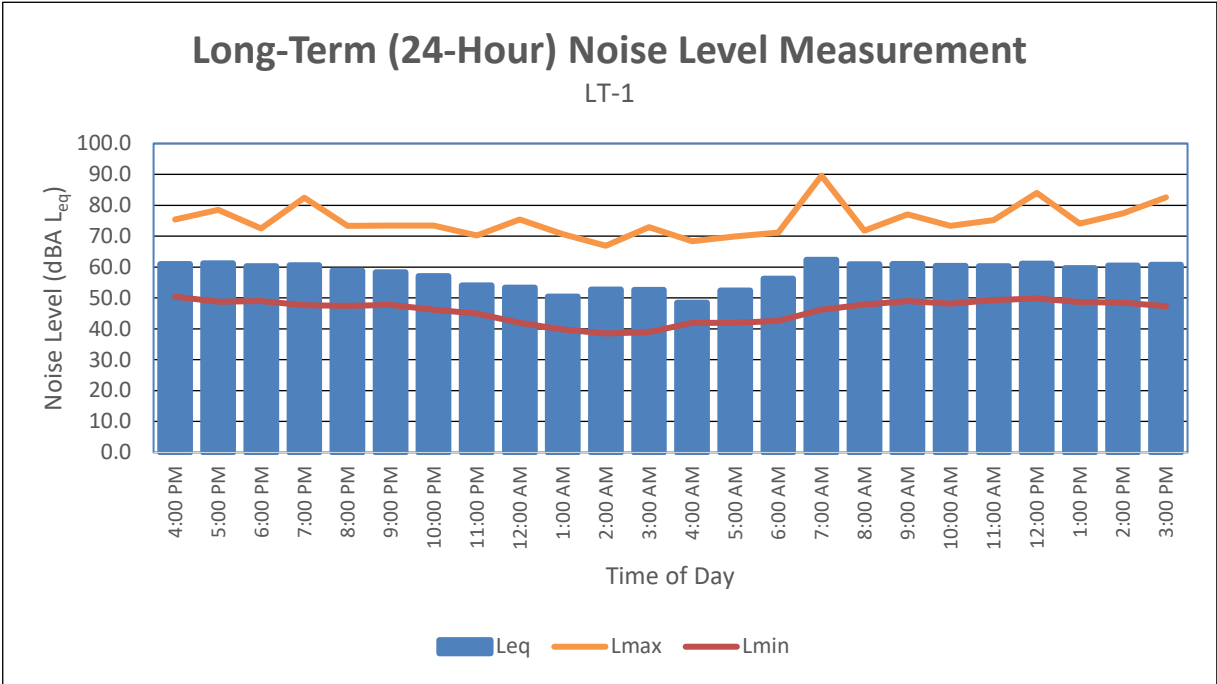
Source: Compiled by LSA Associates, Inc. (2024).

dBA = A-weighted decibel

L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: 20241601

Test Personnel: Dana Kwan

Project Name: 29 Wildwood EV

Equipment: Spark 706RC (SN:18906)

Site Number: LT-2 Date: 6/13/24

Time: From 4:00 p.m. To 4:00 p.m.

Site Location: On a speed limit pole southeast of the project boundary, approximately 16.5 feet from the Wildwood Avenue centerline

Primary Noise Sources: Vehicle traffic from Grand Avenue (primary), vehicle traffic from Wildwood Avenue (secondary), neighborhood noises (secondary)

Comments: _____

Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L _{eq}	L _{max}	L _{min}
4:00 PM	6/13/24	59.1	80.6	48.3
5:00 PM	6/13/24	59.9	78.9	47.6
6:00 PM	6/13/24	58.3	78.8	46.0
7:00 PM	6/13/24	57.6	75.3	44.8
8:00 PM	6/13/24	55.8	71.3	45.3
9:00 PM	6/13/24	55.2	73.0	45.0
10:00 PM	6/13/24	53.4	73.8	42.9
11:00 PM	6/13/24	50.8	71.0	42.2
12:00 AM	6/14/24	50.3	72.7	40.3
1:00 AM	6/14/24	47.0	68.2	39.0
2:00 AM	6/14/24	48.3	72.3	38.9
3:00 AM	6/14/24	48.1	67.8	39.7
4:00 AM	6/14/24	46.4	63.5	42.1
5:00 AM	6/14/24	53.6	76.2	43.6
6:00 AM	6/14/24	55.3	74.3	43.7
7:00 AM	6/14/24	59.0	77.8	45.9
8:00 AM	6/14/24	58.9	79.7	47.2
9:00 AM	6/14/24	58.8	75.2	47.5
10:00 AM	6/14/24	57.5	73.3	46.9
11:00 AM	6/14/24	57.8	78.6	47.2
12:00 PM	6/14/24	58.6	76.5	46.7
1:00 PM	6/14/24	57.2	74.2	45.8
2:00 PM	6/14/24	58.3	77.8	46.0
3:00 PM	6/14/24	58.2	79.4	46.1

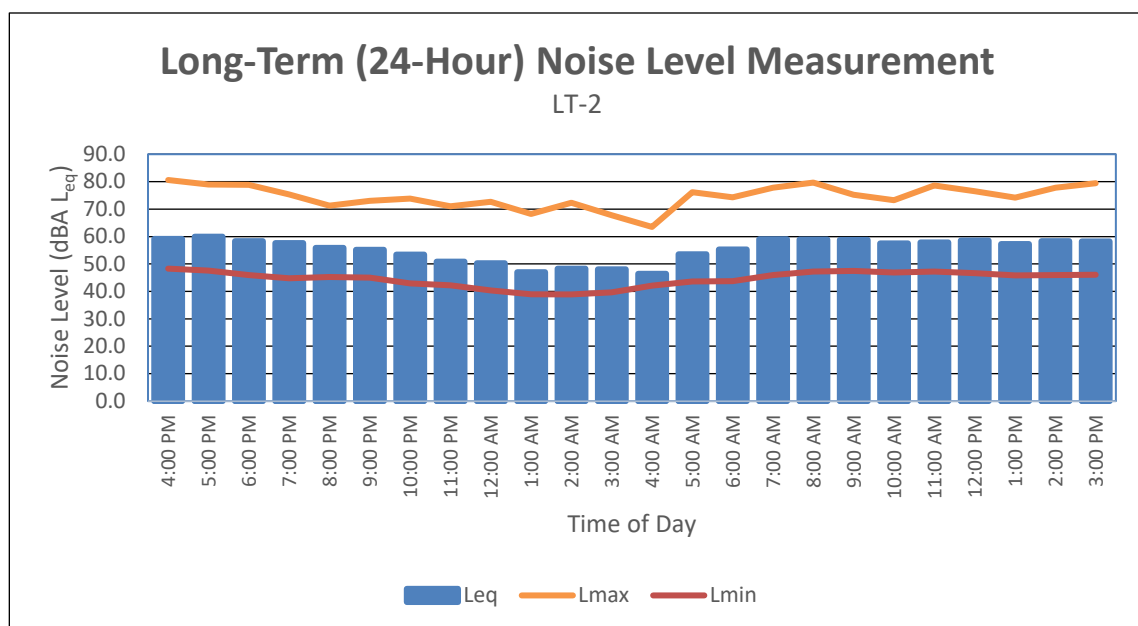
Source: Compiled by LSA Associates, Inc. (2024).

dBA = A-weighted decibel

L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

L_{min} = minimum measured sound level



APPENDIX C

TRIP GENERATION AND VEHICLE MILES TRAVELED ANALYSIS



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MEMORANDUM

DATE: June 14, 2024

To: Kevin Jackson, Planning and Building Director, City of Piedmont

FROM: Arthur Black, Principal Transportation Planner, LSA

SUBJECT: Trip Generation and Vehicle Miles Traveled Analysis for 29 Wildwood Avenue, Piedmont, California

INTRODUCTION

LSA has prepared an analysis of transportation for the proposed demolition of an existing gasoline and automotive repair station at 29 Wildwood Avenue in Piedmont, California. The proposed 29 Wildwood Avenue Electric Vehicle Charging Station Project (project) would replace the existing buildings with a 14-stall electric vehicle (EV) charging station including new canopy structures, fencing, EV charging kiosks, exterior lighting, auxiliary equipment, landscaping, and commercial signage at the project site. The current structures include four fueling stations under two canopies, a one-story building containing a minor auto-repair shop and a convenience store, and a temporary metal storage container. The project site is currently, and will continue to be, accessed from both Grand Avenue and Wildwood Avenue.

TRIP GENERATION

As stated previously, the project would demolish an existing gasoline station with four fueling positions and construct a 14-stall EV charging station. The Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Eleventh Edition (2021)¹ provides trip generation rates for many land uses, including gasoline stations. Furthermore, the ITE *Trip Generation Handbook*, Third Edition (2017)² provides information regarding the rate of trips to a land use already on the roadway network and diverting to the land use as drivers pass by.

Trip generation data for EV charging stations were not provided in the *Trip Generation Manual*. LSA contracted with an independent data collection company to survey three EV charging stations for three days each. LSA then calculated an average trip generation rate per charging position from the

¹ Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual*, Eleventh Edition.

² Institute of Transportation Engineers (ITE). 2017. *Trip Generation Handbook*, Third Edition.

surveyed trip generation data. These data, including LSA calculations, are provided as an attachment.

LSA calculated pass-by trips using methodology provided in the *Trip Generation Handbook*. Survey data identified that 58 percent of trips in the AM peak hour and 42 percent of trips in the PM peak hour to gasoline stations are by vehicles already traveling on the adjacent street. The lower value of 42 percent was applied to daily trips. Survey data collected at the EV charging stations by the independent data collection company found that the occurrence of pass-by trips to the EV charging stations was slightly lower than pass-by trips to the gasoline stations. In the AM peak hour, 47 percent of vehicles were already on the adjacent roads. In the PM peak hour, 39 percent of vehicles were already on the adjacent roads. Throughout the day, 41 percent of vehicles were already on the adjacent roads.

Table A summarizes the trip generation and pass-by trip data and compares traffic generated by the existing land use and the project. As Table A indicates, the proposed project is anticipated to generate 123 fewer daily trips and fewer trips in the AM and PM peak hours than the existing gasoline station, even accounting for lower pass-by trip frequency at EV charging stations.

Table A: Trip Generation Comparison

Land Use (ITE Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Gasoline/Service Station (944) ¹		Positions	172.01	5.14	5.14	10.28	6.96	6.95	13.91
EV Charging Station ²		Positions	33.43	0.90	0.80	1.70	0.93	0.96	1.89
Existing Land Uses									
Gasoline/Service Station	4	Positions	688	21	21	42	28	28	56
Pass-by Trips ³			(289)	(12)	(12)	(24)	(12)	(12)	(24)
Net Existing Trip Generation			399	9	9	18	16	16	32
Proposed Project Trip Generation									
EV Charging Station	14	Positions	468	13	11	24	13	13	26
Pass-by Trips ²			(192)	(6)	(5)	(11)	(5)	(5)	(10)
Net Proposed Trip Generation			276	7	6	13	8	8	16
Net Trip Generation (Proposed - Existing)			(123)	(2)	(3)	(5)	(8)	(8)	(16)

¹ Trip rates based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (2021).

² Trip Rates and Pass-By Trips based on surveys of the following 3 EV charging facilities on August 29-31, 2023.

(1) Fountain Valley (9380 Warner Avenue), (2) Westminster (1025 Westminster Mall), and (3) Santa Monica (1425 Santa Monica Boulevard).

³ Pass-by rates based on the ITE *Trip Generation Handbook*, 3rd Edition (2017).

ADT = average daily traffic

EV = electric vehicle

ITE = Institute of Transportation Engineers

The 2023 Alameda County Congestion Management Program (CMP) states that projects are reviewed if they will cause a net increase of 100 or more PM peak hour vehicle trips. The proposed project is below this threshold for review. Because the project would generate fewer trips than the existing land use and is below the threshold for review established in the CMP, it is determined that

the project does not have the potential to significantly affect roadway operations compared to existing land uses.

VEHICLE MILES TRAVELED

This memorandum addresses whether the project has the potential to conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b). This section considers whether the vehicle miles traveled (VMT) generated by a project would exceed an applicable threshold of significance. *State CEQA Guidelines* Section 15064.3 does not establish a VMT threshold, and historically, the State has not established California Environmental Quality Act (CEQA) thresholds, deferring instead to Lead Agencies.

Certification of revised CEQA guidelines occurred on December 28, 2018. As part of this certification, a deadline of July 1, 2020, was established for jurisdictions to adopt thresholds for evaluation of transportation impacts according to VMT. The City of Piedmont (City) does not appear to have prepared revised traffic impact guidelines or separate VMT analysis guidelines by the July 1, 2020, deadline. However, simultaneous with adoption of CEQA rule changes, the Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) (December 2018).

