



CITY OF SIMI VALLEY

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NOTICE OF PUBLIC HEARING

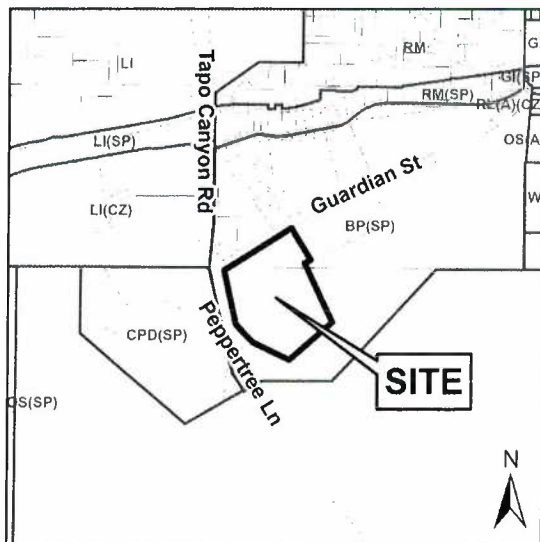
BY THE PLANNING COMMISSION OF THE CITY OF SIMI VALLEY
TO CONSIDER A CONDITIONAL USE PERMIT (CUP-S-2023-0013)
TO DEMOLISH AN EXISTING OFFICE BUILDING AND
CONSTRUCT A 179,490-SQUARE-FOOT WAREHOUSE BUILDING
LOCATED AT 4100 GUARDIAN STREET; AND NOTIFICATION OF
THE RELEASE FOR PUBLIC REVIEW OF, AND INTENT TO ADOPT,
A MITIGATED NEGATIVE DECLARATION FOR THE SUBJECT
APPLICATION

NOTICE IS HEREBY GIVEN that a Public Hearing will be held by the Planning Commission of the City of Simi Valley to consider the application of Dunn Simi, LP for Conditional Use Permit (CUP-S-2023-0013), that the Mitigated Negative Declaration (MND) for this project is available for public review, and that the City proposes to adopt the Mitigated Negative Declaration.

The project consists of demolishing an existing office building and constructing a 179,490-square-foot warehouse building located at 4100 Guardian Street.

Based upon the results of the Initial Study prepared for the project, it has been determined that although the proposed project could have a significant effect on the environment, the incorporation of mitigation measures would bring these effects to less than significant. Therefore, a Mitigated Negative Declaration has been prepared and the public review period will be from July 17, 2024 through August 6, 2024. The MND and Initial Study are available for public review at www.simivalley.org/CEQA; the Department of Environmental Services, 2929 Tapo Canyon Road; and at the Simi Valley Public Library, 2969 Tapo Canyon Road. Copies of the studies cited in the Initial Study can be reviewed at the Department of Environmental Services, 2929 Tapo Canyon Road. Copies of the staff report will be available at the above addresses three days prior to the Public Hearing.

If you challenge the Planning Commission's decision in court, you may be limited to raising only those issues you or someone else raised at the Public Hearing described in this notice.



The Public Hearing will be held at City Hall Council Chambers, 2929 Tapo Canyon Road, Simi Valley, California on August 7, 2024, at 6:30 p.m. At that time, any interested person is welcome to attend and be heard on this matter.

SEAN GIBSON
Deputy Environmental Services Director/City Planner
Department of Environmental Services

Zarui Chaparyan, Associate Planner
Zchaparyan@simivalley.org
(805) 583-6774
Department of Environmental Services



CITY OF SIMI VALLEY

Home of The Ronald Reagan Presidential Library

REVIEW PERIOD: July 17, 2024 – August 6, 2024
TO: All Interested Parties
FROM: Department of Environmental Services
SUBJECT: REQUEST FO REVIEW OF THE INITIAL STUDY AND MITIGATED
NEGATIVE DECLARATION FOR A CONDITIONAL USE PERMIT
(CUP-S-2023-0013) TO DEMOLISH AN EXISTING OFFICE
BUILDING AND CONSTRUCT A 179,490-SQUARE-FOOT
WAREHOUSE BUILDING LOCATED AT 4100 GUARDIAN STREET

The attached Mitigated Negative Declaration and Initial Study have been forwarded to you for possible comments relating to your specific area of interest. Comments should be directed to:

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City of Simi Valley
2929 Tapo Canyon Road
Simi Valley, California 93063
(805) 583-6774
Zchaparyan@simivalley.org

Copies sent to:

City Council
City Manager
City Attorney's Office
Planning Commission
City Departments:
City Manager's Office
City Clerk

Maintenance

C. Oberender

Traffic

J. Link

Transit

B. Gonzales

Simi Valley Library (2)

Environmental Services

Deputy Env. Serv. Director/City Planner
Principal Planner/Zoning Administrator
Case Planner
Environmental Planner
Neighborhood Council Coordinator
Neighborhood Council #2
Recording Secretary
Counter Copy
Public Works Department Engineering

B. Siemer

G. Goddard

Utilities

A. Sexton

R. Escobar

County of Ventura

Resources Mgmt. Agency

D. Ward

Watershed Protection District

Fire Protection District

Other Government Agencies

State Clearinghouse

Ventura County Air Pollution Control District

Ventura County Watershed Protection District

City of Moorpark

City of Thousand Oaks

Rancho Simi Recreation and Park District

Santa Monica Mountains Conservancy

Simi Valley Unified School District

Native American Heritage Commission

Fernandeño Tataviam Band of Mission Indians

Mountains Recreation and Conservation Authority

Golden State Water Company

Applicant: Mike Dunn
Dunn Simi, LP
12000 Wilshire Boulevard, Suite 208
Los Angeles, CA 90017
(213) 580-1400
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Contact: Matthew Herrill
JM Partners Development LLC
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Los Angeles, CA 0031
(626) 226-4861
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CITY OF SIMI VALLEY
MITIGATED NEGATIVE DECLARATION
(NO SIGNIFICANT IMPACT ON THE ENVIRONMENT)

REVIEW PERIOD: July 17, 2024 – August 6, 2024

APPLICANT (PERMITTEE): Mike Dunn
Dunn Simi, LP
12000 Wilshire Boulevard, Suite 208
Los Angeles, CA 90017

CASE PLANNER: Zarui Chaparyan, Associate Planner

ENVIRONMENTAL PLANNER: Zarui Chaparyan, Associate Planner

PROJECT NO.: CUP-S-2023-0013

PROJECT DESCRIPTION: Conditional Use Permit (CUP-S-2023-0013) to demolish an existing 135,520-SF office building and construct a 179,490-SF warehouse facility with retaining walls, parking lot, and landscaping at 4100 Guardian Street, Simi Valley.

PROJECT LOCATION: 4100 Guardian Street

On the basis of the Initial Study for the project, it has been determined that the project would not have a potentially significant effect on the environment. This document constitutes a Mitigated Negative Declaration based upon the inclusion of the following measures into the project by the Permittee.

I-1 Pre-construction Nesting Bird Survey and Avoidance.

- Ground-disturbing activities and vegetation removal (including tree trimming) may only occur outside the bird nesting season (September 1-January 31).
- If ground-disturbing activities or vegetation removal (including tree trimming) are scheduled during the bird nesting season (February 1-August 31), a pre-construction survey for nesting birds must be conducted by a qualified avian biologist with prior experience conducting nest bird surveys for construction projects. A qualified biologist must meet the minimum qualifications for Biological Consultants as listed below:
 - Must have an undergraduate or graduate degree with coursework in biology, botany, wildlife biology, natural resources, ecology, conservation biology, or environmental biology;
 - Have an up-to-date subscription to and experience using the California Natural Diversity Database/BIOS;
 - Be able to map survey findings in GIS or have access to an individual or firm with the ability to map survey findings in GIS. To conduct biological field surveys and construction monitoring; and
 - Must have at least four years of experience conducting wildlife surveys for biological groups located within the region and be able to identify Ventura County's designated Locally Important Species.
- The study area includes the Project site and a 100-foot buffer around the Project site. If no active nests are found, no additional measures are required.
- If active nests are found, the avian biologist must map the location and document the species and nesting stage. The qualified avian biologist must implement an avoidance buffer area appropriate to the species. The avian biologist may change the avoidance buffer if field observations of bird behavior and biology to ensure the nest is unaffected

by Project activities, avoiding a risk of nest failure. The nest site would be fenced and/or flagged in all directions, and this area may not be disturbed until the nest becomes inactive.

- I-2 Cultural Resources WEAP Training.** Before construction, the Permittee must contract with a qualified archaeologist and local Native American monitor to develop Worker Environmental Awareness Program (WEAP) for all personnel involved in Project construction, including field consultants and construction workers. The one-time WEAP training session must be conducted before any Project-related construction activities in the Project site. The WEAP will include relevant information regarding the archaeological sensitivity of the area, including applicable regulations, protocols for unanticipated discoveries, and consequences of violating state laws and regulations. The WEAP will also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located at the Project site and will outline further steps needed and who to contact if any potential cultural resources or tribal cultural resources are encountered. The WEAP will emphasize the requirement for confidentiality.

The Permittee must submit the WEAP to the City of Simi Valley (City) for review and approval before implementation. All workers, contractors, and visitors must attend the WEAP before entering the Project site and performing any work. The Permittee must provide copies of the training attendance sheets monthly to City staff as a record of compliance with this measure.

- I-3 Archeological and Native American Monitoring.** Prior to the commencement of construction, the Permittee will secure the services of a Native American Monitor from the Fernandeño Tataviam Band of Mission Indians and a qualified archaeological monitor to observe all ground-disturbing activity (i.e clearing, grubbing, grading, trenching, etc.) on a full-time basis. A copy of the contracts or monitoring agreements will be sent to the City of Simi Valley for their review and approval.

- I-4 Unanticipated Discovery of Cultural Resources.** If archaeological resources are encountered during ground disturbing activity on the site, all activity within a 100-foot radius of the find must be stopped, the City of Simi Valley must be notified, and a qualified archaeologist and Fernandeño Tataviam Band of Mission Indians Native American monitor must examine the find. The archaeological and Native American monitors must evaluate the find to determine if it meets the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. The City of Simi Valley will consult in good faith with the Fernandeño Tataviam Band of Mission Indians on the disposition and treatment of any tribal cultural resource encountered. If the find(s) do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeological and Native American monitor. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, Native American Heritage Commission (tribal cultural resources), and the South Central Coastal Information Center.

The Permittee will ensure that construction personnel do not collect or move any cultural material and will ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.

I-5 Unanticipated Discovery of Human Remains. If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Ventura County Coroner must be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, the South Central Coastal Information Center, and the MLD.

I-6 Drainage and Landscaping Maintenance. The construction contractor must adhere to the following maintenance protocols for construction on expansive soils on the Project site:

- Positive drainage should be continually provided and maintained away from structures and should not be changed creating an adverse drainage condition. Plumbing leaks should be immediately repaired so the subgrade soils underlying the structure do not become saturated.
- Initial landscaping must be undertaken in unpaved areas adjacent to structures. Trees and shrubbery must not be planted where roots can grow under foundations and hardscape when they mature.
- Landscaped areas must be maintained in a uniformly moist condition and not allowed to dry out.

I-7 Paleontological Resource Monitoring and Mitigation Plan. Before the start of any Project-related construction activities, the Permittee must retain a State-approved paleontologist (Project Paleontologist) to prepare and implement a project-specific Paleontological Resource Monitoring and Mitigation Plan (PRMMP), which must be approved by the City of Simi Valley Environmental Services Director. The Project Paleontologist is responsible for implementing all the paleontological conditions of approval and for using qualified paleontologists to assist in work and field monitoring. A qualified Project Paleontologist is defined by the Society of Vertebrate Paleontology standards as a practicing scientist who is recognized in the paleontological community as a professional and can demonstrate familiarity and proficiency with paleontology in a stratigraphic context. A Project Paleontologist must have the equivalent of the following qualifications:

- A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience;

- At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts;
- Proficiency in recognizing fossils in the field and determining their significance;
- Expertise in local geology, stratigraphy, and biostratigraphy; and
- Experience collecting vertebrate fossils in the field.