The Technical Advisory includes a discussion of the use of screening thresholds to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. One of the recommendations is to screen small projects. The Technical Advisory specifically indicates that projects generating or attracting fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. This value may be arbitrarily low in this set of recommendations; however, Table A shows that the project is anticipated to generate 123 fewer trips per day than the existing land use. With a net reduction in daily trips, the project would be considered a small project. Because the project's trip generation is below an applicable threshold of significance (i.e., the screening threshold), the proposed project would not conflict or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b), and the transportation impact for the purposes of CEQA would be less than significant.

CONCLUSION

This analysis estimated the project would result in 123 fewer daily trips than the existing land use, including fewer trips in the AM and PM peak hours. Because the project would generate fewer trips than the existing land use and is below the threshold for review established in the CMP, it is determined that the project does not have the potential to significantly affect roadway operations compared to existing land uses.

The project is a small project generating fewer than 110 new daily trips. Therefore, the project meets screening thresholds for not requiring additional analysis of project VMT and would be presumed to have a less-than-significant impact on transportation under CEQA.

Attachment: A: Trip Generation / EV Charging Survey

ATTACHMENT A

TRIP GENERATION / EV CHARGING SURVEY

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers (3 Sites)
CITY: Fountain Valley, Westminster, Santa Monica

DATE: -
DAY: -

SUMMARY OF RESULTS

98 chargers

DATE: 8/29/2023
DAY: Tuesday

TOTAL SURVEYED TRIPS	1642
TOTAL PASS-BY TRIPS	666
PASS-BY TRIP %	41%
TOTAL INTERNAL TRIP CAPTURE	462
INTERNAL TRIP CAPTURE %	28%
TOTAL DAILY TRIPS	3274

In	Out	Total	In	Out	Total
AM Pk Hr Trips	74	66	140	PM Pk Hr Trips	100
AM Pk Hr Trip Rates	0.76	0.67	1.43	PM Pk Hr Trip Rates	1.02
AM Pass-By Trips	36			PM Pass-By Trips	36
AM Pass-By Trip %	49%			PM Pass-By Trip %	36%
AM Int Trip Capt	25			PM Int Trip Capt	25
AM Int Trip Capt %	34%			PM Int Trip Capt %	25%
Daily Trip Rate	33.41				

DATE: 8/30/2023
DAY: Wednesday

TOTAL SURVEYED TRIPS	988
TOTAL PASS-BY TRIPS	393
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	258
INTERNAL TRIP CAPTURE %	26%
TOTAL DAILY TRIPS	3377

In	Out	Total	In	Out	Total
AM Pk Hr Trips	90	77	167	PM Pk Hr Trips	96
AM Pk Hr Trip Rates	0.92	0.78	1.70	PM Pk Hr Trip Rates	0.98
AM Pass-By Trips	41			PM Pass-By Trips	19
AM Pass-By Trip %	46%			PM Pass-By Trip %	40% (of 48)
AM Int Trip Capt	21			PM Int Trip Capt	14
AM Int Trip Capt %	23%			PM Int Trip Capt %	29% (of 48)
Daily Trip Rate	34.46				

DATE: 8/31/2023
DAY: Thursday

TOTAL SURVEYED TRIPS	668
TOTAL PASS-BY TRIPS	281
PASS-BY TRIP %	42%
TOTAL INTERNAL TRIP CAPTURE	164
INTERNAL TRIP CAPTURE %	25%
TOTAL DAILY TRIPS	3178

In	Out	Total	In	Out	Total
AM Pk Hr Trips	101	91	192	PM Pk Hr Trips	76
AM Pk Hr Trip Rates	1.03	0.93	1.96	PM Pk Hr Trip Rates	0.78
AM Pass-By Trips	22			PM Pass-By Trips	16
AM Pass-By Trip %	48%	(of 46)		PM Pass-By Trip %	46% (of 35)
AM Int Trip Capt	14			PM Int Trip Capt	10
AM Int Trip Capt %	30%	(of 46)		PM Int Trip Capt %	29% (of 35)
Daily Trip Rate	32.43				

DATE: 3-Day
DAY: Total

TOTAL SURVEYED TRIPS	3298
TOTAL PASS-BY TRIPS	1340
PASS-BY TRIP %	41%
TOTAL INTERNAL TRIP CAPTURE	884
INTERNAL TRIP CAPTURE %	27%
TOTAL DAILY TRIPS	9829

In	Out	Total	In	Out	Total
AM Pk Hr Trips	265	234	499	PM Pk Hr Trips	272
AM Pk Hr Trip Rates	0.90	0.80	1.70	PM Pk Hr Trip Rates	0.93
AM Pass-By Trips	99			PM Pass-By Trips	71
AM Pass-By Trip %	47%	(of 210)		PM Pass-By Trip %	39% (of 183)
AM Int Trip Capt	60			PM Int Trip Capt	49
AM Int Trip Capt %	29%	(of 210)		PM Int Trip Capt %	27% (of 183)
Daily Trip Rate	33.43				

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 9380 Warner Ave
CITY: Fountain Valley

DATE: 8/29/2023
DAY: Tuesday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Warner Ave or Bushard Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?									
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
0:00	2	2	4	0	0	2	0	2	0							
0:15	3	1	4	0	1	2	0	3	0							
0:30	3	2	5	0	1	2	0	3	0							
0:45	2	4	6	0	0	2	0	2	0							
1:00	0	2	2	0	0	0	0	0	0							
1:15	1	1	2	0	1	0	0	1	0							
1:30	2	2	4	0	1	1	0	2	0							
1:45	1	0	1	0	0	1	0	1	0							
2:00	1	1	2	0	1	0	0	1	0							
2:15	1	3	4	0	0	1	0	1	0							
2:30	1	0	1	0	1	0	0	1	0							
2:45	0	1	1	0	0	0	0	0	0							
3:00	0	1	1	0	0	0	0	0	0							
3:15	0	0	0	0	0	0	0	0	0							
3:30	1	0	1	0	0	1	0	1	0							
3:45	1	0	1	0	0	1	0	1	0							
4:00	0	1	1	0	0	0	0	0	0							
4:15	0	1	1	0	0	0	0	0	0							
4:30	0	0	0	0	0	0	0	0	0							
4:45	0	0	0	0	0	0	0	0	0							
5:00	0	0	0	0	0	0	0	0	0							
5:15	3	0	3	0	1	1	0	2	1							
5:30	0	1	1	0	0	0	0	0	0							
5:45	1	1	2	0	0	0	0	0	1							
6:00	0	1	1	0	0	0	0	0	0							
6:15	4	1	5	0	3	1	0	4	0							
6:30	5	1	6	0	3	1	0	4	1							
6:45	2	4	6	0	0	1	0	1	1							
7:00	2	3	5	0	1	0	0	1	1							
7:15	2	0	2	0	2	0	1	1	0							
7:30	2	4	6	0	1	2	0	3	0							
7:45	4	2	6	0	2	0	1	1	2							
8:00	2	3	5	0	1	1	1	1	0							
8:15	3	2	5	0	1	2	3	0	0							
8:30	3	4	7	0	0	1	1	0	2							
8:45	4	2	6	0	2	1	3	0	1							
9:00	4	4	8	0	3	1	3	1	0							
9:15	1	0	1	0	2	1	1	2	0							
9:30	4	6	10	0	0	2	1	1	2							
9:45	6	2	8	0	3	2	3	2	1							
10:00	6	4	10	0	1	2	3	0	3							
10:15	3	6	9	0	2	0	2	0	1							
10:30	3	9	12	0	3	0	3	0	0							
10:45	5	4	9	0	2	1	2	1	1							
11:00	5	4	9	0	2	3	5	0	0							
11:15	3	4	7	0	0	2	2	0	1							
11:30	3	8	11	0	1	1	1	1	1							
11:45	3	2	5	0	2	1	1	2	0							
12:00	5	4	9	0	3	2	4	1	0							
12:15	5	5	10	0	2	2	3	1	1							
12:30	5	2	7	0	2	1	3	0	0							
12:45	3	2	5	0	3	0	3	0	0							
13:00	3	7	10	0	2	1	2	1	0							
13:15	3	5	8	0	3	0	3	0	0							
13:30	5	4	9	0	2	2	3	1	1							
13:45	4	5	9	0	1	2	2	1	1							
14:00	6	4	10	0	2	5	4	1	0							
14:15	4	5	9	0	3	1	2	2	0							
14:30	2	3	5	0	1	1	1	1	0							
14:45	5	2	7	0	2	2	1	3	1							
15:00	2	2	4	0	2	0	1	1	0							
15:15	4	2	6	0	2	2	3	1	0							
15:30	5	3	8	0	3	0	1	2	2							
15:45	4	4	8	0	3	1	1	3	0							
16:00	7	3	10	1	3	3	2	4	1							
16:15	6	6	12	2	4	2	1	5	0							
16:30	3	5	8	0	1	2	0	3	0							
16:45	4	3	7	0	2	2	1	3	0							
17:00	3	6	9	0	2	1	0	3	0							
17:15	7	5	12	0	3	2	2	3	2							
17:30	7	5	12	0	4	3	3	4	0							
17:45	2	4	6	0	1	1	0	2	0							
18:00	6	5	11	0	5	1	1	5	0							
18:15	8	4	12	3	4	4	2	6	0							
18:30	4	3	7	3	2	1	2	1	1							
18:45	5	6	11	2	4	1	2	3	0							
19:00	3	3	6	0	3	0	1	2	0							
19:15	4	5	9	0	2	1	0	3	1							
19:30	7	6	13	2	4	3	2	5	0							
19:45	4	6	10	0	2	2	1	3	0							
20:00	7	5	12	1	4	3	1	6	0							
20:15	5	4	9	2	0	4	0	4	1							
20:30	4	7	11	0	3	1	0	4	0							
20:45	4	4	8	0	2	1	0	3	1							
21:00	2	3	5	0	1	1	0	2	0							
21:15	5	5	10	0	1	2	0	3	2							
21:30	7	3	10	0	1	5	0	6	1							
21:45	2	5	7	0	1	1	0	2	0							
22:00	3	6	9	0	2	1	0	3	0							
22:15	2	4	6	0	1	1	0	2	0							
22:30	4	0	4	0	2	2	0	4	0							
22:45	5	2	7	0	3	1	0	4	1							
23:00	4	8	12	0	2	1	0	3	1							
23:15	2	3	5	0	0	2	0	2	0							
23:30	4	5	9	0	1	1	0	2	2							
23:45	1	3	4	0	1	0	0	1	0							
TOTAL	308	305	613		151	117	96	172	40							

TOTAL INBOUND TRIPS	308
RESPONSE %	87%
TOTAL PASS BY TRIPS	151
PASS-BY TRIP %	49%
TOTAL INTERNAL TRIP CAPTURE	96
INTERNAL TRIP CAPTURE %	31%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 9380 Warner Ave
CITY: Fountain Valley

DATE: 8/30/2023
DAY: Wednesday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Warner Ave or Bushard Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?									
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
0:00	3	0	3	0	1	1	0	2	1							
0:15	3	3	6	0	1	1	0	2	1							
0:30	0	2	2	0	0	0	0	0	0							
0:45	3	4	7	0	1	2	0	3	0							
1:00	0	1	1	0	0	0	0	0	0							
1:15	2	0	2	0	0	2	0	2	0							
1:30	0	3	3	0	0	0	0	0	0							
1:45	1	1	2	0	1	0	0	1	0							
2:00	1	0	1	0	1	0	0	1	0							
2:15	0	0	0	0	0	0	0	0	0							
2:30	0	0	0	0	0	0	0	0	0							
2:45	0	0	0	0	0	0	0	0	0							
3:00	3	2	5	0	1	2	0	3	0							
3:15	1	1	2	0	1	0	0	1	0							
3:30	0	0	0	0	0	0	0	0	0							
3:45	2	1	3	0	1	1	0	2	0							
4:00	0	1	1	0	0	0	0	0	0							
4:15	0	0	0	0	0	0	0	0	0							
4:30	1	1	2	0	0	1	0	1	0							
4:45	1	0	1	0	1	0	0	1	0							
5:00	2	1	3	0	1	1	0	2	0							
5:15	1	3	4	0	0	1	0	1	0							
5:30	1	1	2	0	1	0	0	1	0							
5:45	0	2	2	0	0	0	0	0	0							
6:00	5	1	6	0	0	3	1	2	2							
6:15	2	5	7	0	2	0	0	2	0							
6:30	4	1	5	0	2	2	0	4	0							
6:45	3	5	8	0	3	0	0	3	0							
7:00	2	3	5	0	1	1	1	1	0							
7:15	3	2	5	0	2	1	2	1	0							
7:30	3	1	4	0	1	0	1	0	2							
7:45	4	1	5	0	2	1	3	0	1							
8:00	3	6	9	0	2	1	2	1	0							
8:15	4	7	11	0	2	0	0	2	2							
8:30	3	2	5	0	1	2	1	2	0							
8:45	5	4	9	0	1	3	3	1	1							
9:00	6	7	13	0	1	2	0	3	3							
9:15	5	4	9	0	0	4	2	2	1							
9:30	5	5	10	0	2	2	3	1	1							
9:45	4	4	8	0	3	0	3	0	1							
10:00	4	3	7	0	1	3	2	2	0							
10:15	7	6	13	0	2	2	2	2	3							
10:30	6	7	13	0	2	3	5	0	1							
10:45	5	8	13	0	3	1	2	2	1							
11:00	4	6	10	0	2	2	2	2	0							
11:15	4	2	6	0	2	1	2	1	1							
11:30	6	4	10	0	4	2	3	3	1							
11:45	3	7	10	0	1	1	1	1	1							
12:00	3	2	5	0	2	1	1	2	0							
12:15	3	6	9	0	1	1	0	2	1							
12:30	2	2	4	0	1	1	2	0	0							
12:45	6	1	7	0	2	4	4	2	0							
13:00	4	6	10	0	2	2	3	1	0							
13:15	4	5	9	0	2	0	2	0	2							
13:30	7	5	12	0	2	4	5	1	1							
13:45	4	4	8	0	2	2	3	1	0							
14:00	3	1	6	0	1	2	1	2	0							
14:15	6	6	12	0	2	2	2	2	2							
14:30	3	4	7	0	2	0	2	0	1							
14:45	4	4	8	0	1	3	2	2	0							
15:00	4	2	6	0	2	2	1	3	0							
15:15	6	7	13	0	3	1	0	4	2							
15:30	4	3	7	1	0	4	1	3	0							
15:45	5	7	12	0	1	4	1	4	0							
16:00	5	6	11	0	1	4	3	2	0							
16:15	7	3	10	0	1	4	2	3	2							
16:30	3	5	8	0	2	1	1	2	0							
16:45	5	6	11	0	3	2	1	4	0							
17:00	6	4	10	0	2	2	2	2	2							
17:15	4	3	7	4	2	2	1	3	0							
17:30	3	5	8	3	2	1	1	2	0							
17:45	0	5	5	0	0	0	0	0	0							
18:00	3	3	6	0	2	1	2	1	0							
18:15	4	1	5	0	2	2	1	3	0							
18:30	9	7	16	0	4	4	3	5	1							
18:45	6	3	9	0	2	3	2	3	1							
19:00	4	5	9	0	1	2	0	3	1							
19:15	5	5	10	0	2	2	0	4	1							
19:30	5	3	8	0	0	3	0	3	2							
19:45	4	5	9	0	2	1	0	3	1							
20:00	2	3	5	0	2	0	0	2	0							
20:15	3	4	7	0	0	3	0	3	0							
20:30	6	4	10	0	1	3	0	4	2							
20:45	5	5	10	0	2	2	0	4	1							
21:00	3	4	7	0	2	1	0	3	0							
21:15	4	5	9	0	2	1	0	3	1							
21:30	5	3	8	0	3	2	0	5	0							
21:45	3	2	5	0	1	2	0	3	0							
22:00	1	5	6	0	0	0	0	0	1							
22:15	1	5	6	0	1	0	0	1	0							
22:30	3	1	4	0	2	1	0	3	0							
22:45	3	2	5	0	1	2	0	3	0							
23:00	4	2	6	0	1	3	0	4	0							
23:15	2	1	3	0	1	1	0	2	0							
23:30	1	4	5	0	1	0	0	1	0							
23:45	1	2	3	0	0	1	0	1	0							
TOTAL	313	316	629		127	138	90	175	48							

7:00-8:00 AM	12	7	19	6	50%	7	58%
7:15-8:15 AM	13	10	23	7	54%	8	62%
7:30-8:30 AM	14	15	29	7	50%	6	43%
7:45-8:45 AM	14	16	30	7	50%	6	43%
8:00-9:00 AM	15	19	34	6	40%	6	40%

4:00-5:00 PM	20	20	40	7	35%	7	35%
4:15-5:15 PM	21	18	39	8	38%	6	29%
4:30-5:30 PM	18	18	36	9	50%	5	28%
4:45-5:45 PM	18	18	36	9	50%	5	28%
5:00-6:00 PM	13	17	30	6	46%	4	31%

TOTAL INBOUND TRIPS	313
RESPONSE %	85%
TOTAL PASS-BY TRIPS	127
PASS-BY TRIP %	41%
TOTAL INTERNAL TRIP CAPTURE	90
INTERNAL TRIP CAPTURE %	29%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 9380 Warner Ave
CITY: Fountain Valley

DATE: 8/31/2023
DAY: Thursday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Warner Ave or Bushard Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?									
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
0:00	2	5	7	0	0	1	0	1	1							
0:15	1	1	2	0	1	0	0	1	0							
0:30	1	0	1	0	0	1	0	1	0							
0:45	2	0	2	0	0	2	0	2	0							
1:00	1	2	3	0	0	1	0	1	0							
1:15	0	2	2	0	0	0	0	0	0							
1:30	0	0	0	0	0	0	0	0	0							
1:45	1	0	1	0	0	1	0	1	0							
2:00	1	0	1	0	1	0	0	1	0							
2:15	1	0	1	0	0	1	0	1	0							
2:30	1	2	3	0	1	0	0	1	0							
2:45	1	1	2	0	0	1	0	1	0							
3:00	0	0	0	0	0	0	0	0	0							
3:15	1	3	4	0	0	1	0	1	0							
3:30	0	0	0	0	0	0	0	0	0							
3:45	0	0	0	0	0	0	0	0	0							
4:00	0	0	0	0	0	0	0	0	0							
4:15	0	0	0	0	0	0	0	0	0							
4:30	0	0	0	0	0	0	0	0	0							
4:45	1	0	1	0	0	1	0	1	0							
5:00	2	0	2	0	0	2	0	2	0							
5:15	2	1	3	0	0	2	0	2	0							
5:30	4	2	6	0	1	2	0	3	1							
5:45	3	3	6	0	0	3	0	3	0							
6:00	1	3	4	0	0	1	0	1	0							
6:15	7	2	9	0	3	4	0	7	0							
6:30	0	1	1	0	0	0	0	0	0							
6:45	3	5	8	0	0	3	0	3	0							
7:00	2	2	4	0	0	2	0	2	0							
7:15	2	1	3	0	2	0	1	1	0							
7:30	4	7	11	0	2	1	1	2	1							
7:45	2	4	6	0	0	1	1	0	1							
8:00	3	0	3	0	2	1	1	2	0							
8:15	4	4	8	0	2	1	1	2	1							
8:30	4	4	8	0	2	2	4	0	0							
8:45	4	6	10	2	2	1	2	1	1							
9:00	2	5	7	0	0	2	1	1	0							
9:15	4	6	10	0	1	1	1	1	2							
9:30	6	1	7	0	4	2	3	3	0							
9:45	4	5	9	0	0	3	2	1	1							
10:00	0	4	4	0	0	0	0	0	0							
10:15	2	3	5	0	1	1	1	1	0							
10:30	6	1	7	0	3	3	4	2	0							
10:45	5	1	6	0	3	2	2	3	0							
11:00	5	5	10	1	2	1	2	1	2							
11:15	4	7	11	0	2	1	0	3	1							
11:30	5	4	9	0	2	2	2	2	1							
11:45	6	3	9	0	4	2	3	3	0							
12:00	4	5	9	0	3	1	1	3	0							
12:15	5	5	10	0	3	2	3	2	0							
12:30	4	2	6	0	2	1	0	3	1							
12:45	3	7	10	0	1	2	3	0	0							
13:00	4	3	7	0	1	2	2	1	1							
13:15	4	4	8	0	1	3	2	2	0							
13:30	4	3	7	0	1	3	3	1	0							
13:45	2	6	8	0	1	1	2	0	0							
14:00	2	1	3	0	1	1	1	1	0							
14:15	2	4	6	0	1	1	1	1	0							
14:30	5	2	7	0	2	2	2	2	1							
14:45	5	3	8	0	2	2	2	2	1							
15:00	7	9	16	3	3	3	0	6	1							
15:15	2	4	6	0	1	1	1	1	0							
15:30	9	5	14	0	4	4	2	6	1							
15:45	5	8	13	0	4	1	1	4	0							
16:00	4	3	7	0	3	0	1	2	1							
16:15	5	5	10	0	2	2	1	3	1							
16:30	4	4	8	0	1	3	0	4	0							
16:45	4	4	8	0	1	2	0	3	1							
17:00	6	4	10	0	2	4	1	5	0							
17:15	6	4	10	0	4	2	3	3	0							
17:30	6	6	12	0	3	3	1	5	0							
17:45	4	7	11	0	2	2	1	3	0							
18:00	3	1	4	0	0	3	0	3	0							
18:15	2	2	4	0	1	1	1	1	0							
18:30	7	2	9	0	2	4	1	5	1							
18:45	6	4	10	0	4	2	3	3	0							
19:00	4	5	9	0	2	2	1	3	0							
19:15	6	8	14	0	5	1	1	5	0							
19:30	3	4	7	0	1	1	2	0	1							
19:45	8	7	15	0	4	3	1	6	1							
20:00	5	3	8	1	3	2	0	5	0							
20:15	3	3	6	1	2	1	0	3	0							
20:30	1	5	6	0	0	1	0	1	0							
20:45	9	4	13	0	4	2	0	6	3							
21:00	1	5	6	0	0	1	0	1	0							
21:15	2	6	8	0	2	0	0	2	0							
21:30	5	2	7	0	3	2	0	5	0							
21:45	2	2	4	0	1	1	0	2	0							
22:00	2	3	5	0	1	1	0	2	0							
22:15	4	2	6	0	2	2	0	4	0							
22:30	2	5	7	0	2	0	0	2	0							
22:45	3	2	5	0	2	1	0	3	0							
23:00	6	0	6	0	2	3	0	5	1							
23:15	3	6	9	0	1	2	0	3	0							
23:30	4	3	7	0	2	2	0	4	0							
23:45	3	7	10	0	2	0	0	2	1							
TOTAL	310	305	615		138	142	76	204	30							

TOTAL INBOUND TRIPS	310
RESPONSE %	90%
TOTAL PASS-BY TRIPS	138
PASS-BY TRIP %	45%
TOTAL INTERNAL TRIP CAPTURE	76
INTERNAL TRIP CAPTURE %	25%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 9380 Warner Ave
CITY: Fountain Valley

DATE: -
DAY: -

SUMMARY OF RESULTS

12 chargers

DATE: 8/29/2023
DAY: Tuesday

TOTAL SURVEYED TRIPS	308
TOTAL PASS-BY TRIPS	151
PASS-BY TRIP %	49%
TOTAL INTERNAL TRIP CAPTURE	96
INTERNAL TRIP CAPTURE %	31%
TOTAL DAILY TRIPS	613

In	Out	Total	In	Out	Total
AM Pk Hr Trips	12	11	23	PM Pk Hr Trips	21
AM Pk Hr Trip Rates	1.00	0.92	1.92	PM Pk Hr Trip Rates	1.75
AM Pass-By Trips	4			PM Pass-By Trips	11
AM Pass-By Trip %	33%			PM Pass-By Trip %	52%
AM Int Trip Capt	6			PM Int Trip Capt	6
AM Int Trip Capt %	50%			PM Int Trip Capt %	29%
Daily Trip Rate	51.08				

DATE: 8/30/2023
DAY: Wednesday

TOTAL SURVEYED TRIPS	313
TOTAL PASS-BY TRIPS	127
PASS-BY TRIP %	41%
TOTAL INTERNAL TRIP CAPTURE	90
INTERNAL TRIP CAPTURE %	29%
TOTAL DAILY TRIPS	629

In	Out	Total	In	Out	Total
AM Pk Hr Trips	15	19	34	PM Pk Hr Trips	20
AM Pk Hr Trip Rates	1.25	1.58	2.83	PM Pk Hr Trip Rates	1.67
AM Pass-By Trips	6			PM Pass-By Trips	7
AM Pass-By Trip %	40%			PM Pass-By Trip %	35%
AM Int Trip Capt	6			PM Int Trip Capt	7
AM Int Trip Capt %	40%			PM Int Trip Capt %	35%
Daily Trip Rate	52.42				

DATE: 8/31/2023
DAY: Thursday

TOTAL SURVEYED TRIPS	310
TOTAL PASS-BY TRIPS	138
PASS-BY TRIP %	45%
TOTAL INTERNAL TRIP CAPTURE	76
INTERNAL TRIP CAPTURE %	25%
TOTAL DAILY TRIPS	615

In	Out	Total	In	Out	Total
AM Pk Hr Trips	15	14	29	PM Pk Hr Trips	22
AM Pk Hr Trip Rates	1.25	1.17	2.42	PM Pk Hr Trip Rates	1.83
AM Pass-By Trips	8			PM Pass-By Trips	11
AM Pass-By Trip %	53%			PM Pass-By Trip %	50%
AM Int Trip Capt	8			PM Int Trip Capt	6
AM Int Trip Capt %	53%			PM Int Trip Capt %	27%
Daily Trip Rate	51.25				