At a minimum, information to be contained in the PRMMP, in addition to other information required under the guidelines of the Society of Vertebrate Paleontology (SVP), is as follows:

- Description of the Project site and planned earthwork and excavation, and a map identifying locations where excavations and ground disturbing activities will or will be likely to encounter paleontological resources.
- The museum or repository that has agreed to accept the recovered fossils must be identified in the PRMMP.
- The PRMMP must detail methods of monitoring, recovery, preparation, and analysis of specimens, data analysis, reporting, and the final curation location of specimens at an identified repository.
- Identification of personnel with authority and responsibility to temporarily halt or divert ground disturbance activities to allow for recovery of significant specimens.
- The PRMMP must be submitted to the City of Simi Valley Environmental Services Director for review and approval 60 days before the start of Project construction.

I-8 Paleontological Resources WEAP Training. Prior to the start of Project-related construction activities, a WEAP must be developed by the Project Paleontologist. The WEAP must address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources. The training program must also include the set of reporting procedures that workers are to follow if paleontological resources are encountered during Project activities. The WEAP may be combined with other environmental training programs for the Project. All field personnel will receive WEAP training on paleontological resources prior to Project-related construction activities.

I-9 Paleontological Monitoring and Fossil Recovery. Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. If the Project Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at depth, he or she may recommend to the City of Simi Valley (City) that monitoring be reduced or cease entirely.

- If fossils are discovered, the Project Paleontologist must temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. The Paleontological Monitor, and/or Project Paleontologist must evaluate the discovery and determine if the fossil may be considered significant, and if significant, recover the fossil.
- Upon completion of Project ground disturbing activities, all significant fossils collected would be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossil specimens must be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the approved

repository (identified in the Paleontological Resource Mitigation Plan) and receipt(s) of collections submitted sent to City no later than 60 days after all ground disturbing activities are completed.

I-10 Paleontological Resources Monitoring Report. The Permittee must prepare a paleontological resource mitigation and monitoring report by the Project Paleontologist following completion of ground disturbing activities. The contents of the report must include, but not be limited to a description and inventory list of recovered fossil materials (if any); a map showing the location of paleontological resources found in the field; determinations of scientific significance; proof of accession of fossil materials into the pre-approved museum or other repository; and a statement by the Project Paleontologist that Project impacts to paleontological resources have been mitigated.

RESPONSIBLE AGENCIES: City of Simi Valley

TRUSTEE AGENCIES: None



Zarui Chaparyan, Associate Planner

DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

4100 Guardian Street Warehouse

Prepared for

City of Simi Valley

Submitted by



July 2024

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1. 4100 GUARDIAN STREET WAREHOUSE MITIGATED NEGATIVE DECLARATION

1.1. Introduction

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to inform responsible and trustee agencies, public agencies, and the public that the City of Simi Valley (City), as the Lead Agency under the California Environmental Quality Act (CEQA), prepared an analysis for the proposed 4100 Guardian Street Warehouse (proposed Project or Project). As Lead Agency, the City is responsible for approving the (MND) and if appropriate, approving or denying the proposed Project.

This document was prepared in accordance with CEQA, (Public Resources Code [PRC] §21000, et seq.) and the CEQA Guidelines (14 Cal. Code Regs. §15000, et seq.). Specifically, this document meets the requirements of CEQA Guidelines § 15000 and § 15071, and the environmental checklist (Chapter 3) meets the requirements of CEQA Guidelines § 15063. An IS is prepared by a lead agency to determine if a project may have significant effects on the environment (CEQA Guidelines § 15063[a]), and to determine the appropriate environmental document. In accordance with CEQA Guidelines § 15070, “A public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when:

- (a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.”*

Based on the analysis in this IS, the City determined that all Project-related environmental impacts would be less than significant with mitigation, less than significant, or no impact would occur. Therefore, approval of an MND will satisfy the requirements of CEQA. The mitigation measures included in this MND are designed to reduce or eliminate the potentially significant environmental impacts described in the IS. Mitigation measures are structured in accordance with the criteria in CEQA Guidelines § 15370.

1.2. Public Review

In accordance with CEQA Guidelines, §15073, the lead agency must provide a public review period pursuant to CEQA Guidelines §15105 of at least 20 days. The notice of intent to adopt the proposed MND must include a copy of the proposed IS, and together, the IS/MND must be sent to the public, responsible agencies, trustee agencies, and the County Clerk of the county within which the proposed Project is located. Pursuant to CEQA Guidelines §15072, the lead agency must notify in writing any public agency that provides comments on the proposed IS/MND of public hearings for the Project.

1.3. Document Organization

The IS/MND is organized as follows:

Section 1. Introduction. This section introduces the document and discusses the CEQA process and public review process.

Section 2. Project Description. This section provides a brief Project overview, describes the Project location, setting, land use, and zoning, and provides a detailed description of the Project and anticipated permits and approvals.

Section 3. Environmental Checklist. This section provides an analysis of environmental impacts that would potentially occur as a result of the proposed Project. The list of applicable mitigation measures is provided in this section.

Section 4. Mitigation Monitoring and Reporting Program. This section identifies procedures for implementing mitigation measures to be adopted for the proposed Project.

Section 5. List of Preparers. This section identifies the report preparers.

Section 6. List of Acronyms and Abbreviations. This section lists common acronyms and abbreviations used throughout the document.

Section 7. References. This section lists the references corresponding with the in-text citations used in preparation of this IS/MND.

2. PROJECT DESCRIPTION

2.1. Project Overview

Dunn Simi, LP (Applicant or Permittee) proposes to construct the 4100 Guardian Street Warehouse (proposed Project), which would include the demolition of an existing 135,520-square-foot (SF) office building and construction of a 179,490-SF facility, of which 9,000 SF would be used for potential office space. This IS/MND was prepared to evaluate the reasonably foreseeable and potentially significant adverse environmental impacts associated with the proposed Project. This section discusses project information, such as the location, setting, Project components, construction, operation, as well as anticipated permits and approvals. The proposed Project would include demolition of the existing building, and construction of a warehouse building, office spaces, parking lot, and landscaping improvements. The proposed Project would provide a modern industrial building to be operated by a to-be-determined tenant. The approximate hours of construction and operation would be weekdays from 8:00 am to 5:00 pm.

2.2. Project Location and Setting

The proposed Project would be located at 4100 Guardian Street, which is along the southeastern edge of the City of Simi Valley at the southeast corner of the intersection of Tapo Canyon Road and Guardian Street (Figure 1). The Project site is bounded by Guardian Street to the north, Peppertree Lane to the west, open space and an office building to the east, and open space and institutional development to the south. Commercial office buildings are located to the north of Guardian Street and west of Tapo Canyon Road. Peppertree Lane begins at the intersection of Tapo Canyon Road and Guardian Street and runs north-south, connecting to the American Jewish University – Brandeis Bardin Campus, located approximately 200 feet to the south of the Project site. The Project site is approximately 1.2 miles south of California State Route (SR) 118 (Ronald Reagan Freeway).

The proposed Project would be located on approximately 10.3 acres spanning two parcels that currently consist of an existing 135,520-SF office park building, 172,879-SF paved parking lot, and a 205,001-SF of landscaping. The office building is currently occupied by several tenants but would be vacated by January 2025.

2.3. Land Use and Zoning

The Project site is within an area governed by the City of Simi Valley General Plan and the Brandeis-Bardin Institute Specific Area Plan.

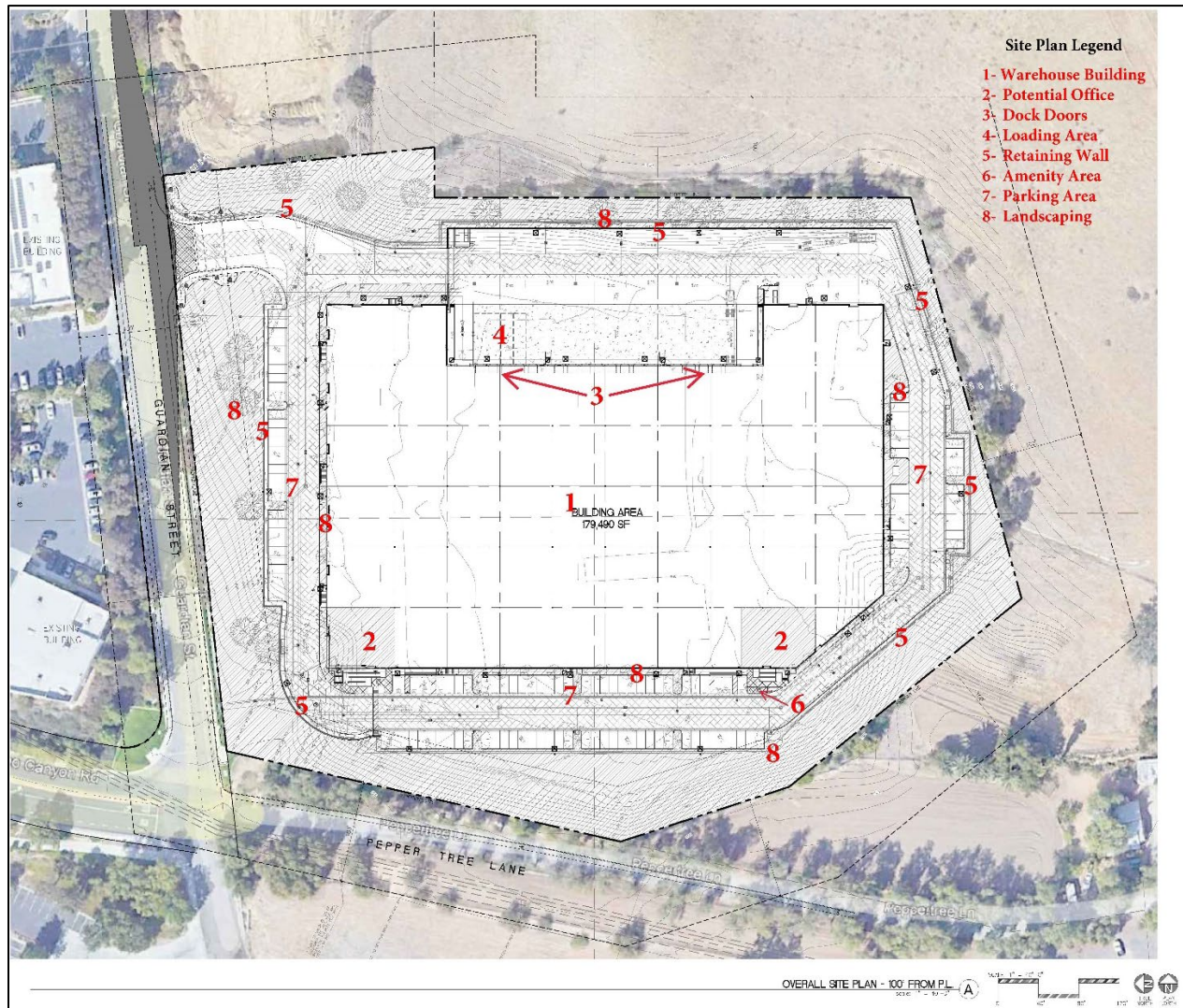
The proposed Project's General Plan land use designation is Business Park (City of Simi Valley, 2011; 2023). The Project spans two parcels, Assessor's Parcel Numbers (APNs) 626-0-052-065 and 626-0-052-095, and zoned Business Park (BP) under Title 9 of the Development Code of the City of Simi Valley Municipal Code (City of Simi Valley, 2011; 2024a).

Figure 1. Proposed Project Location

2.4. Project Details

The proposed Project includes demolition of the existing 135,520-SF office building, site preparation (excavation and grading), and construction of a 170,490-SF warehouse facility building, of which 9,000-SF would be for office spaces, parking lot, and landscaping improvements on an approximately 10.3-acre site. Each construction phase is discussed further below, and construction components are shown in Figure 2.