DATE: 3-Day
DAY: Total

TOTAL SURVEYED TRIPS	931
TOTAL PASS-BY TRIPS	416
PASS-BY TRIP %	45%
TOTAL INTERNAL TRIP CAPTURE	262
INTERNAL TRIP CAPTURE %	28%
TOTAL DAILY TRIPS	1857

In	Out	Total	In	Out	Total
AM Pk Hr Trips	42	44	86	PM Pk Hr Trips	63
AM Pk Hr Trip Rates	1.17	1.22	2.39	PM Pk Hr Trip Rates	1.75
AM Pass-By Trips	18			PM Pass-By Trips	29
AM Pass-By Trip %	43%			PM Pass-By Trip %	46%
AM Int Trip Capt	20			PM Int Trip Capt	19
AM Int Trip Capt %	48%			PM Int Trip Capt %	30%
Daily Trip Rate	51.58				

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1025 Westminster Mall
CITY: Westminster

DATE: 8/29/2023
DAY: Tuesday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Bolsa Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?													
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %				
0:00	2	5	7	0	1	1	0	2	0											
0:15	2	6	8	0	0	1	0	1	1											
0:30	0	1	1	0	0	0	0	0	0											
0:45	1	3	4	0	0	1	0	1	0											
1:00	0	1	1	0	0	0	0	0	0											
1:15	0	1	1	0	0	0	0	0	0											
1:30	0	0	0	0	0	0	0	0	0											
1:45	1	0	1	0	0	1	0	1	0											
2:00	2	0	2	0	0	2	0	2	0											
2:15	1	0	1	0	0	1	0	1	0											
2:30	0	2	2	0	0	0	0	0	0											
2:45	0	1	1	0	0	0	0	0	0											
3:00	0	1	1	0	0	0	0	0	0											
3:15	0	0	0	0	0	0	0	0	0											
3:30	1	0	1	0	0	1	0	1	0											
3:45	0	0	0	0	0	0	0	0	0											
4:00	0	0	0	0	0	0	0	0	0											
4:15	1	1	2	0	0	0	0	0	0											
4:30	0	1	1	0	0	1	0	1	0											
4:45	0	0	0	0	0	0	0	0	0											
5:00	2	0	2	0	0	2	0	2	0											
5:15	2	0	2	0	1	1	0	2	0											
5:30	0	0	0	0	0	0	0	0	0											
5:45	4	1	5	0	2	0	0	2	0											
6:00	0	2	2	0	0	2	0	2	0											
6:15	4	1	5	0	2	2	0	4	0											
6:30	1	1	2	0	1	0	0	1	0											
6:45	2	3	5	0	0	2	0	2	0											
7:00	5	4	9	0	2	3	0	5	0											
7:15	4	2	6	0	1	3	0	4	0											
7:30	4	2	6	0	1	1	0	2	1											
7:45	3	5	8	0	2	2	3	1	0											
8:00	4	0	4	0	0	4	0	4	0				7:00-8:00 AM	16	13	29	6	38%	3	19%
8:15	4	4	8	0	4	0	4	0	0				7:15-8:15 AM	15	9	24	4	27%	3	20%
8:30	4	3	7	0	3	1	0	4	0				7:30-8:30 AM	15	11	26	7	47%	7	47%
8:45	4	11	15	0	4	0	1	1	1				7:45-8:45 AM	15	12	27	9	60%	7	47%
9:00	5	5	10	0	5	1	2	4	0				8:00-9:00 AM	16	18	34	9	56%	5	31%
9:15	5	4	9	0	3	2	2	3	0											
9:30	7	5	12	0	2	5	2	5	0											
9:45	7	4	11	0	4	3	3	4	0											
10:00	10	9	19	0	4	5	1	8	1											
10:15	4	11	15	0	2	2	2	2	0											
10:30	2	3	5	0	1	1	1	1	0											
10:45	2	6	8	0	0	1	1	0	1											
11:00	12	3	15	0	4	7	6	5	1											
11:15	6	4	10	0	2	4	2	4	0											
11:30	3	8	11	0	1	1	0	2	2											
11:45	6	5	11	0	1	2	1	2	2											
12:00	3	3	6	0	1	1	0	2	1											
12:15	4	3	7	0	2	2	1	3	0											
12:30	10	6	16	0	4	3	4	3	3											
12:45	7	8	15	0	2	2	2	2	3											
13:00	8	7	15	0	2	3	3	2	2											
13:15	7	5	12	0	5	3	5	3	0											
13:30	1	6	7	0	0	0	0	0	0											
13:45	1	7	8	0	1	0	1	0	1											
14:00	12	4	16	0	9	2	6	5	1											
14:15	4	3	7	0	0	3	1	2	1											
14:30	9	6	15	0	2	3	1	4	4											
14:45	2	10	12	0	0	2	0	2	0											
15:00	3	5	8	0	3	0	1	2	0											
15:15	6	6	12	0	3	2	2	3	1											
15:30	6	4	10	0	3	3	2	4	0											
15:45	3	4	7	0	1	1	1	1	1											
16:00	7	6	13	0	2	4	2	4	1											
16:15	4	2	6	0	4	1	3	2	0											
16:30	5	3	8	0	2	2	0	4	0											
16:45	10	4	14	0	3	7	3	7	0											
17:00	11	7	18	1	2	5	2	5	4											
17:15	4	4	8	3	0	4	0	4	0											
17:30	4	9	13	0	2	1	0	3	1											
17:45	3	9	12	0	1	2	0	3	0											
18:00	3	7	10	0	1	2	1	2	0											
18:15	7	3	10	0	3	4	4	3	0											
18:30	0	2	2	0	0	0	0	0	0											
18:45	6	3	9	0	3	2	2	3	1											
19:00	6	4	10	0	2	2	2	2	2											
19:15	3	7	10	0	0	2	0	2	1											
19:30	5	7	12	0	1	3	3	1	1											
19:45	11	2	13	0	4	3	3	4	2											
20:00	8	5	13	0	4	6	2	8	0											
20:15	5	5	10	0	2	3	1	4	0											
20:30	7	8	15	0	3	4	2	5	0											
20:45	7	9	16	0	3	3	2	4	1											
21:00	5	7	12	0	3	2	2	3	0											
21:15	4	5	9	0	1	3	0	4	0											
21:30	3	5	8	0	2	1	1	2	0											
21:45	7	4	11	0	2	1	1	2	4											
22:00	4	5	9	0	1	1	0	2	2											
22:15	5	3	8	0	2	1	1	2	1											
22:30	2	4	6	0	2	0	0	2	1											
22:45	9	2	11	0	3	2	1	4	3											
23:00	5	5	10	0	3	1	1	3	2											
23:15	2	3	5	0	0	1	0	0	1											
23:30	4	6	10	0	3	1	2	2	0											
23:45	0	7	7	0	0	0	0	0	0											
TOTAL	379	378	757		153	170	102	221	56											

TOTAL INBOUND TRIPS	379
RESPONSE %	85%
TOTAL PASS-BY TRIPS	153
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	102
INTERNAL TRIP CAPTURE %	27%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1025 Westminster Mall
CITY: Westminster

DATE: 8/30/2023
DAY: Wednesday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Bolsa Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?									
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
0:00	4	3	7	0	3	0	0	3	1							
0:15	3	4	7	0	0	2	0	2	1							
0:30	1	2	3	0	0	1	0	1	0							
0:45	0	0	0	0	0	0	0	0	0							
1:00	0	2	2	0	0	0	0	0	0							
1:15	1	3	4	0	1	0	0	1	0							
1:30	0	0	0	0	0	0	0	0	0							
1:45	1	0	1	0	0	1	0	1	0							
2:00	0	1	1	0	0	0	0	0	0							
2:15	1	0	1	0	0	1	0	1	0							
2:30	0	1	1	0	0	0	0	0	0							
2:45	1	1	2	0	1	0	0	1	0							
3:00	0	0	0	0	0	0	0	0	0							
3:15	0	1	1	0	0	0	0	0	0							
3:30	1	0	1	0	0	0	0	0	1							
3:45	0	0	0	0	0	0	0	0	0							
4:00	2	0	2	0	1	0	0	1	1							
4:15	0	2	2	0	0	0	0	0	0							
4:30	0	1	1	0	0	0	0	0	0							
4:45	1	0	1	0	0	0	0	0	1							
5:00	3	0	3	0	2	0	0	2	1							
5:15	1	2	3	0	1	0	0	1	0							
5:30	4	3	7	0	2	1	0	3	1							
5:45	1	0	1	0	1	0	0	1	0							
6:00	3	2	5	0	1	2	1	2	0							
6:15	3	2	5	0	1	1	1	2	0							
6:30	3	3	6	0	2	1	1	2	0							
6:45	4	2	6	0	1	2	0	3	1							
7:00	2	3	5	0	2	1	0	3	0							
7:15	5	5	10	0	3	1	0	4	0							
7:30	2	6	8	0	1	1	1	1	0							
7:45	9	7	16	0	3	6	2	7	0							
8:00	11	2	13	0	6	4	3	7	1							
8:15	6	4	10	0	4	3	1	6	1							
8:30	5	4	9	0	2	4	1	5	1							
8:45	5	4	9	0	2	2	0	4	1							
9:00	4	5	9	0	2	2	2	2	1							
9:15	8	10	18	0	2	4	2	4	1							
9:30	3	6	9	0	2	0	2	0	1							
9:45	8	7	15	0	3	3	4	2	2							
10:00	3	5	8	0	1	2	2	1	1							
10:15	5	3	8	0	2	2	2	2	0							
10:30	9	4	13	0	3	3	3	3	3							
10:45	7	6	13	0	3	3	3	3	1							
11:00	3	4	7	0	1	1	0	2	1							
11:15	11	6	17	0	5	3	3	5	3							
11:30	6	5	11	0	3	3	3	3	0							
11:45	6	7	13	0	2	4	4	2	0							
12:00	3	6	9	0	1	2	2	1	0							
12:15	6	9	15	0	1	2	1	2	3							
12:30	3	7	10	0	1	1	1	1	1							
12:45	7	6	13	0	2	4	2	4	1							
13:00	7	6	13	0	2	5	1	6	0							
13:15	10	5	15	0	2	6	1	7	1							
13:30	5	6	11	0	2	4	3	3	0							
13:45	8	5	13	0	2	5	2	5	1							
14:00	4	5	9	0	2	2	1	3	0							
14:15	6	9	15	0	1	4	2	3	1							
14:30	3	7	10	0	2	1	1	2	0							
14:45	4	8	12	0	1	3	1	3	0							
15:00	5	5	10	0	2	3	2	3	0							
15:15	4	6	10	0	1	2	2	1	1							
15:30	5	5	10	0	1	4	3	2	0							
15:45	5	3	8	0	3	2	1	4	0							
16:00	8	4	12	0	3	4	2	5	1							
16:15	5	6	11	0	2	2	2	2	1							
16:30	5	5	10	0	3	2	1	4	0							
16:45	4	5	9	0	2	1	1	2	1							
17:00	7	5	12	0	3	4	1	6	0							
17:15	7	5	12	0	3	4	1	6	0							
17:30	5	6	11	0	2	3	1	4	0							
17:45	9	8	17	0	4	3	4	3	2							
18:00	7	6	13	0	5	1	2	4	0							
18:15	4	9	13	0	1	3	2	2	1							
18:30	5	5	10	0	2	3	2	3	0							
18:45	7	6	13	0	1	5	1	5	1							
19:00	5	7	12	0	2	2	0	4	1							
19:15	5	5	10	0	1	1	2	0	2							
19:30	6	6	12	0	2	3	1	4	2							
19:45	4	5	9	0	1	1	1	1	2							
20:00	8	5	13	0	4	2	3	3	2							
20:15	3	3	6	0	1	2	0	3	0							
20:30	5	6	11	0	1	3	0	4	1							
20:45	6	5	11	0	2	2	0	4	2							
21:00	7	5	12	0	3	2	2	3	2							
21:15	6	6	12	0	2	2	2	2	2							
21:30	7	7	14	0	2	5	3	4	0							
21:45	9	6	15	0	4	3	3	4	2							
22:00	0	3	3	0	0	0	0	0	0							
22:15	5	3	8	0	1	1	1	1	3							
22:30	5	8	13	0	2	3	0	5	0							
22:45	4	4	8	0	2	2	0	4	0							
23:00	5	5	10	0	1	3	0	4	1							
23:15	4	5	9	0	1	1	0	2	2							
23:30	3	6	9	0	2	1	0	3	1							
23:45	6	5	11	0	1	2	0	3	2							
TOTAL	417	411	828		161	191	105	247	69							

TOTAL INBOUND TRIPS	417
RESPONSE %	84%
TOTAL PASS-BY TRIPS	161
PASS-BY TRIP %	39%
TOTAL INTERNAL TRIP CAPTURE	105
INTERNAL TRIP CAPTURE %	25%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1025 Westminster Mall
CITY: Westminster