Figure 2. Site Plan



Demolition

The existing development consists of a 135,520-SF single office park building with a 172,879-SF paved area and 205,001 SF of landscaping. Everything within the 10.3-acre property line would be demolished, including the existing building, pavement, landscaping, and underground utility systems. 144 mature, non-native trees would be removed or transplanted as necessary to accommodate construction of the new warehouse building and parking lot. In compliance with Simi Valley Municipal Code (SVMC) § 9-38.040 and as recommended by the City's Certified Arborist consultant, some of the mature trees may be transplanted on-site, away from the development footprint or removed for resale and off-site transplant.

(Innes, 2024). The Applicant would coordinate with a reputable tree moving company during these activities., Seven (7) oak trees on the property are proposed to be preserved in place, including the heritage oak tree.

Site Preparation

Site preparation would include activities such as excavation, grading, and fencing of protected trees per the Protected Tree Report (Tree Care Consulting, 2024, provided as Appendix C), connections to existing utilities, and installation of stormwater infrastructure. Grated inlets, gutters, storm drains, detention basin, and pretreatment devices would be installed to reduce pollution in runoff. Cut material would be approximately 26,800 cubic yards (CY) and fill material would be approximately 4,050 CY. Material to be exported would be approximately 22,750 CY.

Warehouse Building

The new building would be a total of 179,490 SF with a 170,490-SF warehouse building and 9,000 SF of office space with a maximum height of 36 feet. The warehouse building would include four restrooms.

The loading area and 18 dock doors would be located along the eastern portion of the building. Additionally, a retaining wall is proposed for truck loading docks along the base of the eastern and southern ascending slopes with new cuts into the existing slopes. 20-foot-high site lighting poles would be installed around the building perimeter, and exterior lights would surround the building. An outdoor break area is proposed adjacent to the southeast border of the building.

Parking Lot

As part of the proposed Project, 129,690 SF of permeable surface parking would be provided to the north, south, and west of the facility as well as a new driveway alignment along Guardian Street. A total of 129 parking stalls are proposed, including 99 standard parking stalls, five Americans with Disabilities Act (ADA) parking stalls, and 25 electric vehicle (EV) parking stalls as well as three bike racks.

Retaining Walls

The proposed Project would include construction of retaining walls surrounding the majority of the site boundary on the north, east, and south. Retaining walls may consist of a combination of soil nail walls, permanent caisson (pile) walls, and permanent conventional L-walls (DRS Engineering Inc, 2024).

Landscaping

Landscaping would be done within the new parking areas and driveways as well as along the proposed warehouse building. Landscaping would include a variety of trees, shrubs (40 percent of the landscape area), accent plants, and groundcover (60% of the landscape area) and total 138,923 SF. Three- to six-foot-high screen hedges would surround the electrical transformer on the eastern side of the Project site. Decorative paving would also be incorporated in these areas as part of the proposed landscaping improvements.

Irrigation for the new landscaping would be installed, including sprinklers using potable water. All landscaping improvements would comply with the requirements of the SVMC and State Model Water Efficient Landscape Ordinances as required by the California Green Building Standards Code (CCR Title 24, Part 11).

2.5. Project Construction

Construction phases include demolition, site preparation, building construction, and paving. Construction of the proposed Project is anticipated to occur over approximately 18 months, beginning in the first quarter of 2025 and concluding in the first quarter of 2026. An average of 30 construction workers would be on site, with a peak of up to 70 workers depending on the construction phase. Construction would occur Monday through Friday between 8:00 a.m. and 5:00 p.m. (one shift per day), consistent with the City of Simi Valley building construction work hours. Construction would not occur on weekends or federal holidays. Temporary nighttime lighting during construction would be required and confined to the Project site to provide site security. All utility connections required for the Project would be routed to existing utilities during construction.

Access to the Project site and staging areas would be provided by the driveway approach off Guardian Street to the northeast. Temporary partial lane closures on Guardian Street would be required during construction of the revised driveway approach. Construction staging of materials and equipment would be within the Project site. Cut material would be approximately 26,800 cubic yards (CY) and fill material would be approximately 4,050 CY. Material to be exported would be approximately 22,750 CY. Typical construction equipment would include the following:

- Backhoe
- Concrete mixing trucks
- Excavators
- Grinders
- Mixers
- Generators
- Chainsaw
- Bulldozers
- Graders
- Pavers
- Water trucks
- Forklifts
- Concrete saws
- Cranes
- Tractors
- Rollers
- Air compressors
- Welders

Project construction would comply with the Stormwater Pollution Prevention Plan (SWPPP) as required by the Construction General Permit in compliance with State Water Board Order WQ 2022-0057-DWQ. Construction would also comply with the Ventura Countywide Stormwater Quality management Program, which includes the Ventura County Storm Water Quality Urban Impact Mitigation Management Plan (SQUIMP), National Pollutant Discharge Elimination System (NPDES) Permit No. CAS004004, Order No. R4-2021-0105. The Project would comply with AB 341 (2011), AB 1826 (2014), and SB 1383 by ensuring all trash enclosure areas contain adequate space for multiple container types (e.g., municipal solid waste, solid waste recycling, and organic waste recycling). Additionally, the proposed Project would comply with the Statewide Model Water Efficient Landscape Ordinance and AB 1572 (2023) (Non-Functional Turf Ban) for commercial purposes). During Project construction activities, SWPPP best management practices (BMPs) for erosion and sediment control, as well as City of Simi Valley BMPs, would be implemented at the site.

2.6. Operations and Maintenance

Currently, operations and maintenance of the new warehouse is unknown, as no actual tenant has been identified. Specific building operations and maintenance and the type of products to be shipped and stored have not been determined. For analysis purposes, operations may involve up to 180 employees and up to 52 daily heavy-duty truck trips, but may vary depending on the ultimate tenant operations. The assumed hours of operation would be 8:00 a.m. to 5:00 p.m. on weekdays.

2.7. Anticipated Permits and Approvals

Table 1 presents the anticipated permits and approvals from regulatory agencies needed for the proposed Project:

Table 1. Anticipated Permits and Approvals Required for the Proposed Project

Agency	Jurisdiction	Requirements/Permits/Approvals
Local/Regional Agencies		
Ventura County Air Pollution Control District	Air quality standards and permits	Authority to Construct and Permit to Operate for stationary sources, such as backup generator
Ventura County Watershed Protection District	Jurisdiction over Meier Canyon Creek	Establishes standards for stormwater treatment and runoff
City of Simi Valley	New development projects Ventura Countywide Stormwater Quality Management Program	Planned Development Permit Landscape Documentation Package for compliance with State Model Water Efficient Landscape Ordinance Approval for design and implementation of post-construction stormwater management control measures. Grading Permits Building Permits

3. INITIAL STUDY ENVIRONMENTAL CHECKLIST

- | | |
|---|---|
| 1. Project Title: | 4100 Guardian Street Warehouse Project |
| 2. Lead Agency Name and Address: | City of Simi Valley
Environmental Services
2929 Tapo Canyon Road
Simi Valley, California 93063 |
| 3. Contact Person and Phone Number: | Zarui Chaparyan, Associate Planner
Environmental Services
City of Simi Valley
2929 Tapo Canyon Road
Simi Valley, California 93063 |
| 4. Project Location: | 4100 Guardian Street, Simi Valley, CA 93063 |
| 5. Project Sponsor's Name and Address: | Dunn Simi, LP
1200 Wilshire Boulevard, Suite 208
Los Angeles, CA 90017 |
| 6. General Plan Designation: | Business Park |
| 7. Zoning: | Business Park (BP) |
| 8. Description of Project: | Dunn Simi, LP (Applicant) proposes to demolish an existing 135,520-SF office building and construct a 179,490-SF warehouse facility with retaining walls, parking lot, and landscaping at 4100 Guardian Street, Simi Valley. |
| 9. Surrounding Land Uses/Setting | The Project site is on two parcels, APNs 626-0-052-065 and 626-0-052-095. The Project site is bounded by Guardian Street to the north, Peppertree Lane to the west, open space and an office building to the east, and open space and institutional development to the south. Commercial office buildings are located to the north of Guardian Street and west of Tapo Canyon Road. Peppertree Lane begins at the intersection of Tapo Canyon Road and Guardian Street and runs north-south, connecting to the American Jewish University – Brandeis Bardin Campus, approximately 200 feet south of the Project site. |
| 10. Other Public Agencies Whose Approval is Required | Ventura County Air Pollution Control District, Ventura County Watershed Protection District, City of Simi Valley |
| 11. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 21808.3.1? | Yes (refer to Section 3.20, Tribal Cultural Resources) |

3.1. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the proposed Project, requiring implementation of mitigation as indicated by the checklist and in Sections 3.3 through 3.23.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" 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 checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

3.2. Environmental 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

SCANNED SIGNATURE HERE

Zarui Chaparyan, Associate Planner
Department of Environmental Services
City of Simi Valley

Date

3.3. Aesthetics

AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Have a substantial adverse effect on a scenic vista?	<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 checked="" type="checkbox"/>	<input 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 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"/>

3.3.1. Environmental Impacts

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

LESS-THAN-SIGNIFICANT IMPACT. The Project site is surrounded by immediate views of commercial office buildings and ornamental trees and landscaping to the north, open space grasslands to the east, open space and low-density development to the south, and open space and landscaping to the west. Scenic vistas can be found along Tapo Canyon Road but are limited to the northern portion of the road and do not extend to the Project vicinity (City of Simi Valley, 2012a). Although construction equipment and materials may be visible from public vantage points, construction would be short-term, lasting approximately 18 months. Therefore, operational impacts to scenic vistas would be less than significant, and no mitigation is required.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

LESS-THAN-SIGNIFICANT IMPACT. According to the Ventura County General Plan's Resource Protection Map, no Scenic Resource Areas exist near the Project site (Ventura County, 2010). However, the City of Simi Valley General Plan Natural Resources Element identifies open space and tree-studded hillsides as visual resources (City of Simi Valley, 2021). The Project site is approximately 0.2 miles south of California State Route (SR) 118, an eligible State scenic highway but not an officially designated State scenic highway (Caltrans, 2018). The Project site is not visible from SR-118. Construction of the proposed Project would not damage or adversely affect rock outcroppings or historic buildings, as construction activities would occur within a previously developed property that does not include these resources. While open space and tree-studded hillsides are located south of the Project site, the Project would not include development within these visual resources nor would it block views of these areas. Therefore, the proposed Project would not obstruct views to or from a State scenic highway, and a less-than-significant impact on scenic resources within a State scenic highway would occur. No mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would be located in an urbanized area adjacent to open space. The Project site is currently zoned Business Park and would not conflict with any applicable zoning and land use regulations governing scenic quality. The proposed Project would be compatible with the surrounding area, as it would look relatively similar to the existing development on site and adjacent buildings. This would be consistent with the Brandeis-Bardin Institute Specific Area Plan, which identifies development standards to preserve natural areas above twenty percent slope, protection of the Meier Creek Channel, and preservation of existing trees (City of Simi Valley, 2011). All proposed Project components would be consistent with the existing visual character of the area and would not contrast with neighboring development or impact a scenic vista. The proposed Project activities do not involve the construction of any large obtrusive structures that would be substantially different from the existing building and degrade the existing visual character or quality of the site or its surroundings. Therefore, impacts would be less than significant, and no mitigation is required.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

LESS-THAN-SIGNIFICANT IMPACT. Although Project construction would occur during daylight hours between 8:00 a.m. and 5:00 p.m., temporary construction nighttime lighting would be required for security purposes. In addition, permanent lighting would be installed at the Project site for operation activities and security purposes. All lighting at the Project site would be directed toward the site and away from surrounding roadways, so that glare would not occur. Additionally, each exterior light fixture and light source would comply with the standards pursuant to SVMC § 9-30.040 (Exterior Light and Glare). Pursuant to SVMC § 8-21.16 (Special Non-Residential Building Provisions), the proposed Project would comply with lighting standards that require open parking lots and access thereto to include a maintained minimum of one foot-candle¹ of light or an energy efficient type on the parking surface from dusk until the close of business every operating day. The proposed warehouse building would not have large areas of reflective surfaces, such as glass or metal, and would not cause substantial adverse glare in the surroundings. Therefore, the proposed Project would have a less-than-significant impact related to light or glare, and no mitigation is required.