DATE: 8/31/2023
DAY: Thursday

	Inbound Trips	Outbound Trip	TOTAL	Vehicles in Queue	Q1: If you were not charging today, would you be driving on Bolsa Ave now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?		NO RESPONSE		Inbound Trips	Outbound Trip	TOTAL	Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
					YES (Pass-by Trip)	NO	YES (Internal Trip)	NO									
0:00	1	3	4	0	1	0	0	1	0								
0:15	1	3	4	0	1	0	0	1	0								
0:30	0	4	4	0	0	0	0	0	0								
0:45	0	0	0	0	0	1	0	1	0								
1:00	1	2	3	0	0	0	0	0	0								
1:15	1	0	1	0	1	0	0	1	0								
1:30	0	0	0	0	0	0	0	0	0								
1:45	0	1	1	0	0	0	0	0	0								
2:00	0	1	1	0	0	0	0	0	0								
2:15	0	0	0	0	0	0	0	0	0								
2:30	1	1	2	0	0	1	0	1	0								
2:45	2	0	2	0	1	1	0	2	0								
3:00	2	1	3	0	1	1	0	2	0								
3:15	3	2	5	0	2	0	0	2	1								
3:30	1	0	1	0	1	0	0	1	0								
3:45	0	2	2	0	0	0	0	0	0								
4:00	2	1	3	0	2	0	0	2	0								
4:15	1	1	2	0	1	1	0	1	0								
4:30	0	1	1	0	0	0	0	0	0								
4:45	1	2	3	0	0	1	0	1	0								
5:00	4	0	4	0	1	1	0	2	1								
5:15	3	2	5	0	1	2	0	3	1								
5:30	2	2	4	0	1	0	0	1	1								
5:45	4	2	6	0	2	2	0	4	0								
6:00	0	0	0	0	0	0	0	0	0								
6:15	4	1	5	0	2	0	1	1	2								
6:30	2	4	6	0	2	0	0	2	0								
6:45	9	3	12	0	6	3	0	9	0								
7:00	4	3	7	0	1	3	0	4	0								
7:15	3	5	8	0	2	2	0	4	0								
7:30	8	6	14	0	4	3	2	5	0								
7:45	4	8	12	0	2	2	0	4	0								
8:00	10	6	16	0	3	3	1	5	4								
8:15	9	8	17	0	5	2	3	4	2								
8:30	4	8	12	0	2	1	0	3	1								
8:45	3	11	14	0	2	1	1	2	0								
9:00	6	3	9	0	1	2	0	3	2								
9:15	5	4	9	0	3	3	3	3	0								
9:30	6	4	10	0	2	4	3	3	0								
9:45	6	8	14	0	2	3	1	4	1								
10:00	7	3	10	0	3	3	4	2	0								
10:15	8	7	15	0	3	5	2	6	1								
10:30	6	4	10	0	2	2	2	2	2								
10:45	8	4	12	0	3	1	1	3	3								
11:00	3	8	11	0	1	3	2	2	0								
11:15	3	7	10	0	1	1	1	1	1								
11:30	4	6	10	0	2	1	1	2	1								
11:45	3	4	7	0	0	2	0	2	1								
12:00	8	4	12	0	3	4	4	3	1								
12:15	7	5	12	0	1	3	1	3	3								
12:30	4	10	14	0	2	1	1	2	1								
12:45	5	3	8	0	1	3	2	2	1								
13:00	8	5	13	0	2	4	2	4	2								
13:15	4	6	10	0	2	2	1	3	0								
13:30	3	4	7	0	1	1	2	0	1								
13:45	3	5	8	0	1	2	2	1	0								
14:00	5	6	11	0	2	2	2	2	1								
14:15	5	7	12	0	3	1	0	4	1								
14:30	7	5	12	0	2	5	2	5	0								
14:45	3	4	7	0	1	0	1	0	2								
15:00	4	5	9	0	2	1	1	2	2								
15:15	5	4	9	0	2	1	2	1	1								
15:30	5	2	7	0	4	1	1	4	0								
15:45	1	5	6	0	1	0	0	1	0								
16:00	4	1	5	0	2	1	2	1	1								
16:15	2	6	8	0	1	0	1	0	1								
16:30	4	6	10	0	2	0	0	2	2								
16:45	3	2	5	0	0	3	1	2	0								
17:00	3	2	5	0	1	2	2	1	0								
17:15	1	3	4	0	0	1	1	0	0								
17:30	5	3	8	0	2	2	0	4	1								
17:45	4	3	7	0	0	3	2	1	1								
18:00	7	5	12	0	2	5	3	4	0								
18:15	6	4	10	0	1	3	2	2	2								
18:30	1	6	7	0	0	1	1	0	0								
18:45	8	8	16	0	3	4	5	2	1								
19:00	8	5	13	0	1	4	2	3	3								
19:15	6	6	12	0	2	4	3	3	0								
19:30	2	4	6	0	1	1	1	1	0								
19:45	5	9	14	0	2	1	1	2	2								
20:00	9	3	12	0	4	4	2	6	1								
20:15	6	6	12	0	4	1	1	4	1								
20:30	2	5	7	0	1	0	1	0	1								
20:45	4	5	9	0	2	2	2	2	0								
21:00	8	6	14	0	4	2	2	4	2								
21:15	1	5	6	0	0	0	0	0	1								
21:30	2	5	7	0	0	2	0	2	0								
21:45	4	3	7	0	1	2	1	2	1								
22:00	3	2	5	0	2	1	0	3	0								
22:15	3	2	5	0	0	3	0	3	0								
22:30	2	5	7	0	0	0	0	0	2								
22:45	1	2	3	0	0	1	0	1	0								
23:00	6	2	8	0	3	1	0	4	2								
23:15	1	1	2	0	0	1	0	1	0								
23:30	5	3	8	0	2	2	0	4	1								
23:45	0	0	0	0	0	0	0	0	0								
TOTAL	358	364	722		143	148	88	203	67								

TOTAL INBOUND TRIPS	358
RESPONSE %	81%
TOTAL PASS BY TRIPS	143
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	88
INTERNAL TRIP CAPTURE %	25%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1025 Westminster Mall
CITY: Westminster

DATE: -
DAY: -

SUMMARY OF RESULTS

24 chargers

DATE: 8/29/2023
DAY: Tuesday

TOTAL SURVEYED TRIPS	379
TOTAL PASS-BY TRIPS	153
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	102
INTERNAL TRIP CAPTURE %	27%
TOTAL DAILY TRIPS	757

In	Out	Total	In	Out	Total
AM Pk Hr Trips	16	18	34	PM Pk Hr Trips	29
AM Pk Hr Trip Rates	0.67	0.75	1.42	PM Pk Hr Trip Rates	1.21
AM Pass-By Trips	9			PM Pass-By Trips	7
AM Pass-By Trip %	56%			PM Pass-By Trip %	24%
AM Int Trip Capt	5			PM Int Trip Capt	5
AM Int Trip Capt %	31%			PM Int Trip Capt %	17%
Daily Trip Rate	31.54				

DATE: 8/30/2023
DAY: Wednesday

TOTAL SURVEYED TRIPS	417
TOTAL PASS-BY TRIPS	161
PASS-BY TRIP %	39%
TOTAL INTERNAL TRIP CAPTURE	105
INTERNAL TRIP CAPTURE %	25%
TOTAL DAILY TRIPS	828

In	Out	Total	In	Out	Total
AM Pk Hr Trips	31	17	48	PM Pk Hr Trips	28
AM Pk Hr Trip Rates	1.29	0.71	2.00	PM Pk Hr Trip Rates	1.17
AM Pass-By Trips	15			PM Pass-By Trips	12
AM Pass-By Trip %	48%			PM Pass-By Trip %	43%
AM Int Trip Capt	7			PM Int Trip Capt	7
AM Int Trip Capt %	23%			PM Int Trip Capt %	25%
Daily Trip Rate	34.50				

DATE: 8/31/2023
DAY: Thursday

TOTAL SURVEYED TRIPS	358
TOTAL PASS-BY TRIPS	143
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	88
INTERNAL TRIP CAPTURE %	25%
TOTAL DAILY TRIPS	722

In	Out	Total	In	Out	Total
AM Pk Hr Trips	31	28	59	PM Pk Hr Trips	13
AM Pk Hr Trip Rates	1.29	1.17	2.46	PM Pk Hr Trip Rates	0.54
AM Pass-By Trips	14			PM Pass-By Trips	5
AM Pass-By Trip %	45%			PM Pass-By Trip %	38%
AM Int Trip Capt	6			PM Int Trip Capt	4
AM Int Trip Capt %	19%			PM Int Trip Capt %	31%
Daily Trip Rate	30.08				

DATE: 3-Day
DAY: Total

TOTAL SURVEYED TRIPS	1154
TOTAL PASS-BY TRIPS	457
PASS-BY TRIP %	40%
TOTAL INTERNAL TRIP CAPTURE	295
INTERNAL TRIP CAPTURE %	26%
TOTAL DAILY TRIPS	2307

In	Out	Total	In	Out	Total
AM Pk Hr Trips	78	63	141	PM Pk Hr Trips	70
AM Pk Hr Trip Rates	1.08	0.88	1.96	PM Pk Hr Trip Rates	0.97
AM Pass-By Trips	38			PM Pass-By Trips	24
AM Pass-By Trip %	49%			PM Pass-By Trip %	34%
AM Int Trip Capt	18			PM Int Trip Capt	16
AM Int Trip Capt %	23%			PM Int Trip Capt %	23%
Daily Trip Rate	32.04				

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1425 Santa Monica Blvd
CITY: Santa Monica

DATE: 8/29/2023
DAY: Tuesday

				Vehicles in Queue	Q1: If you were not charging today, would you be driving on Santa Monica Blvd now?		Q2: While charging your vehicle, will you be shopping/dining at one or more adjacent retail/restaurants uses?									
	Inbound Trips	Outbound Trip	TOTAL		YES (Pass-by Trip)	NO	YES (Internal Trip)	NO	NO RESPONSE				Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
0:00	16	5	21	0	5	6	2	9	5							
0:15	19	14	33	0	4	9	3	10	6							
0:30	11	19	30	0	5	3	2	6	3							
0:45	9	11	20	0	2	3	1	4	4							
1:00	4	6	10	0	1	3	1	3	0							
1:15	5	8	13	0	1	4	2	3	0							
1:30	3	9	12	0	0	1	0	1	2							
1:45	2	9	11	0	1	1	0	2	0							
2:00	5	6	11	0	1	1	0	2	3							
2:15	8	4	12	0	3	3	2	4	2							
2:30	3	1	4	0	1	0	0	1	1							
2:45	2	5	7	0	1	2	2	1	0							
3:00	2	3	5	0	1	0	1	0	1							
3:15	2	4	6	0	0	1	0	1	1							
3:30	4	0	4	0	0	2	0	2	2							
3:45	6	6	12	0	1	4	1	4	1							
4:00	2	3	5	0	0	1	0	1	0							
4:15	1	3	4	0	1	1	1	1	0							
4:30	2	3	5	0	0	1	0	1	1							
4:45	6	3	9	0	1	2	1	2	3							
5:00	0	3	3	0	0	0	0	0	0							
5:15	2	4	6	0	0	2	0	2	0							
5:30	3	1	4	0	1	1	1	1	1							
5:45	4	1	5	0	1	1	0	2	2							
6:00	6	7	13	0	1	2	1	2	3							
6:15	6	7	13	0	4	1	2	3	1							
6:30	6	5	11	0	3	3	1	5	0							
6:45	1	5	6	0	0	1	0	1	0							
7:00	7	4	11	0	3	4	2	5	0							
7:15	2	6	8	0	3	0	2	1	0							
7:30	12	8	20	0	7	3	4	6	1							
7:45	11	7	18	0	5	3	2	6	3							
8:00	9	9	18	0	4	3	2	5	2							
8:15	14	8	22	0	6	5	4	7	3							
8:30	9	11	20	0	7	0	4	3	2							
8:45	14	9	23	0	6	4	4	6	4							
9:00	8	12	20	0	2	3	2	3	3							
9:15	8	12	20	0	4	2	2	4	2							
9:30	8	10	18	0	3	3	2	4	2							
9:45	11	10	21	0	8	2	3	7	1							
10:00	15	9	24	0	5	7	6	6	3							
10:15	14	12	26	0	5	5	3	7	4							
10:30	9	15	24	0	3	5	3	5	1							
10:45	15	13	28	0	6	5	3	8	4							
11:00	10	13	23	0	6	3	2	7	1							
11:15	15	15	30	0	5	6	5	7	4							
11:30	12	10	22	0	4	6	5	5	2							
11:45	13	12	25	0	6	4	4	6	3							
12:00	11	12	23	0	5	5	4	6	1							
12:15	9	13	22	0	3	4	1	6	2							
12:30	17	11	28	0	7	4	5	6	6							
12:45	10	12	22	0	4	5	3	6	1							
13:00	16	12	28	0	5	6	5	6	5							
13:15	20	11	31	0	8	9	7	10	3							
13:30	8	13	21	0	2	4	3	3	2							
13:45	9	12	21	0	5	4	3	6	0							
14:00	13	11	24	0	7	5	5	7	1							
14:15	7	12	19	0	2	4	2	4	1							
14:30	8	13	21	0	3	5	2	6	0							
14:45	13	13	26	0	4	7	2	9	2							
15:00	18	13	31	0	7	6	6	7	5							
15:15	13	14	27	0	5	6	4	7	2							
15:30	12	15	27	0	4	4	1	7	4							
15:45	12	9	21	0	5	5	3	7	2							
16:00	15	11	26	0	6	8	5	9	1							
16:15	19	10	29	0	5	9	7	7	5							
16:30	8	12	20	0	3	1	2	2	4							
16:45	12	15	27	0	3	4	3	4	5							
17:00	14	11	25	0	6	8	5	9	0							
17:15	11	16	27	0	4	4	3	5	3							
17:30	13	14	27	0	5	7	3	9	1							
17:45	10	7	17	0	2	4	1	5	4							
18:00	19	15	34	0	6	8	4	10	5							
18:15	10	11	21	0	5	3	3	5	2							
18:30	20	17	37	0	7	8	3	8	5							
18:45	14	16	30	0	4	6	3	6	5							
19:00	16	18	34	0	6	7	4	9	2							
19:15	5	10	15	0	3	1	1	3	1							
19:30	14	15	29	0	6	5	4	7	3							
19:45	12	15	27	0	5	4	3	6	3							
20:00	21	11	32	0	7	11	6	12	3							
20:15	10	10	20	0	6	3	5	4	0							
20:30	14	13	27	0	6	7	4	9	2							
20:45	12	12	24	0	3	6	7	2	3							
21:00	14	14	28	0	4	7	4	7	3							
21:15	8	18	26	0	3	4	3	4	1							
21:30	16	10	26	0	6	6	6	6	4							
21:45	12	13	25	0	3	5	5	3	4							
22:00	14	12	26	0	8	3	4	7	3							
22:15	13	11	24	0	5	5	6	4	3							
22:30	9	17	26	0	4	3	2	5	2							
22:45	6	5	11	0	1	2	1	2	3							
23:00	7	10	17	0	3	3	2	4	1							
23:15	10	9	19	0	4	4	5	3	2							
23:30	8	7	15	0	3	4	0	7	1							
23:45	17	8	25	0	7	6	6	7	4							
TOTAL	955	949	1904		362	381	264	475	212							