¹ Foot-candle is defined as a unit of measure of the intensity of light falling on a surface equal to one lumen per square foot (Municode, 2023).

3.4. Agriculture and Forestry Resources

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) pre-pared 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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping 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 §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §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"/>

3.4.1. Environmental Impacts

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-agricultural use?**

NO IMPACT. The Department of Conservation (DOC) California Important Farmland Finder identifies the Project site as Urban and Built-Up Land, which is defined as land occupied by residential, industrial, commercial, institutional, or other similar structures with a building density of approximately six structures to a 10-acre parcel (DOC, 2022). Accordingly, the Project site is not identified as containing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance that would be converted to accommodate the proposed Project. Therefore, no impact on designated farmland would occur, and no mitigation is required.

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

NO IMPACT. As discussed in Section 3.4.1(a), the proposed Project would be located on Urban and Built-Up Land (DOC, 2018). Because the Project site would not be located on designated agricultural land, it would not be located on land enrolled in a Williamson Act Contract. The Project site is zoned Business Park (BP), and there are no agricultural zoning designations or agricultural uses within the Project limits or adjacent areas (City of Simi Valley, 2011; 2023; 2024a). Therefore, there would be no impact on existing zoning for agricultural use or a Williamson Act Contract, and no mitigation is required.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

NO IMPACT. As discussed in Section 3.4.1(b), the Project site is zoned BP, and as a result, would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. Therefore, there would be no impact on land zoned for forest land, and no mitigation is required.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

NO IMPACT. The proposed Project would occur in an area that does not include forest land. Accordingly, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, there would be no impact on forest land, and no mitigation is required.

e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

NO IMPACT. As discussed in Sections 3.4.1(a) and 3.4.1(b), no farmland exists within the Project site or the surrounding area. Accordingly, the proposed Project would not involve changes in the existing environment that could result in the conversion of farmland to non-agricultural use. Therefore, there would be no impact on agricultural land uses or activities, and no mitigation is required.

3.5. Air Quality

AIR QUALITY

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

3.5.1. Environmental Impacts

This section introduces general information on air quality and provides data on the existing air quality settings and detailed analysis on Project air quality impacts, provided in detail in the Air Quality Assessment for 4100 Guardian Street Warehouse Project, prepared by Kimley-Horn and Associates, Inc. in February 2024. This report is incorporated by reference and provided in Appendix A:

Kimley-Horn. 2024a. Air Quality Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California. February.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

NO IMPACT. The United States Environmental Protection Agency (USEPA) requires each state with nonattainment areas to submit a State Implementation Plan that demonstrates the means to attain the federal standards and integrates federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas. The California Clean Air Act (CCAA) requires the development of air quality attainment plans for areas designated as nonattainment regarding the state and federal ambient air quality standards that outline emissions limits and control measures to meet these standards.

The proposed Project is located within the South Central Coast Air Basin (SCCAB) and under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). To reduce emissions of criteria pollutants for which the SCCAB is in nonattainment, the VCAPCD adopted the 2022 Air Quality Management Plan (AQMP) that establishes program of rules and regulations directed at this goal and achieving state and national air quality standards. The proposed Project is subject to the VCAPCD's AQMP.

Project consistency with the AQMP is determined by comparing the actual population growth in the County with the projected growth rates in the AQMP. However, if more recent population forecasts have been adopted by the Ventura Council of Governments (VCOG) where the County population is lower than that included in the AQMP, lead agencies may use the more recent VCOG forecasts for determining consistency (Kimley-Horn, 2024a).

The proposed Project consists of the redevelopment of a built-out site that would not result in a direct increase in population since the proposed buildings would not accommodate any new residents. Accordingly, the Project would not result in substantial unplanned growth or unaccounted for growth in the General Plan or growth projections used by the VCAPCD to develop the 2022 AQMP. Thus, no impact would occur, and mitigation is not required.

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 IMPACT. Construction of the proposed Project would generate short-term emissions of criteria air pollutants, including ozone (O₃) precursor pollutants (i.e., Reactive Organic Gases [ROG] and Nitrogen Oxide [NO_x]) and Coarse Particulate Matter (PM₁₀) and Fine Particulate Matter (PM_{2.5}). Construction-generated emissions are short term and would occur only during the construction period. Accordingly, the VCAPCD's thresholds of significance for ROG and NO_x are not intended to be counted towards construction emissions because construction emissions are temporary (Kimley-Horn, 2024a).

Construction would result in the temporary generation of emissions resulting during demolition, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are primarily dependent on the amount of ground disturbance from site preparation activities as well as weather conditions and the appropriate application of water (Kimley-Horn, 2024a).

Construction is expected to occur over a period of a year to a year and a half. Emissions anticipated to be generated by construction activities were calculated using the California Air Resources Board (CARB)-approved CalEEMod computer program, which models emissions for land use development projects, based on typical construction requirements. Table 2 below summarizes the predicted maximum daily construction generated emissions for the Project.

Table 2. Construction-Related Emissions

Construction Year	Emissions (Maximum Pounds Per Day)					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Year 1	3.72	36.06	33.99	0.08	11.89	5.47
Year 2	14.80	19.55	29.02	0.04	2.22	1.08

Notes: Notes: VCAPCD Rule 55 Fugitive Dust applied. The Rule 55 reduction/credits include the following action to minimize fugitive dust: securing tarps over truckloads of soil material; watering exposed soil surfaces and bulk material stockpiles; limited speeds on unpaved roads. No mitigation was applied to construction equipment. Refer to Appendix A of Appendix A (Air Quality Assessment; Kimley-Horn, 2024a) for Model Data Outputs.

Source: CalEEMod version 2022. Refer to Appendix A of the Air Quality Assessment (Kimley-Horn, 2024a) for model outputs.

Fugitive dust emissions may have a substantial, temporary impact on local air quality and may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The greatest emissions of fugitive dust would occur during the site preparation and grading which would require the use of earth-moving equipment. The proposed Project would be subject to VCAPCD Rules 51 and 55 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.) and 74.2 (architectural coatings) to minimize fugitive dust and limit volatile organic compound (VOC) content in specific coatings. As noted above, VCAPCD does not intend for the significance threshold of 25 pounds per day (lbs/day) for

ROG and NO_x to be applied to construction emissions since these emissions are temporary. Compliance with the applicable VCAPCD Rules would ensure that Project construction emissions would not result in a cumulatively considerable net increase of any criteria pollutant. Therefore, impacts related to temporary construction activities would be less than significant, and mitigation is not required (Kimley-Horn, 2024a).

Operational Emissions

Project-generated emissions would be primarily associated with motor vehicle traffic, and equipment to support warehouse operations, including forklifts and potentially a backup generator. Table 3, Operational Emissions shows the estimated maximum daily operational emissions for the proposed Project. These emission estimates conservatively assume no baseline activity occurs at the site, and all proposed Project operations could be considered net new emissions.

Table 3. Operational Emissions

Source Type	Emissions (Maximum lbs/Day)					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Mobile Sources	1.53	9.44	15.8	0.09	4.98	1.37
Area Sources	5.37	0.07	7.81	0	0.01	0.01
Energy Use	0.05	0.95	0.79	0.01	0.07	0.07
Off-Road Equipment	0.34	3.2	4.52	0.01	0.17	0.16
Stationary Sources	1.23	5.51	3.14	0.01	0.18	0.18
Total Emissions	8.52	19.17	32.06	0.12	5.41	1.79
VCAPCD Significance Thresholds	25	25	None	None	None	None
Exceeds Threshold?	No	No	N/A	N/A	N/A	N/A

Source: CalEEMod version 2022, updated by Aspen Environmental Group. Refer to Appendix A-1 of this Initial Study for model outputs.

As shown in Table 3, the Project's overall operational emissions would be below the VCAPCD daily emissions thresholds of 25 lbs/day for ozone precursors. The following types of sources were included.

Mobile Sources. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Project-generated vehicle emissions are based on the use of CalEEMod as recommended by the VCAPCD, considering up to 325 vehicle trips, daily. The vehicle trips would be a split of 273 daily light-duty vehicle trips (worker commutes) and 52 daily heavy-duty truck trips for the warehouse. As shown in Table 3, the anticipated mobile source emissions from the Project would not exceed VCAPCD thresholds for criteria pollutants.

Area Sources. Area source emissions would be generated due to on-site use of consumer products, architectural coating, and landscaping.

Energy Use. Energy-related emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be for miscellaneous equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.

Off-Road Equipment. The Project operations would include use of off-road equipment, for cargo handling. The emissions estimates assume that the Project would include up to 4 diesel forklifts, each operating up to eight hours per day.

Stationary Sources, Emergency Backup Generator. Stationary sources include the emissions-generating equipment associated with Project operations. To support warehouse use, emissions estimates assume that a diesel backup generator would be used in the event of a power failure. Generator use would not be part of the Project's normal daily operations. Nonetheless, emissions associated with one emergency backup generator are included based on the specifications in the Air Quality Assessment (prepared by Kimley-Horn, see Appendix A). If a backup generator is required, the end user would be required to obtain a permit from the VCAPCD before installation. Emergency backup generators must comply with the California Air Toxic Control Measure (ATCM) for Stationary Diesel Engines and VCAPCD Rule 74.9 (Stationary Internal Combustion Engines), which would minimize emissions.

Summary of Operational Emissions. As shown in Table 3, the Project's operational emissions would not exceed VCAPCD thresholds of 25 pounds per day for ozone precursors. As a result, operational emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, adherence to VCAPCD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

Cumulative Short-Term Emissions

The SCCAB is designated nonattainment for O₃ and PM₁₀ for State standards and nonattainment for O₃ for Federal standards. VCAPCD significance thresholds are designed to ensure compliance with both National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) and based on projected emissions in the SCCAB. Therefore, if a project is predicted to not exceed the thresholds, the project's contribution to the cumulative impact on air quality in the SCCAB would not be cumulatively considerable for those pollutants that are in nonattainment in the SCCAB. As discussed above, quantitative thresholds for temporary construction impacts have not been established by the VCAPCD, but the VCAPCD recommends implementation of dust control measures. The Project would be required to comply with VCAPCD Rule 55 (Fugitive Dust) to incorporate dust control measures during construction to ensure construction dust emissions are not generated in quantities that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or endanger the comfort, repose, health, or safety of any such person or the public. As such, the proposed Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction (Kimley-Horn, 2024a).

Cumulative Long-Term Impacts

Separate significance thresholds for cumulative operational emissions have not been established by the VCAPCD. Air emissions have an inherently cumulative impact. As such, no single project is significant enough to result in nonattainment of ambient air quality standards, and individual project emissions

contribute to existing cumulatively significant adverse air quality impacts. Operational thresholds of significance have been developed by the VCAPCD based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCCAB's existing air quality conditions. Therefore, a project that exceeds these thresholds would also have a cumulatively considerable contribution to a significant cumulative impact (Kimley-Horn, 2024a).

As shown in Table 3, the proposed Project's operational emissions would not exceed VCAPCD thresholds. As such, operational emissions of the proposed Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. In addition, adherence to VCAPCD rules and regulations would prevent potential impacts related to cumulative conditions on a project-by-project basis. Therefore, Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant, and mitigation is not required (Kimley-Horn, 2024a).

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

LESS-THAN-SIGNIFICANT IMPACT.

Carbon Monoxide Hotspots

An analysis of Carbon Monoxide (CO) "hot spots" is needed to determine whether the change in the level of service (LOS) of an intersection resulting from the proposed Project would have the potential to result in exceedances of the CAAQS or NAAQS. CO exceedances are recognized as being caused by vehicular emissions, primarily when vehicles are idling at intersections. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). CO concentrations have steadily declined due to the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. Accordingly, even very busy intersections do not result in exceedances of the CO standard (Kimley-Horn, 2024a).