TOTAL INBOUND TRIPS	955
RESPONSE %	78%
TOTAL PASS-BY TRIPS	362
PASS-BY TRIP %	38%
TOTAL INTERNAL TRIP CAPTURE	264
INTERNAL TRIP CAPTURE %	28%

7:00-8:00 AM	32	25	57	18	56%	10	31%
7:15-8:15 AM	34	30	64	19	56%	10	29%
7:30-8:30 AM	46	32	78	22	48%	12	26%
7:45-8:45 AM	43	35	78	22	51%	12	28%
8:00-9:00 AM	46	37	83	23	50%	14	30%
4:00-5:00 PM	54	48	102	17	31%	17	31%
4:15-5:15 PM	53	48	101	17	32%	17	32%
4:30-5:30 PM	45	54	99	16	36%	13	29%
4:45-5:45 PM	50	56	106	18	36%	14	28%
5:00-6:00 PM	48	48	96	17	35%	12	25%

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1425 Santa Monica Blvd
CITY: Santa Monica

DATE: 8/31/2023
DAY: Thursday

*** Tesla Security staff asked that we cease our survey on 8-30-23 ***

	Inbound Trips	Outbound Trips	TOTAL
0:00	14	5	19
0:15	18	13	31
0:30	17	21	38
0:45	9	20	29
1:00	5	10	15
1:15	5	10	21
1:30	4	5	9
1:45	7	5	12
2:00	4	11	15
2:15	2	4	6
2:30	2	6	8
2:45	10	4	14
3:00	4	1	5
3:15	4	4	13
3:30	3	5	8
3:45	2	6	8
4:00	0	4	4
4:15	0	5	5
4:30	0	4	4
4:45	4	1	5
5:00	2	1	4
5:15	4	2	6
5:30	3	5	8
5:45	2	2	4
6:00	5	3	8
6:15	7	3	10
6:30	3	5	8
6:45	8	4	12
7:00	8	4	12
7:15	4	6	10
7:30	4	6	10
7:45	8	9	17
8:00	17	5	22
8:15	14	13	27
8:30	13	14	27
8:45	11	17	28
9:00	8	9	17
9:15	13	8	21
9:30	11	13	24
9:45	13	14	27
10:00	9	13	22
10:15	12	8	20
10:30	14	11	26
10:45	14	15	29
11:00	14	9	23
11:15	11	10	21
11:30	17	15	32
11:45	8	17	25
12:00	13	14	27
12:15	7	12	19
12:30	22	9	32
12:45	1	13	21
13:00	12	15	27
13:15	13	8	21
13:30	9	11	20
13:45	8	12	20
14:00	7	11	18
14:15	16	6	22
14:30	16	11	27
14:45	10	11	21
15:00	15	17	32
15:15	15	12	27
15:30	11	12	23
15:45	5	9	14
16:00	14	19	33
16:15	14	9	23
16:30	8	8	16
16:45	5	10	15
17:00	9	10	19
17:15	16	8	24
17:30	8	11	19
17:45	8	8	16
18:00	11	10	21
18:15	11	11	22
18:30	9	11	20
18:45	13	12	25
19:00	10	8	18
19:15	8	9	17
19:30	10	10	20
19:45	19	14	33
20:00	11	2	13
20:15	15	15	30
20:30	14	17	31
20:45	13	18	31
21:00	9	14	23
21:15	7	10	17
21:30	12	9	21
21:45	8	12	18
22:00	13	13	27
22:15	17	10	27
22:30	8	9	17
22:45	17	11	28
23:00	9	16	25
23:15	7	9	16
23:30	15	5	18
23:45	2	2	5
TOTAL	916	925	1841

[illegible][illegible]

Inbound Trips	Outbound Trip	TOTAL	Pass-by Trips	Pass-by Trip %	Internal Capture	Internal Capture %
------------------	------------------	-------	------------------	-------------------	---------------------	-----------------------

7:00-8:00 AM	24	25	49	0	0
7:15-8:15 AM	33	26	59	0	0
7:30-8:30 AM	43	33	76	0	0
7:45-8:45 AM	52	41	93	0	0
8:00-9:00 AM	55	49	104	0	0

4:00-5:00 PM	41	46	87	0	0
4:15-5:15 PM	36	37	73	0	0
4:30-5:30 PM	38	36	74	0	0
4:45-5:45 PM	38	39	77	0	0
5:00-6:00 PM	41	37	78	0	0

*** NO STATS ***	TOTAL SURVEYED INBOUND TRIPS	0
*** NO STATS ***	RESPONSE %	#DIV/0!
*** NO STATS ***	TOTAL PASS-BY TRIPS	0
*** NO STATS ***	PASS-BY TRIP %	#DIV/0!
*** NO STATS ***	TOTAL INTERNAL TRIP CAPTURE	0
*** NO STATS ***	INTERNAL TRIP CAPTURE %	#DIV/0!

Trip Generation / EV Charging Survey

LOCATION: Tesla EV Chargers, 1425 Santa Monica Blvd
CITY: Santa Monica

DATE: - _____
DAY: - _____

SUMMARY OF RESULTS

62 chargers

DATE: 8/29/2023
DAY: Tuesday

TOTAL SURVEYED TRIPS	955
TOTAL PASS-BY TRIPS	362
PASS-BY TRIP %	38%
TOTAL INTERNAL TRIP CAPTURE	264
INTERNAL TRIP CAPTURE %	28%
TOTAL DAILY TRIPS	1904

In	Out	Total	In	Out	Total
AM Pk Hr Trips	46	37	83	PM Pk Hr Trips	50
AM Pk Hr Trip Rates	0.74	0.60	1.34	PM Pk Hr Trip Rates	0.81
AM Pass-By Trips	23			PM Pass-By Trips	18
AM Pass-By Trip %	50%			PM Pass-By Trip %	36%
AM Int Trip Capt	14			PM Int Trip Capt	14
AM Int Trip Capt %	30%			PM Int Trip Capt %	28%
Daily Trip Rate	30.71				

DATE: 8/30/2023
DAY: Wednesday

TOTAL SURVEYED TRIPS	258	*** STATS THROUGH 9:30 AM ***
TOTAL PASS-BY TRIPS	105	*** STATS THROUGH 9:30 AM ***
PASS-BY TRIP %	41%	*** STATS THROUGH 9:30 AM ***
TOTAL INTERNAL TRIP CAPTURE	63	*** STATS THROUGH 9:30 AM ***
INTERNAL TRIP CAPTURE %	24%	*** STATS THROUGH 9:30 AM ***
TOTAL DAILY TRIPS	1920	

In	Out	Total	In	Out	Total
AM Pk Hr Trips	44	41	85	PM Pk Hr Trips	48
AM Pk Hr Trip Rates	0.71	0.66	1.37	PM Pk Hr Trip Rates	0.77
AM Pass-By Trips	20			PM Pass-By Trips	
AM Pass-By Trip %	45%			PM Pass-By Trip %	
AM Int Trip Capt	8			PM Int Trip Capt	
AM Int Trip Capt %	18%			PM Int Trip Capt %	
Daily Trip Rate	30.97				

DATE: 8/31/2023
DAY: Thursday

TOTAL SURVEYED TRIPS		*** NO STATS ***
TOTAL PASS-BY TRIPS		*** NO STATS ***
PASS-BY TRIP %		*** NO STATS ***
TOTAL INTERNAL TRIP CAPTURE		*** NO STATS ***
INTERNAL TRIP CAPTURE %		*** NO STATS ***
TOTAL DAILY TRIPS	1841	

In	Out	Total	In	Out	Total
AM Pk Hr Trips	55	49	104	PM Pk Hr Trips	41
AM Pk Hr Trip Rates	0.89	0.79	1.68	PM Pk Hr Trip Rates	0.66
AM Pass-By Trips				PM Pass-By Trips	
AM Pass-By Trip %				PM Pass-By Trip %	
AM Int Trip Capt				PM Int Trip Capt	
AM Int Trip Capt %				PM Int Trip Capt %	
Daily Trip Rate	29.69				

DATE: 3-Day
DAY: Total

TOTAL SURVEYED TRIPS	1213
TOTAL PASS-BY TRIPS	467
PASS-BY TRIP %	39%
TOTAL INTERNAL TRIP CAPTURE	327
INTERNAL TRIP CAPTURE %	26%
TOTAL DAILY TRIPS	5665

In	Out	Total	In	Out	Total
AM Pk Hr Trips	145	127	272	PM Pk Hr Trips	139
AM Pk Hr Trip Rates	0.78	0.68	1.46	PM Pk Hr Trip Rates	0.75
AM Pass-By Trips	43			PM Pass-By Trips	18
AM Pass-By Trip %	48%	(of 90)		PM Pass-By Trip %	36%
AM Int Trip Capt	22			PM Int Trip Capt	14
AM Int Trip Capt %	24%	(of 90)		PM Int Trip Capt %	28%
Daily Trip Rate	30.46				



City: Santa Ana
Location: Ace Hardware, 3501 W 1st Street
Date: 3- Day Total
Count Type: Driveway Volume Count

	W 1st St Driveway		
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	3	4
7:15	1	0	1
7:30	5	1	6
7:45	4	3	7
8:00	5	4	9
8:15	7	2	9
8:30	6	3	9
8:45	5	5	10
9:00	8	4	12
9:15	19	11	30
9:30	18	9	27
9:45	13	5	18
10:00	17	11	28
10:15	16	11	27
10:30	12	6	18
10:45	9	6	15
11:00	8	15	23
11:15	19	11	30
11:30	13	10	23
11:45	15	15	30
12:00	11	9	20
12:15	15	14	29
12:30	16	9	25
12:45	8	11	19
13:00	18	9	27
13:15	8	11	19
13:30	13	8	21
13:45	15	9	24
14:00	14	18	32
14:15	13	8	21
14:30	11	9	20
14:45	14	10	24
15:00	17	9	26
15:15	16	13	29
15:30	9	8	17
15:45	9	10	19
16:00	19	6	25
16:15	23	12	35
16:30	17	5	22
16:45	17	8	25
17:00	13	10	23
17:15	10	8	18
17:30	15	9	24
17:45	15	13	28
18:00	15	12	27
18:15	19	9	28
18:30	11	12	23
18:45	5	7	12
19:00	5	1	6
19:15	4	0	4
19:30	0	1	1
19:45	2	1	3
20:00	0	1	1
20:15	2	1	3
20:30	1	1	2
20:45	0	1	1
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	601	418	1019