The SCCAB is currently designated as attainment for both the 1-Hour and 8-Hour State and federal CO standards. The primary sources of diesel exhaust particulates in the Project vicinity are vehicles traveling along Guardian Street and Tapo Canyon Road. According to the Simi Valley General Plan Environmental Impact Report, Tapo Canyon Road from Los Angeles Avenue to Royal Avenue has a volume of 14,300 average daily trips and 2,700 average daily trips from Royal Avenue to Guardian Way. Tapo Canyon Road is therefore considered a high-volume roadway, which produces pollutants near the Project site.

A project's localized air quality impact is considered significant if CO emissions create a hotspot where either the State one-hour standard of 20 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (LOS E or worse). Because the Project would not result in a substantial increase in vehicle trips when compared to the existing conditions, traffic generated by the Project would not result in exposing existing sensitive receptors to substantial pollutant concentrations. The Project would not result in a CO hotspot and would have less-than-significant impacts in regard to sensitive receptors.

Construction-Related Diesel Particulate Matter

Construction would result in the generation of diesel particulate matter (DPM) emissions from the use of off-road diesel equipment. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant (TAC) emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer (Kimley-Horn, 2024a).

The use of diesel-powered construction equipment would be temporary and episodic. Therefore, the duration of exposure would be short-term and exhaust from construction equipment would dissipate rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction would be temporary and transient throughout the Project site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time which would limit the exposure of any proximate individual sensitive receptor to TACs (Kimley-Horn, 2024a).

Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited (Kimley-Horn, 2024a).

Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location, and the highly dispersive properties of DPM, sensitive receptors, such as those at American Jewish University – Brandeis Bardin Campus, would not be exposed to substantial concentrations of construction-related TAC emissions. Impacts would be less than significant.

Operational Diesel Particulate Matter

The CARB Land Use Handbook includes recommendations for siting new sensitive land uses near specific sources of air pollution such as distribution centers. Recommended minimum separation between sensitive land uses and existing sources of pollutants are intended to reduce health risks from air pollution. Based on CARB recommendations, siting new sensitive receptors within 1,000 feet of a distribution center that generates more than 100 trucks per day should be avoided. According to Project trip generation estimates, the proposed Project would generate 52 daily heavy-duty truck trips. Therefore, considering the anticipated number of daily trucks, highly dispersive properties of DPM, and the distance of the nearest sensitive receptors (200 feet south of the Project site), sensitive receptors would not be exposed to substantial concentrations of operational TAC emissions. Impacts would be less than significant (Kimley-Horn, 2024a).

Criteria Pollutant Health Impacts

The VCAPCD has set its CEQA significance thresholds to correlate with the trigger levels for the federal New Source Review (NSR) Program and VCAPCD Rule 26 for new or modified sources. The NSR Program was created by the Federal Clean Air Act (FCAA) to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the VCAPCD's emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

NO_x and ROG are precursor emissions that form O₃ in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O₃ may be formed at a distance downwind from the sources.

Breathing ground-level O₃ can result in health effects that include reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O₃ concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O₃ can make asthma symptoms worse and can increase sensitivity to asthma triggers.

The VCAPCD's 2022 AQMP focuses on the 2018 8-hour ozone standard and presents a combined local and State clean air strategy based on concurrent ROG and NO_x emission reductions. The largest source of NO_x emissions (an O₃ precursor) in 2018 were related to on-road sources. Although vehicle miles traveled in the SCCAB continue to increase, NO_x and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2022 AQMP demonstrates that the VCAPCD can achieve attainment of the 2015 federal 8-hour standard by 2027. In addition, since NO_x emissions also lead to the formation of PM_{2.5}, the NO_x reductions needed to meet the O₃ standards will likewise lead to improvement of PM_{2.5} levels and attainment of PM_{2.5} standards.

It is difficult to directly correlate specific health effects that will occur as a result of a project's significant criteria air pollutant emissions. Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. In addition, such modeling efforts are costly, and the value of a project-specific analysis may be modest in relation to that cost. Furthermore, the results, while costly to produce, may not be particularly useful. For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level.

The mass emissions thresholds developed by VCAPCD and used by CEQA lead agencies throughout Southern California to determine potential significance of project-related regional changes in the environment are not directly indicative of exceedances of applicable ambient air standards. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O₃ or PM. The effects on ground-level ambient concentrations of pollutants that may be breathed by people are also influenced by the spatial and temporal patterns of the emission sources. In other words, the effect on O₃ and PM concentrations from a given mass of pollutants emitted in one location may vary from the effect if that same mass of pollutants was emitted in an entirely different location in the SCCAB. The same effect may be observed when the daily and seasonal variation of emissions is taken into account. Regional-scale photochemical modeling, typically performed only for NAAQS attainment demonstration and rule promulgation, account for these changes in the spatial, temporal, and chemical nature of regional emissions.

Emissions from Project construction and operation would vary by time of day, month, and season, and the majority of Project-related emissions, being generated by mobile sources driving to and from the site,

would be emitted throughout a wide area defined by the origins and destinations of people travelling to and from the proposed Project.

The Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level (Kimley-Horn, 2024a). As previously discussed, Project emissions would be less than significant and would not exceed VCAPCD thresholds (refer to Table 3). Localized effects of on-site Project emissions on nearby receptors were also found to be less than significant. Short- and long-term emissions from the Project are not expected to cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standards. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. Therefore, impacts would be less than significant, and no mitigation is required.

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

NO IMPACT. The VCAPCD Guidelines identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the VCAPCD as odor sources. During construction-related activities, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g., diesel exhaust from grading and construction equipment and asphalt). These odors are a temporary short-term impact that is typical of construction projects and would disperse rapidly. Therefore, the Project would not create objectionable odors (Kimley-Horn, 2024a).

3.6. Biological Resources

BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 Wildlife 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

3.6.1. Environmental Impacts

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

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. No native plant communities or habitats occur within the Project site because it is entirely developed with an existing building and paved parking lot. According to the Biological Resources Assessment prepared by South Environmental in August 2023 (see Appendix B), no special-status plants or animals were observed within the Project site (South Environmental, 2023a). The Project's direct impacts would occur in existing developed areas where no habitats occur. The developed areas do not support special-status species due to a lack of habitat, and the existing developments preclude special-status species from establishing there in the future. Because the Project site and surrounding areas are developed and lack native habitats, no direct impacts to habitat would occur from the proposed Project.

One candidate species for listing under the California Endangered Species Act (CESA), Crotch bumble bee (*Bombus crotchii*) does have a potential to be present in the Project site and was omitted from the

Biological Resources Assessment. This species is found between San Diego and Redding in a variety of habitats, including open grasslands, shrublands, chaparral, and semi-urban settings (CDFW, 2022). The Crotch bumble bee nests underground in grassland and scrub habitats and tolerates hot and dry environments. Because most of the site is paved and developed, the Crotch bumble bee is not expected to nest within the Project site. The species forages on a wide variety of plants, including milkweed, lupine, sage buckwheat, and poppy (Hatfield et al., 2015). Additionally, many recent observations of Crotch bumble bees have been on ornamental species such as petunias, lavenders, sages, and others (iNaturalist, 2024). It has a low potential to traverse the Project site and may forage on ornamental plants in landscaped areas. If foraging Crotch bumble bees are present during Project activities, they are expected to leave the Project site on their own and impacts to the Crotch bumble bee would therefore be less than significant. Any impacts to Crotch bumble bee would also not constitute “take”² under CESA and an Incidental Take Permit from the California Department of Fish and Wildlife (CDFW) would not be required.

Additionally, one CDFW watch list species, Cooper’s hawk (*Accipiter cooperii*) has a high potential to forage within the Project site and low potential to nest there. This species was included in the Biological Resources Assessment but was determined to have no potential to be present. Cooper’s hawks have no formal protection, beyond the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. If present, impacts to Cooper’s hawk would be avoided or minimized through the implementation of Mitigation Measure (MM) BIO-1; therefore any impacts to Cooper’s hawk would be less than significant.

In addition to the special-status species discussed above, all native birds in California are protected by the MBTA and California Fish and Game Code. Trees, shrubs, and structures on the Project site and in the open space adjacent to the Project could provide potential nesting habitat. If nests are present during the initiation of Project activities, active nests, eggs, or young could be destroyed or otherwise disturbed to a point at which the young do not survive, which would be a violation of the MBTA and California Fish and Game Code. In addition, indirect impacts from construction noise or vibration have the potential to disturb an active bird nest to the point of failure if the nest is within the immediate vicinity of Project construction activities resulting in the violation of the MBTA and California Fish and Game Code. To avoid impacts to active bird nests, eggs, or young, preconstruction nesting bird surveys and monitoring would be implemented during construction activities as described in MM BIO-1. Impacts would be reduced to less than significant with implementation of MM BIO-1.

Mitigation Measure

MM BIO-1 Pre-construction Nesting Bird Survey and Avoidance.

- Ground-disturbing activities and vegetation removal (including tree trimming) may only occur outside the bird nesting season (September 1-January 31).
- If ground-disturbing activities or vegetation removal (including tree trimming) are scheduled during the bird nesting season (February 1-August 31), a pre-construction survey for nesting birds must be conducted by a qualified avian biologist with prior experience conducting nest bird surveys for construction projects. A qualified biologist must meet the minimum qualifications for Biological Consultants as listed below:
 - Must have an undergraduate or graduate degree with coursework in biology, botany, wildlife biology, natural resources, ecology, conservation biology, or environmental biology;

² Fish and Game Code section 86 defines “take” as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (CDFW, 2024).

- Have an up-to-date subscription to and experience using the California Natural Diversity Database/BIOS;
 - Be able to map survey findings in GIS or have access to an individual or firm with the ability to map survey findings in GIS. To conduct biological field surveys and construction monitoring; and
 - Must have at least four years of experience conducting wildlife surveys for biological groups located within the region and be able to identify Ventura County's designated Locally Important Species.
- The study area includes the Project site and a 100-foot buffer around the Project site. If no active nests are found, no additional measures are required.
 - If active nests are found, the avian biologist must map the location and document the species and nesting stage. The qualified avian biologist must implement an avoidance buffer area appropriate to the species. The avian biologist may change the avoidance buffer if field observations of bird behavior and biology to ensure the nest is unaffected by Project activities, avoiding a risk of nest failure. The nest site would be fenced and/or flagged in all directions, and this area may not be disturbed until the nest becomes inactive.

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, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

NO IMPACT. The Project site is entirely developed, and no riparian habitat or sensitive natural communities are located on site. Meier Canyon Creek is located approximately 450 feet west of the Project site, just west of Peppertree Lane. The Project site includes one existing stormwater discharge pipe that flows into a catch basin at the northwest corner of the Project site, which discharges runoff from the existing office building and paved areas to Meier Canyon Creek. Project construction activities would occur within the limits of the Project site boundary, and no temporary or permanent loss of riparian vegetation would occur. Although Meier Canyon Creek would receive seasonal stormwater flows that are diverted from the Project site, these impacts would remain the same as they do under existing conditions, as the site is currently paved and developed with an office building and parking lot. The existing outlet would be retained to continue to convey flows for the proposed Project. No new discharge locations or outlets would be constructed (Delane Engineering, 2024). Therefore, 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.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

NO IMPACT. The State Water Resources Control Board (SWRCB) defines a state wetland, or “waters of the state” as “any surface water or groundwater, including saline waters, within the boundaries of the state” (SWRCB, 2021). As described in Section 3.6.1(b), Meier Canyon Creek is an intermittent stream located approximately 450 feet west of the Project site. While this water body is likely a water of the state and CDFW jurisdictional streambed, the proposed Project does not include any activities that would result in removal, filling, or other direct impact to this aquatic resource. All Project construction and operations activities would occur outside of this water body. Although the Project site is connected to Meier Canyon Creek by an existing storm drain system, construction activities would be required to comply with the SWRCB Construction Stormwater Program to minimize stormwater discharges from activities such as earthwork. The construction contractor would be required to obtain coverage under the NPDES General

Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (SWRCB, 2024a). Therefore, impacts associated with discharge flows during construction would be less than significant.

A federally protected wetland, or “waters of the U.S.,” must be a relatively permanent body of water with a continuous surface connection to other relatively permanent bodies of waters or navigable waters. Because Meier Canyon Creek flows intermittently, it is not considered a federally protected wetland. Thus, no impacts to a federally protected wetland would occur.