	N Gunther Pl Driveway		
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	3	0	3
7:15	1	1	2
7:30	2	3	5
7:45	3	3	6
8:00	3	3	6
8:15	4	6	10
8:30	4	7	11
8:45	8	6	14
9:00	6	10	16
9:15	5	8	13
9:30	4	13	17
9:45	4	6	10
10:00	6	13	19
10:15	7	10	17
10:30	8	12	20
10:45	10	12	22
11:00	8	8	16
11:15	8	9	17
11:30	4	11	15
11:45	9	16	25
12:00	11	9	20
12:15	11	15	26
12:30	6	8	14
12:45	10	13	23
13:00	16	13	29
13:15	9	17	26
13:30	7	11	18
13:45	11	7	18
14:00	11	13	24
14:15	3	12	15
14:30	4	8	12
14:45	6	9	15
15:00	8	9	17
15:15	10	19	29
15:30	7	13	20
15:45	4	8	12
16:00	6	7	13
16:15	5	13	18
16:30	7	20	27
16:45	3	12	15
17:00	9	13	22
17:15	8	11	19
17:30	15	11	26
17:45	7	10	17
18:00	4	14	18
18:15	10	10	20
18:30	6	14	20
18:45	3	13	16
19:00	0	10	10
19:15	0	5	5
19:30	2	1	3
19:45	0	0	0
20:00	1	1	2
20:15	1	3	4
20:30	1	1	2
20:45	1	2	3
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	1	1
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	330	513	843

	TOTAL		
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	4	3	7
7:15	2	1	3
7:30	7	4	11
7:45	7	6	13
8:00	8	7	15
8:15	11	8	19
8:30	10	10	20
8:45	13	11	24
9:00	14	14	28
9:15	24	19	43
9:30	22	22	44
9:45	17	11	28
10:00	23	24	47
10:15	23	21	44
10:30	20	18	38
10:45	19	18	37
11:00	16	23	39
11:15	27	20	47
11:30	17	21	38
11:45	24	31	55
12:00	22	18	40
12:15	26	29	55
12:30	22	17	39
12:45	18	24	42
13:00	34	22	56
13:15	17	28	45
13:30	20	19	39
13:45	26	16	42
14:00	25	31	56
14:15	16	20	36
14:30	15	17	32
14:45	20	19	39
15:00	25	18	43
15:15	26	32	58
15:30	16	21	37
15:45	13	18	31
16:00	25	13	38
16:15	28	25	53
16:30	24	25	49
16:45	20	20	40
17:00	22	23	45
17:15	18	19	37
17:30	30	20	50
17:45	22	23	45
18:00	19	26	45
18:15	29	19	48
18:30	17	26	43
18:45	8	20	28
19:00	5	11	16
19:15	4	5	9
19:30	2	2	4
19:45	2	1	3
20:00	1	2	3
20:15	3	4	7
20:30	2	2	4
20:45	1	3	4
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	1	1
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	931	931	1862

16.217 tsf
Entering Exiting Total

7:00-8:00	20	14	34
7:15-8:15	24	18	42
7:30-8:30	33	25	58
7:45-8:45	36	31	67
8:00-9:00	42	36	78

AM Pk Hr Rates 0.86 0.74 1.60

4:00-5:00	97	83	180
4:15-5:15	94	93	187
4:30-5:30	84	87	171
4:45-5:45	90	82	172
5:00-6:00	92	85	177

PM Pk Hr Rates 1.93 1.91 3.84

Daily Rate 38.27



City: Santa Ana
Location: Ace Hardware, 3501 W 1st Street
Date: Tuesday, August 29, 2023
Count Type: Driveway Volume Count

W 1st St Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	1	1
7:15	1	0	1
7:30	2	0	2
7:45	1	0	1
8:00	2	3	5
8:15	3	1	4
8:30	3	1	4
8:45	1	0	1
9:00	5	2	7
9:15	7	3	10
9:30	7	3	10
9:45	4	1	5
10:00	4	4	8
10:15	3	3	6
10:30	6	0	6
10:45	6	2	8
11:00	1	7	8
11:15	7	3	10
11:30	3	3	6
11:45	6	4	10
12:00	3	3	6
12:15	2	6	8
12:30	8	2	10
12:45	4	5	9
13:00	8	4	12
13:15	3	6	9
13:30	4	4	8
13:45	4	2	6
14:00	5	7	12
14:15	1	3	4
14:30	4	4	8
14:45	2	0	2
15:00	8	4	12
15:15	6	5	11
15:30	5	1	6
15:45	2	3	5
16:00	1	2	3
16:15	9	4	13
16:30	4	0	4
16:45	5	2	7
17:00	6	3	9
17:15	1	3	4
17:30	6	2	8
17:45	7	7	14
18:00	7	6	13
18:15	8	3	11
18:30	7	5	12
18:45	0	2	2
19:00	1	0	1
19:15	0	0	0
19:30	0	1	1
19:45	0	0	0
20:00	0	0	0
20:15	0	1	1
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	203	141	344

N Gunther Pl Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	0	1
7:15	0	1	1
7:30	1	1	2
7:45	1	0	1
8:00	1	0	1
8:15	0	3	3
8:30	0	1	1
8:45	3	2	5
9:00	0	5	5
9:15	2	5	7
9:30	0	2	2
9:45	1	3	4
10:00	5	4	9
10:15	2	4	6
10:30	1	2	3
10:45	5	6	11
11:00	2	5	7
11:15	3	3	6
11:30	2	5	7
11:45	3	4	7
12:00	4	1	5
12:15	2	3	5
12:30	2	1	3
12:45	3	4	7
13:00	5	5	10
13:15	2	6	8
13:30	1	2	3
13:45	6	2	8
14:00	5	6	11
14:15	2	2	4
14:30	4	1	5
14:45	2	4	6
15:00	2	2	4
15:15	1	7	8
15:30	1	6	7
15:45	2	2	4
16:00	1	1	2
16:15	1	3	4
16:30	2	5	7
16:45	1	5	6
17:00	2	4	6
17:15	3	3	6
17:30	5	3	8
17:45	3	3	6
18:00	1	6	7
18:15	3	5	8
18:30	3	8	11
18:45	0	4	4
19:00	0	2	2
19:15	0	1	1
19:30	1	0	1
19:45	0	0	0
20:00	0	0	0
20:15	1	1	2
20:30	0	0	0
20:45	0	1	1
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	1	1
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	104	166	270

TOTAL			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	1	2
7:15	1	1	2
7:30	3	1	4
7:45	2	0	2
8:00	3	3	6
8:15	3	4	7
8:30	3	2	5
8:45	4	2	6
9:00	5	7	12
9:15	9	8	17
9:30	7	5	12
9:45	5	4	9
10:00	9	8	17
10:15	5	7	12
10:30	7	2	9
10:45	11	8	19
11:00	3	12	15
11:15	10	6	16
11:30	5	8	13
11:45	9	8	17
12:00	7	4	11
12:15	4	9	13
12:30	10	3	13
12:45	7	9	16
13:00	13	9	22
13:15	5	12	17
13:30	5	6	11
13:45	10	4	14
14:00	10	13	23
14:15	3	5	8
14:30	8	5	13
14:45	4	4	8
15:00	10	6	16
15:15	7	12	19
15:30	6	7	13
15:45	4	5	9
16:00	2	3	5
16:15	10	7	17
16:30	6	5	11
16:45	6	7	13
17:00	8	7	15
17:15	4	6	10
17:30	11	5	16
17:45	10	10	20
18:00	8	12	20
18:15	11	8	19
18:30	10	13	23
18:45	0	6	6
19:00	1	2	3
19:15	0	1	1
19:30	1	1	2
19:45	0	0	0
20:00	0	0	0
20:15	1	2	3
20:30	0	0	0
20:45	0	1	1
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	1	1
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	307	307	614

Entering Exiting Total

7:00-8:00 7 3 10
7:15-8:15 9 5 14
7:30-8:30 11 8 19
7:45-8:45 11 9 20
8:00-9:00 13 11 24

4:00-5:00 24 22 46
4:15-5:15 30 26 56
4:30-5:30 24 25 49
4:45-5:45 29 25 54
5:00-6:00 33 28 61



City: Santa Ana
Location: Ace Hardware, 3501 W 1st Street
Date: Wednesday, August 30, 2023
Count Type: Driveway Volume Count

W 1st St Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	0	0	0
7:30	2	1	3
7:45	1	2	3
8:00	2	0	2
8:15	3	1	4
8:30	1	1	2
8:45	1	2	3
9:00	1	2	3
9:15	8	5	13
9:30	8	2	10
9:45	6	3	9
10:00	7	5	12
10:15	3	2	5
10:30	2	4	6
10:45	1	0	1
11:00	4	5	9
11:15	5	5	10
11:30	7	1	8
11:45	7	7	14
12:00	3	3	6
12:15	2	3	5
12:30	4	2	6
12:45	1	3	4
13:00	4	1	5
13:15	4	4	8
13:30	7	3	10
13:45	6	5	11
14:00	4	9	13
14:15	6	1	7
14:30	5	2	7
14:45	7	4	11
15:00	6	4	10
15:15	5	6	11
15:30	2	3	5
15:45	5	4	9
16:00	6	3	9
16:15	5	0	5
16:30	4	3	7
16:45	3	3	6
17:00	3	2	5
17:15	5	3	8
17:30	4	5	9
17:45	4	2	6
18:00	5	3	8
18:15	3	1	4
18:30	3	3	6
18:45	3	4	7
19:00	1	1	2
19:15	3	0	3
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	2	0	2
20:30	1	0	1
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	195	138	333

N Gunther Pl Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	1	1	2
7:45	2	1	3
8:00	1	3	4
8:15	3	1	4
8:30	1	4	5
8:45	3	2	5
9:00	3	1	4
9:15	2	1	3
9:30	2	8	10
9:45	2	2	4
10:00	1	5	6
10:15	4	3	7
10:30	3	5	8
10:45	2	3	5
11:00	1	1	2
11:15	5	2	7
11:30	2	6	8
11:45	2	8	10
12:00	3	2	5
12:15	1	3	4
12:30	2	2	4
12:45	4	4	8
13:00	8	4	12
13:15	3	6	9
13:30	2	6	8
13:45	2	2	4
14:00	4	2	6
14:15	1	4	5
14:30	0	5	5
14:45	1	2	3
15:00	3	3	6
15:15	6	6	12
15:30	3	3	6
15:45	0	5	5
16:00	4	3	7
16:15	2	5	7
16:30	4	8	12
16:45	1	3	4
17:00	4	4	8
17:15	2	3	5
17:30	6	3	9
17:45	4	6	10
18:00	1	5	6
18:15	4	2	6
18:30	1	2	3
18:45	1	5	6
19:00	0	3	3
19:15	0	3	3
19:30	0	0	0
19:45	0	0	0
20:00	0	1	1
20:15	0	2	2
20:30	0	1	1
20:45	1	1	2
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	119	176	295

TOTAL			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	3	2	5
7:45	3	3	6
8:00	3	3	6
8:15	6	2	8
8:30	2	5	7
8:45	4	4	8
9:00	4	3	7
9:15	10	6	16
9:30	10	10	20
9:45	8	5	13
10:00	8	10	18
10:15	7	5	12
10:30	5	9	14
10:45	3	3	6
11:00	5	6	11
11:15	10	7	17
11:30	9	7	16
11:45	9	15	24
12:00	6	5	11
12:15	3	6	9
12:30	6	4	10
12:45	5	7	12
13:00	12	5	17
13:15	7	10	17
13:30	9	9	18
13:45	8	7	15
14:00	8	11	19
14:15	7	5	12
14:30	5	7	12
14:45	8	6	14
15:00	9	7	16
15:15	11	12	23
15:30	5	6	11
15:45	5	9	14
16:00	10	6	16
16:15	7	5	12
16:30	8	11	19
16:45	4	6	10
17:00	7	6	13
17:15	7	6	13
17:30	10	8	18
17:45	8	8	16
18:00	6	8	14
18:15	7	3	10
18:30	4	5	9
18:45	4	9	13
19:00	1	4	5
19:15	3	3	6
19:30	0	0	0
19:45	0	0	0
20:00	0	1	1
20:15	2	2	4
20:30	1	1	2
20:45	1	1	2
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	314	314	628

	Entering	Exiting	Total



City: Santa Ana
Location: Ace Hardware, 3501 W 1st Street
Date: Thursday, August 31, 2023
Count Type: Driveway Volume Count

W 1st St Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	2	3
7:15	0	0	0
7:30	1	0	1
7:45	2	1	3
8:00	1	1	2
8:15	1	0	1
8:30	2	1	3
8:45	3	3	6
9:00	2	0	2
9:15	4	3	7
9:30	3	4	7
9:45	3	1	4
10:00	6	2	8
10:15	10	6	16
10:30	4	2	6
10:45	2	4	6
11:00	3	3	6
11:15	7	3	10
11:30	3	6	9
11:45	2	4	6
12:00	5	3	8
12:15	11	5	16
12:30	4	5	9
12:45	3	3	6
13:00	6	4	10
13:15	1	1	2
13:30	2	1	3
13:45	5	2	7
14:00	5	2	7
14:15	6	4	10
14:30	2	3	5
14:45	5	6	11
15:00	3	1	4
15:15	5	2	7
15:30	2	4	6
15:45	2	3	5
16:00	12	1	13
16:15	9	8	17
16:30	9	2	11
16:45	9	3	12
17:00	4	5	9
17:15	4	2	6
17:30	5	2	7
17:45	4	4	8
18:00	3	3	6
18:15	8	5	13
18:30	1	4	5
18:45	2	1	3
19:00	3	0	3
19:15	1	0	1
19:30	0	0	0
19:45	2	1	3
20:00	0	1	1
20:15	0	0	0
20:30	0	1	1
20:45	0	1	1
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	203	139	342

N Gunther Pl Driveway			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	2	0	2
7:15	0	0	0
7:30	0	1	1
7:45	0	2	2
8:00	1	0	1
8:15	1	2	3
8:30	3	2	5
8:45	2	2	4
9:00	3	4	7
9:15	1	2	3
9:30	2	3	5
9:45	1	1	2
10:00	0	4	4
10:15	1	3	4
10:30	4	5	9
10:45	3	3	6
11:00	5	2	7
11:15	0	4	4
11:30	0	0	0
11:45	4	4	8
12:00	4	6	10
12:15	8	9	17
12:30	2	5	7
12:45	3	5	8
13:00	3	4	7
13:15	4	5	9
13:30	4	3	7
13:45	3	3	6
14:00	2	5	7
14:15	0	6	6
14:30	0	2	2
14:45	3	3	6
15:00	3	4	7
15:15	3	6	9
15:30	3	4	7
15:45	2	1	3
16:00	1	3	4
16:15	2	5	7
16:30	1	7	8
16:45	1	4	5
17:00	3	5	8
17:15	3	5	8
17:30	4	5	9
17:45	0	1	1
18:00	2	3	5
18:15	3	3	6
18:30	2	4	6
18:45	2	4	6
19:00	0	5	5
19:15	0	1	1
19:30	1	1	2
19:45	0	0	0
20:00	1	0	1
20:15	0	0	0
20:30	1	0	1
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	107	171	278

TOTAL			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	3	2	5
7:15	0	0	0
7:30	1	1	2
7:45	2	3	5
8:00	2	1	3
8:15	2	2	4
8:30	5	3	8
8:45	5	5	10
9:00	5	4	9
9:15	5	5	10
9:30	5	7	12
9:45	4	2	6
10:00	6	6	12
10:15	11	9	20
10:30	8	7	15
10:45	5	7	12
11:00	8	5	13
11:15	7	7	14
11:30	3	6	9
11:45	6	8	14
12:00	9	9	18
12:15	19	14	33
12:30	6	10	16
12:45	6	8	14
13:00	9	8	17
13:15	5	6	11
13:30	6	4	10
13:45	8	5	13
14:00	7	7	14
14:15	6	10	16
14:30	2	5	7
14:45	8	9	17
15:00	6	5	11
15:15	8	8	16
15:30	5	8	13
15:45	4	4	8
16:00	13	4	17
16:15	11	13	24
16:30	10	9	19
16:45	10	7	17
17:00	7	10	17
17:15	7	7	14
17:30	9	7	16
17:45	4	5	9
18:00	5	6	11
18:15	11	8	19
18:30	3	8	11
18:45	4	5	9
19:00	3	5	8
19:15	1	1	2
19:30	1	1	2
19:45	2	1	3
20:00	1	1	2
20:15	0	0	0
20:30	1	1	2
20:45	0	1	1
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	310	310	620

Entering Exiting Total

7:00-8:00	6	6	12
7:15-8:15	5	5	10
7:30-8:30	7	7	14
7:45-8:45	11	9	20
8:00-9:00	14	11	25

4:00-5:00	44	33	77
4:15-5:15	38	39	77
4:30-5:30	34	33	67
4:45-5:45	33	31	64
5:00-6:00	27	29	56



City: Newport Beach
Location: Mother's Market, 3049 E Coast Hwy
Date: 3- Day Total
Count Type: Driveway Volume Count

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	5	1	6
6:15	3	2	5
6:30	0	0	0
6:45	2	0	2
7:00	4	2	6
7:15	6	5	11
7:30	8	3	11
7:45	13	4	17
8:00	15	15	30
8:15	31	33	64
8:30	23	24	47
8:45	28	28	56
9:00	25	22	47
9:15	23	20	43
9:30	35	33	68
9:45	34	40	74
10:00	30	29	59
10:15	31	37	68
10:30	40	28	68
10:45	33	31	64
11:00	35	30	65
11:15	41	45	86
11:30	42	36	78
11:45	45	44	89
12:00	38	38	76
12:15	43	34	77
12:30	40	52	92
12:45	36	33	69
13:00	36	34	70
13:15	55	55	110
13:30	43	35	78
13:45	40	42	82
14:00	36	37	73
14:15	38	36	74
14:30	42	42	84
14:45	39	47	86
15:00	38	39	77
15:15	41	33	74
15:30	34	43	77
15:45	45	44	89
16:00	48	46	94
16:15	43	37	80
16:30	36	36	72
16:45	42	43	85
17:00	53	55	108
17:15	51	53	104
17:30	46	45	91
17:45	44	52	96
18:00	41	42	83
18:15	44	36	80
18:30	33	37	70
18:45	33	39	72
19:00	32	41	73
19:15	41	31	72
19:30	34	34	68
19:45	38	37	75
20:00	27	27	54
20:15	18	24	42
20:30	17	20	37
20:45	16	21	37
21:00	1	9	10
21:15	5	10	15
21:30	1	3	4
21:45	0	1	1
22:00	0	2	2
22:15	0	0	0
22:30	0	0	0
22:45	0	2	2
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	1940	1939	3879

4.862 tsf		
Entering	Exiting	Total

7:00-8:00	31	14	45
7:15-8:15	42	27	69
7:30-8:30	67	55	122
7:45-8:45	82	76	158
8:00-9:00	97	100	197
AM Pk Hr Rates	6.65	6.86	13.51

4:00-5:00	169	162	331
4:15-5:15	174	171	345
4:30-5:30	182	187	369
4:45-5:45	192	196	388
5:00-6:00	194	205	399
PM Pk Hr Rates	13.30	14.05	27.35

Daily Rate	265.94
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City: Newport Beach
Location: Mother's Market, 3049 E Coast Hwy
Date: Tuesday, August 29, 2023
Count Type: Driveway Volume Count

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	3	0	3
6:15	1	2	3
6:30	0	0	0
6:45	0	0	0
7:00	1	0	1
7:15	3	2	5
7:30	3	1	4
7:45	5	1	6
8:00	10	8	18
8:15	13	15	28
8:30	5	9	14
8:45	11	13	24
9:00	9	7	16
9:15	9	7	16
9:30	11	11	22
9:45	12	12	24
10:00	12	10	22
10:15	13	17	30
10:30	16	11	27
10:45	7	9	16
11:00	13	9	22
11:15	12	13	25
11:30	15	14	29
11:45	16	14	30
12:00	12	13	25
12:15	17	10	27
12:30	12	19	31
12:45	13	10	23
13:00	10	6	16
13:15	20	17	37
13:30	10	11	21
13:45	12	10	22
14:00	10	14	24
14:15	22	15	37
14:30	15	18	33
14:45	11	16	27
15:00	9	8	17
15:15	18	11	29
15:30	11	14	25
15:45	13	15	28
16:00	17	16	33
16:15	14	14	28
16:30	13	15	28
16:45	11	17	28
17:00	18	16	34
17:15	15	18	33
17:30	16	11	27
17:45	13	18	31
18:00	10	13	23
18:15	11	9	20
18:30	15	13	28
18:45	9	14	23
19:00	8	13	21
19:15	15	8	23
19:30	6	12	18
19:45	17	14	31
20:00	9	10	19
20:15	5	6	11
20:30	6	8	14
20:45	2	3	5
21:00	0	1	1
21:15	0	2	2
21:30	0	2	2
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	645	645	1290

Entering	Exiting	Total
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7:00-8:00	12	4	16
7:15-8:15	21	12	33
7:30-8:30	31	25	56
7:45-8:45	33	33	66
8:00-9:00	39	45	84

4:00-5:00	55	62	117
4:15-5:15	56	62	118
4:30-5:30	57	66	123
4:45-5:45	60	62	122
5:00-6:00	62	63	125



City: Newport Beach
Location: Mother's Market, 3049 E Coast Hwy
Date: Wednesday, August 30, 2023
Count Type: Driveway Volume Count

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	2	1	3
6:15	1	0	1
6:30	0	0	0
6:45	1	0	1
7:00	1	0	1
7:15	1	2	3
7:30	3	2	5
7:45	4	1	5
8:00	2	5	7
8:15	11	9	20
8:30	10	9	19
8:45	9	8	17
9:00	9	8	17
9:15	0	0	0
9:30	12	13	25
9:45	12	12	24
10:00	9	11	20
10:15	11	12	23
10:30	15	12	27
10:45	14	10	24
11:00	10	10	20
11:15	12	12	24
11:30	9	7	16
11:45	16	14	30
12:00	12	15	27
12:15	15	13	28
12:30	13	16	29
12:45	12	14	26
13:00	10	13	23
13:15	18	16	34
13:30	17	16	33
13:45	14	17	31
14:00	13	10	23
14:15	11	12	23
14:30	14	12	26
14:45	11	15	26
15:00	13	13	26
15:15	16	14	30
15:30	11	15	26
15:45	16	14	30
16:00	18	16	34
16:15	18	14	32
16:30	14	13	27
16:45	20	18	38
17:00	18	23	41
17:15	20	19	39
17:30	16	17	33
17:45	14	16	30
18:00	19	19	38
18:15	20	11	31
18:30	6	16	22
18:45	9	9	18
19:00	13	13	26
19:15	16	14	30
19:30	17	16	33
19:45	11	10	21
20:00	10	9	19
20:15	12	15	27
20:30	7	8	15
20:45	7	6	13
21:00	0	6	6
21:15	2	3	5
21:30	0	0	0
21:45	0	1	1
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	677	675	1352

Entering	Exiting	Total
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7:00-8:00	9	5	14
7:15-8:15	10	10	20
7:30-8:30	20	17	37
7:45-8:45	27	24	51
8:00-9:00	32	31	63

4:00-5:00	70	61	131
4:15-5:15	70	68	138
4:30-5:30	72	73	145
4:45-5:45	74	77	151
5:00-6:00	68	75	143



City: Newport Beach
Location: Mother's Market, 3049 E Coast Hwy
Date: Thursday, August 31, 2023
Count Type: Driveway Volume Count

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	1	0	1
6:30	0	0	0
6:45	1	0	1
7:00	2	2	4
7:15	2	1	3
7:30	2	0	2
7:45	4	2	6
8:00	3	2	5
8:15	7	9	16
8:30	8	6	14
8:45	8	7	15
9:00	7	7	14
9:15	14	13	27
9:30	12	9	21
9:45	10	16	26
10:00	9	8	17
10:15	7	8	15
10:30	9	5	14
10:45	12	12	24
11:00	12	11	23
11:15	17	20	37
11:30	18	15	33
11:45	13	16	29
12:00	14	10	24
12:15	11	11	22
12:30	15	17	32
12:45	11	9	20
13:00	16	15	31
13:15	17	22	39
13:30	16	8	24
13:45	14	15	29
14:00	13	13	26
14:15	5	9	14
14:30	13	12	25
14:45	17	16	33
15:00	16	18	34
15:15	7	8	15
15:30	12	14	26
15:45	16	15	31
16:00	13	14	27
16:15	11	9	20
16:30	9	8	17
16:45	11	8	19
17:00	17	16	33
17:15	16	16	32
17:30	14	17	31
17:45	17	18	35
18:00	12	10	22
18:15	13	16	29
18:30	12	8	20
18:45	15	16	31
19:00	11	15	26
19:15	10	9	19
19:30	11	6	17
19:45	10	13	23
20:00	8	8	16
20:15	1	3	4
20:30	4	4	8
20:45	7	12	19
21:00	1	2	3
21:15	3	5	8
21:30	1	1	2
21:45	0	0	0
22:00	0	2	2
22:15	0	0	0
22:30	0	0	0
22:45	0	2	2
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	618	619	1237

Entering	Exiting	Total
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7:00-8:00	10	5	15
7:15-8:15	11	5	16
7:30-8:30	16	13	29
7:45-8:45	22	19	41
8:00-9:00	26	24	50

4:00-5:00	44	39	83
4:15-5:15	48	41	89
4:30-5:30	53	48	101
4:45-5:45	58	57	115
5:00-6:00	64	67	131