During Project operations, the site would be operated as a warehouse facility, and all Project activities would occur within the site boundaries. No removal, filling, hydrological interruption, or other activities would occur within Meier Canyon Creek during operations. Stormwater runoff would continue to be diverted to this drainage and would remain the same as existing conditions. No impacts to state or federally protected wetlands would occur.

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

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The Project site is located on the southern edge of dense urban development in the City of Simi Valley. The site is currently entirely developed and would remain developed under the proposed Project. Open space to the east and west of the Project site provides connectivity to large areas of habitat in the Santa Susana Mountains and Simi Hills. However, this open space is not within the boundaries of the Project site and would remain undeveloped. No new barriers or other developments would be created within the adjacent open space; all components of the proposed Project would occur within existing disturbed and developed land. Therefore, the Project would have no impact on habitat linkages or wildlife movement corridors. The Project does have the potential to impact nesting birds and their nursery sites as discussed in Section 3.6.2(a); however, these impacts would be reduced to less than significant with MM BIO-1 incorporated. Impacts would be less than significant with mitigation.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

NO IMPACT. SVMC § 9-38.030 (Prohibition of Removal) prohibits the removal of protected trees (historic trees, mature native oak trees, or any mature trees). Native oaks and mature trees occur in the landscaped areas on the Project site. In compliance with SVMC § 9-38.040 (Guidelines for Reports on Protected Trees), the Applicant’s consultant prepared a Protected Tree Report (Appendix C) (Tree Care Consulting, 2024, provided as Appendix C). Project construction activities would avoid impacts to these trees by following recommendations in the Protected Tree Report. Seven oak trees would be protected in place, and protection zones marked with temporary fencing would be established to avoid impacts to tree branches and roots during demolition and construction. A consulting arborist would observe all earthwork done near protected trees to prevent damage to tree roots. Root pruning, if needed, would be done with sterile, mechanical root pruning equipment accompanied by hand work under supervision of the consulting arborist. These methods would minimize root damage from excavation and grading equipment disturbing roots. Construction activities would avoid nailing items such as grade stakes onto trees. Should any branches be damaged, an arborist would be notified and provide recommendations on how to proceed. No chemicals such as herbicides would be used upstream and within 100 feet of any tree protected zone. Dust deposited on the foliage of trees would be hosed off so that leaves are not smothered by dust particles (Tree Care Consulting, 2024).

One hundred forty-four mature, non-native trees would be removed or transplanted as necessary to accommodate construction of the new warehouse building and parking lot. In compliance with SVMC § 9-38.040 and as recommended by the Certified Arborist, 28 mature oak trees may be transplanted on-site away from the development footprint or removed for resale and offsite transplant (Innes, 2024). The Applicant would coordinate with a reputable tree moving company during these activities. Compliance with SVMC § 9-38.030 and § 9-38.40 and implementation of the Protected Tree Report recommendations would result in less than significant impacts. No mitigation is required.

During operations, all trees would remain in place and would not be disturbed, with the exception of irrigation, as operations would involve activities within and around the warehouse facility. Therefore, no impacts would occur during operations, and no mitigation is required.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?

NO IMPACT. The Project site is already developed. The site and surrounding areas are not included in any Habitat Conservation Plan or Natural Community Conservation Plan, or any other approved habitat conservation plan. The closest habitat conservation plan area is the Simi Hills Critical Wildlife Passage Area, which is located over 2 miles south of the Project site. Therefore, the Project would have no impact on any adopted conservation plans, and no mitigation is required.

3.7. Cultural Resources

CULTURAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(g) 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"/>
(h) 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"/>
(i) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.7.1. Cultural Resources Overview

Cultural Resources Overview

This section provides an analysis of Project impacts on cultural resources, including historical and archaeological resources as well as human remains, and is based on the results of a California Historical Resources Information Center (CHRIS) cultural resources record search conducted by staff at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton; a review of past cultural resources reports; the results of a Sacred Lands File (SLF) Search conducted by the Native American Heritage Commission (NAHC); and an intensive level pedestrian survey of the Project site by a qualified archaeologist.

A detailed report is provided the Cultural Resources Assessment prepared by South Environmental. This report is incorporated by reference and provided in Appendix D (Confidential):

South Environmental. 2023b. Cultural Resources Assessment. Prepared for Dunn Simi, LP.
November.

Regulatory Framework

CEQA requires a Lead Agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] § 21084.1), archaeological resources, or human remains. A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a Lead Agency determines to be historically significant (CEQA Guidelines § 15064.5[a][1-3]). Resources listed on the National Register of Historic Places (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys. In addition, pursuant to PRC § 5024.1(c), a resource is considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

If it can be demonstrated that a project would cause damage to a unique archaeological resource, the CEQA Lead Agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC § 21083.2[a-b]). PRC § 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Methodology

On July 17, 2023, South Environmental (South) requested a cultural resources records search from the CHRIS to identify any previously recorded cultural resources and previously conducted cultural resources studies within the Project site and a 0.5-mile radius. On August 21, 2023, the SCCIC completed the record search. The search included a review of mapped prehistoric and historic archeological resources and historic built-environment resources, site records, technical reports, archival sources, and ethnographic references. In addition, the SCCIC completed a review of historic maps of the study area, the NRHP, the CRHR, lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility list.

As a result of the record search, the SCCIC identified one previously recorded prehistoric site (lithic scatter) within the Project site which was subject to two salvage excavations in 1984 and 1986. One previously recorded cultural resource was identified within the 0.5-mile radius. Additionally, the SCCIC identified three previous cultural resource studies intersecting the Project site and 16 studies within the 0.5-mile records search radius.

An NAHC SLF search of the Project site and surrounding vicinity was requested on July 18, 2023. The SLF search was completed by the NAHC on August 2, 2023, and had negative results (i.e., no known site-specific information on cultural resources were found).

South also conducted an intensive-level archaeological survey of the Project site on September 11, 2023, which resulted in the identification of two prehistoric isolated artifacts – a quartzite core and a hand stone, likely associated with the previously record site identified during the record search (South Environmental, 2023b). The Project site is fully developed and has been subject to a large amount of previous ground disturbance (South, 2023b).

3.7.2. Environmental Impacts

- a. **Would the project cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5 [§15064.5 generally defines historical resource under CEQA]?**

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. No historical resources were identified within the Project site through the record search or survey. Two isolated prehistoric artifacts were identified along the south and southeastern boundaries of the Project site through the intensive-level archaeological survey, likely associated with the previously recorded prehistoric age lithic scatter identified within the Project site as part of the record search. This site was subject to two salvage excavations in 1984 and 1986. Although proposed ground disturbance would primarily occur within previously disturbed soil during

construction, original grading plans from 1989 and historic aerial photographs of the Project site indicate that portions of the edges where the isolated prehistoric artifacts were identified are less disturbed. Given the high sensitivity of the area, it is possible that archaeological deposits could be encountered at deeper levels or within the less disturbed outer edges. Therefore, a Worker Environmental Awareness Program (WEAP) training session is recommended before construction, and archaeological and Native American monitoring is recommended for all ground disturbance based on the sensitivity of the site. Impacts to historical resources would be reduced by implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4 by requiring a WEAP training before construction, archaeological and Native American monitoring, and protocols for unanticipated discovery of cultural resources and human remains. With implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4, impacts to cultural resources would be less than significant with mitigation.

Mitigation Measures

CUL-1 Cultural Resources WEAP Training

Before construction, the Permittee must contract with a qualified archaeologist and local Native American monitor to develop Worker Environmental Awareness Program (WEAP) for all personnel involved in Project construction, including field consultants and construction workers. The one-time WEAP training session must be conducted before any Project-related construction activities in the Project site. The WEAP will include relevant information regarding the archaeological sensitivity of the area, including applicable regulations, protocols for unanticipated discoveries, and consequences of violating state laws and regulations. The WEAP will also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located at the Project site and will outline further steps needed and who to contact if any potential cultural resources or tribal cultural resources are encountered. The WEAP will emphasize the requirement for confidentiality.

The Permittee must submit the WEAP to the City of Simi Valley (City) for review and approval before implementation. All workers, contractors, and visitors must attend the WEAP before entering the Project site and performing any work. The Permittee must provide copies of the training attendance sheets monthly to City staff as a record of compliance with this measure.

CUL-2 Archeological and Native American Monitoring

Prior to the commencement of construction, the Permittee will secure the services of a Native American Monitor from the Fernandeano Tataviam Band of Mission Indians and a qualified archaeological monitor to observe all ground-disturbing activity (i.e clearing, grubbing, grading, trenching, etc.) on a full-time basis. A copy of the contracts or monitoring agreements will be sent to the City of Simi Valley for their review and approval.

CUL-3 Unanticipated Discovery of Cultural Resources

If archaeological resources are encountered during ground disturbing activity on the site, all activity within a 100-foot radius of the find must be stopped, the City of Simi Valley must be notified, and a qualified archaeologist and Fernandeano Tataviam Band of Mission Indians Native American monitor must examine the find. The archaeological and Native American monitors must evaluate the find to determine if it meets the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building

permits for any construction occurring within the above-referenced 100-foot radius. The City of Simi Valley will consult in good faith with the Fernandefio Tataviam Band of Mission Indians on the disposition and treatment of any tribal cultural resource encountered. If the find(s) do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeological and Native American monitor. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, Native American Heritage Commission (tribal cultural resources), and the South Central Coastal Information Center.

The Permittee will ensure that construction personnel do not collect or move any cultural material and will ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.

CUL-4 Unanticipated Discovery of Human Remains

If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Ventura County Coroner must be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, the South Central Coastal Information Center, and the MLD.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. As discussed above, no unique archaeological resources have been identified within the Project site. The high sensitivity of the area indicates the potential that archaeological deposits could be encountered at deeper levels of excavation and in less disturbed areas. Impacts that would cause a substantial adverse change in the significance of an archaeological resource would be avoided with implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4, which require WEAP training before construction, archaeological and Native American monitoring, and protocols for unanticipated discovery of cultural resources and human remains. Impacts would be less than significant with mitigation.

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

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. No known human remains, or informal, undocumented cemeteries were identified within the Project area as a result of the record search, archival research, NAHC SLF Search, or intensive pedestrian survey. In the unlikely event unknown buried human

remains are encountered during ground disturbing activity, the implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4 would reduce potential impacts to a less-than-significant level. Impacts would be less than significant with mitigation.

3.8. Energy

ENERGY

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<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"/>

3.8.1. Environmental Impacts

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

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would consume energy resources in the form of non-renewable fossil fuels and electricity for site power. Construction would involve the short-term use of transportation fuels and electricity by various equipment. Construction would last approximately 18 months.

Operation of the proposed Project would require the intermittent use of fuel for vehicles transporting goods and for other equipment used for warehouse operations. Energy in the form of electricity for warehouse and office operations would also be required. Statewide policies and programs promote the use of renewable resources in the electricity supply and reduction in the carbon-intensity of transportation fuels. Implementation of the State of California's Low-Carbon Fuel Standard regulations and the State's long-term goal for carbon neutrality by 2045 or earlier require transportation fuels used in California to transition to renewable fuel sources or zero-emission technologies. The electricity supply is on a long-term trend of decarbonization as a result of California's Renewable Portfolio Standard. Over time, increasing portions of the Project's on-site and off-site energy use would be provided from renewable supplies that would decrease the Project's use of non-renewable fuels.

Construction and operation of the proposed facility would occur on the site in a manner consistent with existing land uses in area and would provide warehouse services. As such, the proposed Project would not use non-renewable energy resources in a wasteful or inefficient manner. Use of energy resources to support the proposed Project would not constitute wasteful, inefficient, or unnecessary consumption; therefore, impacts are less than significant, and no mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would result in the construction and operation of a warehouse facility. The proposed Project would not conflict with adopted state or local renewable energy or energy plans. The Proposed Project would not require the removal of any existing renewable energy infrastructure, such as solar or wind-powered electric generating facilities. The City would need to issue Building and Safety Permits for new buildings and would ensure compliance with energy efficiency requirements under the California Green Building Code and Appliance Efficiency Regulations (Title 24 and Title 20 of the California Code of Regulations, respectively, as adopted by the SVMC). The City is responsible for design, inspection, management, and oversight of construction projects to ensure projects

comply with energy efficiency requirements. Energy necessary to develop and operate the proposed facility would be used efficiently and would represent a negligible portion of state-wide energy consumption. Therefore, the proposed Project would not conflict with plans for renewable energy or energy efficiency, and this impact would be less than significant, and no mitigation is required.

3.9. Geology and Soils

GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 geologic units 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"/>
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<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"/>

3.9.1. Environmental Impacts

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.

NO IMPACT. The Project site is located in a seismically active area of Southern California with numerous active faults in the vicinity; however, no Alquist-Priolo Fault Zones or other known Quaternary faults cross or are adjacent to the Project (DOC, 2024a; USGS, 2024a). The closest Alquist Priolo Fault Zone to the Project is the Simi Fault, which is part of the Simi-Santa Rosa Fault Zone and is located approximately 2.3 miles north of the Project (DOC, 2023). The closest Quaternary fault to the Project is the Simi-Santa Rosa Fault Zone, located approximately 2.5 miles to the north (USGS, 2024b). Therefore, no impact would occur, and no mitigation is required.

ii. Strong seismic ground shaking?

LESS-THAN-SIGNIFICANT IMPACT. The Project area would likely be subject to ground shaking associated with earthquakes on local and regional active faults. The intensity of the seismic ground shaking during an earthquake is dependent on the distance between the Project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the Project area. Earthquakes occurring on faults closest to the Project area would most likely generate the largest ground motions. Significant active faults near the Project that could generate large earthquakes resulting in seismic ground shaking at the Project site include the following: the Simi-Santa Rosa Fault zone, the Sierra Madre Fault Zone, the Sycamore Canyon fault, the Northridge Hills fault, and the Chatsworth fault (USGS, 2024b). Large earthquakes on other regional faults could also trigger ground shaking at the Project site.

The exposure of people and structures to seismic ground shaking is a potential risk with or without the proposed Project and cannot be avoided. However, incorporation of modern standard engineering and safety standards in Project design and compliance with City engineering criteria and Building and Municipal Codes would minimize adverse effects to people and structures. Emergency planning and coordination would also reduce injuries to on-site personnel during seismic activity. With incorporation of emergency planning and compliance with current regulations and standard engineering practices, this impact would be less than significant, and no mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

NO IMPACT. Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction (unconsolidated sediments with groundwater levels of 50 feet below ground surface [bgs] or less). Liquefaction-related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects. The California Geological Survey identified the proposed Project site as not within a Liquefaction Hazard zone (DOC, 2024a). Therefore, no impact associated with liquefaction and related ground failures would occur, and no mitigation is required.

iv. Landslides?

LESS-THAN-SIGNIFICANT IMPACT. As discussed in the geotechnical report, the proposed Project is not shown to be in an area susceptible to seismic induced landslides (Gorian & Associates, 2023). However, construction would include cut and fill slopes that would require slope maintenance. Retaining walls would be constructed to provide soil support along adjacent slopes. Federal, State, and local safety regulations and guidelines, and standard geotechnical recommendations would be followed and implemented as part of Project design to reduce the risk of erosion and degradation. Therefore, any potential impacts involving temporary construction slope instability would be less than significant, and no mitigation is required.

b. Would the project result in substantial soil erosion or the loss of topsoil?

LESS-THAN-SIGNIFICANT IMPACT. Project construction would include excavation and trenching which would expose and loosen soils, making them susceptible to erosion by wind and water. Potential soil erosion hazards vary depending on the use, conditions, and textures of the soils. The properties of soil that influence erosion by rainfall and runoff affect the infiltration capacity of soil, as well as the resistance of a soil to detachment and being carried away by falling or flowing water. Soils containing high percentages of fine sands and silt and that are low in density are generally the most erodible. As the clay and organic

matter content of soils increases, the potential for erosion decreases. Clays act as a binder to soil particles, thus reducing the potential for erosion. The Project site is underlain by Tertiary-age sedimentary rock referred to as Lajas Formation, locally mantled by a thin layer of Quaternary age Terrace Deposits and engineered fill (Gorian and Associates, 2023). The Lajas Formation consists of siltstone, claystone, shale, and minor fine-grained sandstone, mantled by several feet of older alluvium (Gorian and Associates, 2023). The proposed Project would implement standard construction SWPPP BMPs in compliance with the Construction General Permit to limit erosion from construction activities. Standard erosion control BMPs generally include minimization of disturbed areas, protection of natural features and soil, phased construction activity, controlled stormwater flows, prompt stabilization of soil, and slope protection.

Per the preliminary Geotechnical Report, implementation of a reliable irrigation system that would prevent over-watering, regular maintenance of drainage structures, and control of rodents would reduce the risk of erosion and degradation during operation of the proposed Project (Gorian and Associates, 2023). Implementation of standard BMPs during Project construction and regular maintenance and protection of slopes during operation would reduce potential soil erosion impacts to less than significant. No mitigation measures are required.

- c. Would the project be located on geologic units 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. The Project would have a less-than-significant impact regarding landslides, slope stability, and liquefaction as discussed above.

Subsidence is the sinking or gradual lowering of the earth's surface. Subsidence can result from either natural geologic causes such as faulting or from man-made causes such as groundwater pumping or oil and gas production (City of Long Beach, 2023). As groundwater or oil and gas is withdrawn, the pore-pressure in the sediments decreases allowing the weight of the overlying sediment to permanently compact or compress the fine-grained units. The United States Geological Survey (USGS) Land Subsidence in California website includes maps of groundwater and oil subsidence in California and indicates that the proposed Project is not located in an area of groundwater or oil subsidence (USGS, 2024b.). Accordingly, the proposed Project would not exacerbate subsidence in the area, and impacts resulting in subsidence would be less than significant. No mitigation is required.

- 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 WITH MITIGATION INCORPORATED. Expansive soils are characterized by their ability to undergo great volume change (shrink and swell) due to variation in soil moisture content. Changes in soil moisture could result from several factors, including rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay. The geotechnical report recommends conducting soil samples after completion of grading, which is a standard practice (Gorian and Associates, 2023). In addition, MM GEO-1 is recommended per geotechnical design recommendations to reduce potential adverse effects of expansive soils, which includes requiring: positive drainage to be continually provided and maintained away from structures; repairing plumbing leaks to avoid saturation of subgrade soils; avoiding landscaping where roots can damage foundations; and maintaining minimal but uniform landscape watering. With implementation of MM GEO-1, impacts would be less than significant.

Mitigation Measure**GEO-1 Drainage and Landscaping Maintenance**

The construction contractor must adhere to the following maintenance protocols for construction on expansive soils on the Project site:

- Positive drainage must be continually provided and maintained away from structures and must not be changed creating an adverse drainage condition. Plumbing leaks must be immediately repaired so the subgrade soils underlying the structure do not become saturated.
- Initial landscaping must be undertaken in unpaved areas adjacent to structures. Trees and shrubbery must not be planted where roots can grow under foundations and hardscape when they mature.
- Landscaped areas must be maintained in a uniformly moist condition and not allowed to dry out.

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

NO IMPACT. The Proposed Project would be connected to municipal sanitary sewer lines. Septic tanks and alternative wastewater disposal would not be used. No impact would occur, and no mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The Project site is underlain by Tertiary-age sedimentary rock referred to as Lajas Formation locally mantled by a thin layer of Quaternary age Terrace Deposits and engineered fill alluvium (Gorian and Associates, 2023). The Lajas Formation consists of siltstone, claystone, shale, and minor fine-grained sandstone, mantled by several feet of older alluvium (Gorian and Associates, 2023). Southern Environmental conducted a paleontological records search in 2023, which indicated that while no paleontological localities are recorded within the Project site, there are four nearby recorded localities from the same sedimentary deposits that occur within the Project site, either at the surface or at depth (Southern Environmental, 2023). Based on the results of the paleontological record search of the Project area and vicinity, potential fossil-bearing units are present in the Project area and as such, paleontological resources could be encountered during excavation. The following mitigation measures, MM GEO-2 through GEO-5, are recommended to ensure that potential impacts to any unique paleontological resources that may be present would be reduced to a less-than-significant level.

Mitigation Measures**GEO-2 Paleontological Resource Monitoring and Mitigation Plan**

Before the start of any Project-related construction activities, the Permittee must retain a State-approved paleontologist (Project Paleontologist) to prepare and implement a project-specific Paleontological Resource Monitoring and Mitigation Plan (PRMMP), which must be approved by the City of Simi Valley Environmental Services Director. The Project Paleontologist is responsible for implementing all the paleontological conditions of approval and for using qualified paleontologists to assist in work and field monitoring. A qualified Project Paleontologist is defined by the Society of Vertebrate Paleontology standards as a practicing scientist who is recognized in the paleontological community as

a professional and can demonstrate familiarity and proficiency with paleontology in a stratigraphic context. A Project Paleontologist must have the equivalent of the following qualifications:

- A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience;
- At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts;
- Proficiency in recognizing fossils in the field and determining their significance;
- Expertise in local geology, stratigraphy, and biostratigraphy; and
- Experience collecting vertebrate fossils in the field.

At a minimum, information to be contained in the PRMMP, in addition to other information required under the guidelines of the Society of Vertebrate Paleontology (SVP), is as follows:

- Description of the Project site and planned earthwork and excavation, and a map identifying locations where excavations and ground disturbing activities will or will be likely to encounter paleontological resources.
- The museum or repository that has agreed to accept the recovered fossils must be identified in the PRMMP.
- The PRMMP must detail methods of monitoring, recovery, preparation, and analysis of specimens, data analysis, reporting, and the final curation location of specimens at an identified repository.
- Identification of personnel with authority and responsibility to temporarily halt or divert ground disturbance activities to allow for recovery of significant specimens.
- The PRMMP must be submitted to the City of Simi Valley Environmental Services Director for review and approval 60 days before the start of Project construction.

GEO-3

Paleontological Resources WEAP Training.

Before the start of Project-related construction activities, a WEAP must be developed by the Project Paleontologist. The WEAP must address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the obligations to preserve and protect such resources consistent with Society of Vertebrate Paleontology standard procedures. The training program must also include the set of reporting procedures that workers are to follow if paleontological resources are encountered during Project activities. The WEAP may be combined with other environmental training programs for the Project. All field personnel will receive WEAP training on paleontological resources before Project-related construction activities.

GEO-4 Paleontological Monitoring and Fossil Recovery

The Project Paleontologist must monitor the Project site. Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. If the Project Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at depth, he or she may recommend to the City of Simi Valley Environmental Services Director that monitoring be reduced or cease entirely.

- If fossils are discovered, the Project Paleontologist must temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. The Paleontological Monitor, and/or Project Paleontologist must evaluate the discovery and determine if the fossil may be considered significant, and if significant, recover the fossil.
- Upon completion of Project ground disturbing activities, all significant fossils collected would be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossil specimens must be identified to the lowest taxonomic level practical before curation at an accredited museum. The fossil specimens must be delivered to the approved repository (identified in the Paleontological Resource Mitigation Plan) and receipt(s) of collections submitted sent to the City of Simi Valley Environmental Services Director no later than 60 days after all ground disturbing activities are completed.

MM GEO-5 Paleontological Resources Monitoring Report. The Permittee must prepare a paleontological resource mitigation and monitoring report by the Project Paleontologist following completion of ground disturbing activities. The contents of the report must include, but not be limited to a description and inventory list of recovered fossil materials (if any); a map showing the location of paleontological resources found in the field; determinations of scientific significance; proof of accession of fossil materials into the pre-approved museum or other repository; and a statement by the Project Paleontologist that Project impacts to paleontological resources have been mitigated.

3.10. Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.10.1. Environmental Impacts

This section introduces general information on greenhouse gas (GHG) emissions and provides data on the existing GHG emissions at the Project site and detailed analysis on Project GHG emissions, provided in detail in the Greenhouse Gas Emissions Assessment for 4100 Guardian Street Warehouse Project, prepared by Kimley-Horn and Associates, Inc. This report is incorporated by reference and provided in Appendix E:

Kimley-Horn. 2024b. Greenhouse Gas Emissions Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California. February.

- 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.

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of GHGs from demolition and construction. The approximate quantity of GHG emissions generated during each anticipated year of construction activity is provided in Table 4.

Table 4. Construction-Related Greenhouse Gas Emissions

Category	MTCO ₂ e
2024 Construction	318
2025 Construction	505
Total Construction Emissions	823
30-Year Amortized Construction	28

Source: CalEEMod version 2020. Refer to Appendix A for model outputs in the GHG Assessment prepared by Kimley-Horn (Kimley-Horn, 2024b, provided as Appendix E).

As shown, the Project would cause the generation of approximately 823 metric tons of carbon dioxide-equivalent (MTCO₂e) during demolition and construction. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions (SCAQMD, 2008). The amortized Project construction emissions would be 28 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project after construction activities conclude. These GHG emissions would come from direct emissions such as Project generated motor vehicle traffic, equipment to support warehouse operations, including forklifts and potentially a backup generator, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions also come from indirect sources, such as off-site generation of electrical power, use of energy required to convey water to and treat wastewater from the Project, solid waste disposal, and any fugitive leaks of refrigerants from air conditioning or refrigerators.

Total GHG emissions associated with the Project are summarized in Table 5, Project Greenhouse Gas Emissions. These emission estimates conservatively assume no baseline activity occurs at the site, and all proposed Project operations could be considered net new emissions.

Table 5. Project Greenhouse Gas Emissions

Source Type	Project GHG Emissions (MTCO ₂ e per Year)
Mobile Sources	1,622
Area Sources	2.63
Energy Use	437
Water	124
Waste	52.7
Refrigerants	< 0.005
Off-Road Equipment	110
Stationary Sources	14.3
Total Operational GHG Emissions	2,362
Amortized Construction GHG Emissions	28
Total Annual GHG Emissions	2,390
Threshold	3,000
Exceeds Threshold?	No

Source: CalEEMod version 2022. Refer to Appendix A in GHG Assessment for model outputs (Kimley-Horn, 2024b, provided as Appendix E).

As indicated in Table 5, the Project would generate approximately 2,390 MTCO₂e annually. Because GHG emissions would not exceed the 3,000 MTCO₂e threshold, the impact of Project GHG emissions on the environment would be less than significant, and no mitigation is required.

- b. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?**

LESS-THAN-SIGNIFICANT IMPACT.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

On September 3, 2020, the Southern California Association of Governments (SCAG) Regional Council adopted Connect SoCal (2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy [RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions,

tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 (passed in 2006, California Health and Safety Code § 38500 et seq.) and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15. The RTP/SCS contains over 4,000 transportation Projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing Project sponsors to qualify for federal funding. The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and FCAA requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the State. The Project's consistency with the RTP/SCS goals is analyzed in detail in Table 6 (Kimley-Horn, 2024b).

Table 6. Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals	Compliance
GOAL 1: Encourage regional economic prosperity and global competitiveness.	N/A: This is not a Project-specific policy and is therefore not applicable.
GOAL 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	N/A: Although this Project is not a transportation improvement project, the Project is located 1.2-mile south of SR-118 with access via Tapo Canyon Road.
GOAL 3: Enhance the preservation, security, and resilience of the regional transportation system.	N/A: This is not a transportation improvement project and is therefore not applicable.
GOAL 4: Increase person and goods movement and travel choices within the transportation system.	N/A: As the proposed Project is not a transportation improvement Project, Goal 4 is not applicable. However, the Project includes a use that would support goods movement.
GOAL 5: Reduce greenhouse gas emissions and improve air quality.	<p>Consistent: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. The proposed Project is required to comply with the provisions of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen).</p> <p>Further, the Project is located in proximity to existing truck routes and freeways. Location of the Project within a developed area would reduce trip lengths, which would reduce GHG and air quality emissions.</p>

GOAL 6: Support healthy and equitable communities.	Consistent: As discussed in the Project's Air Quality Assessment, the Project does not exceed applicable emissions thresholds. Based on the Friant Ranch decision, projects that do not exceed localized thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A: This is not a Project-specific policy and is therefore not applicable.
GOAL 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel	N/A: As the proposed Project is not a transportation improvement Project, Goal 8 is not applicable.
GOAL 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	N/A: As the proposed Project is not a housing development Project, Goal 9 is not applicable.
GOAL 10: Promote conservation of natural and agricultural lands and restoration of habitats.	N/A: The Project is not located on agricultural lands.

Source: Southern California Association of Governments, Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy, 2020) from the GHG Assessment prepared by Kimley-Horn (Kimley-Horn, 2024b, provided as Appendix E).

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in Table 6, the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets (Kimley-Horn, 2024b).

Consistency with the 2022 CARB Scoping Plan

CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with Assembly Bill (AB) 1279, passed in 2022 (§ 38562.2 of the California Health and Safety Code). To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential (GWP); providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan [CAP]) consistent with CEQA Guidelines § 15183.5 (Kimley-Horn, 2024b).

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission (ZE) transportation (i.e., electrifying cars, buses, trains,

and trucks), which constitutes California’s single largest source of GHG emissions. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place. Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include:

- Implementing Senate Bill (SB) 100, passed in 2021 (§ 116876 of the California Health and Safety Code) (achieve 100 percent clean electricity by 2045);
- Achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and
- Implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicle (ZEV) buses and trucks.

Additional transportation policies in the CARB include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375, passed in 2018 (§ 1798.100 of the Civil Code). GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905, passed in 2022 (§ 39740 and § 39741 of the Health and Safety Code, and Public Resources Code § 71460). SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology (Kimley-Horn, 2024b).

As shown in Table 5, approximately 67 percent of the Project’s GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan measures described above. It should be noted that emissions from mobile sources would decline in the future due to Statewide measures for transitioning to lower emissions vehicles discussed above and low carbon fuels. The Project would not impede the State’s progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan (Kimley-Horn, 2024b).

Simi Valley Climate Action Plan

The City adopted the Simi Valley Climate Action Plan (CAP) on June 4, 2012 as part of the City’s General Plan update to reduce and encourage reductions in GHG emissions from all sectors in the City. The City has adopted a goal to reduce its community GHG emissions to 15 percent below its 2006 GHG emissions levels by 2020 as part of the City’s Greenhouse Gas Reduction Plan within the CAP. The City compares and collects GHG emissions data for its municipal operations and tracks county-wide GHG emissions (Kimley-Horn, 2024b).

Table 7, Project Consistency with Simi Valley Climate Action Plan, summarizes the applicable strategies and project-level measures identified within the CAP that could apply to a commercial development. The measures are categorized by R1, R2, and R3. R1 measures are included to show how the anticipated reduction strategies implemented at the state level will result in a reduction of GHG emissions at the City level. R2 and R3 measures are implemented at the City level to reduce GHG emissions from the community as a whole. R2 measures can be quantified to show the value of the reduction from those measures. R3 measures are those measures that cannot be quantified at this time but are supportive of the R2 measures. Applicable R2 measures are listed in Table 7. It is expected that the Project would comply with these strategies and measures to reduce GHG emissions. Therefore, impacts related to consistency with the Simi Valley CAP would be less than significant.

Table 7. Project Consistency with Simi Valley Climate Action Plan

Strategy	Measure	Compliance
R2 Energy Reduction Measures		
R2-E5: Commercial Energy Efficiency Program	This measure involves the adoption of a voluntary incentive program that facilitates energy efficient design for all new non-residential buildings.	Consistent. The Project is required to comply with the Title 24 standards for Building Energy Efficiency that are in effect at the time of development.
R2-E6: Commercial/Industrial Retrofit Program	This measure would initiate a City program that facilitates the incorporation of energy reduction measures for non-residential buildings undergoing major renovations.	Consistent. The Project would not conflict with implementation of this measure. The Project would comply with the latest energy efficiency standards.
R2-E7: Water Use Reduction Initiative	Emissions associated with electricity consumption for water treatment and transportation are included with the energy reduction measures.	Consistent. The Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use.
R2 Solid Waste Measures		
R2-W1: City Diversion Program	This measure would implement a Citywide waste diversion goal of diverting 75% (current goal is 50%) of all waste from landfills by 2020. The following is a potential list of waste reduction measures that can be implemented for municipal operations and within the community on an individual development project level which will further strengthen existing waste reduction/diversion programs	Consistent. The Project would comply with current City mandatory construction and demolition waste recycling percentages. The Project would comply with solid waste diversion programs and include recycling storage areas as part of the Project.
R2-W2: Construction Diversion Program	Existing City Ordinance 1167 requires a minimum diversion of 75% of construction and demolition waste. This measure provides a 10% increase in diversion beyond General Plan Infrastructure Policy IU-5.7 (Recycling and Reuse of Construction Wastes) by increasing the diversion rate to 85%.	Consistent. The Project would comply with current City mandatory construction and demolition waste recycling percentages. The Project would comply with solid waste diversion programs and include recycling storage areas as part of the Project

Landscape Emissions Measures		
R3-L1: Expand City Tree Planting	Municipal, commercial and retail development should be encouraged to plant low emission trees, and exceed shading requirements by a minimum of 10%. In support of Natural Resource Policy NR-2.1 (Tree Preservation), and Land Use Policy LU-11.2 (Greenbelts), all future development must be encouraged to preserve native trees and vegetation to the furthest extent possible.	Consistent. Landscaping would be installed in all areas not devoted to buildings, parking, traffic and specific user requirements, in accordance with the City's landscape guidelines. The Project would exceed the minimum of 10 percent requirements for landscaping.
R2 Transportation Measures		
R2-T1: Anti-Idling Enforcement	This measure involves the adoption and enforcement of an Anti-Idling Ordinance for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within the City.	Consistent. The Project would comply with current State laws that restrict diesel trucks from idling five minutes or less. Construction vehicles are also subject to this regulation.
R2-T2: Employment Based Trip and VMT Reduction	Implementation of this measure would enhance the current trip reduction ordinance which promotes commuter-choice programs, employer transportation management, guaranteed ride home programs, and commuter assistance and outreach type programs intended to reduce commuter vehicle miles traveled.	Consistent. The Project would reduce the number of average daily trips made by employees. The existing use is an office building that generates more employee trips than the proposed Project.
R2-T8: Expand Renewable Fuel/Low Emission Vehicle Use	New developments within the City will be required to provide the necessary facilities and infrastructure in all land use types to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.

Source: City of Simi Valley, 2012b from GHG Assessment prepared by Kimley-Horn (Kimley-Horn, 2024b, provided as Appendix E).

3.11. Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<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 §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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>

3.11.1. Environmental Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS-THAN-SIGNIFICANT IMPACT. Demolition and construction activities under the proposed Project would involve the use of heavy equipment; construction equipment would utilize fuels, lubricants, and other chemicals such as cleaning solvents and paints. Construction activities could result in the release of these materials during routine storage, use, transport, or disposal. The Applicant and its contractor would be required to comply with all applicable federal, State, and local laws and regulations for the transport, storage, use, and disposal of hazardous materials and waste. Additionally, Project construction would comply with the standard SWPPP BMPs and principles related to hazardous materials and waste in compliance with the Construction General Permit. Proper handling, health and safety practices, and prompt cleanup of any spill or release would reduce any potential adverse effects to people or the environment. Therefore, impacts from Project construction activities would be less than significant, and no mitigation is required.

Operation and maintenance activities would primarily include the shipping and storing of goods that would require the use of equipment or vehicles utilizing fuel and oil. Although this could result in the release of these materials during routine transport, disposal, or use, it would be limited to small amounts

of oil that may leak from vehicles. The future operator would be required to comply with all applicable federal, State, and local laws and regulations that pertain to the transport, storage, use, and disposal of hazardous materials and waste. Additionally, prompt cleanup of any spill or release per SWPPP BMPs and principles would reduce any adverse effects related to spill or leaks of hazardous materials. Therefore, impacts from operation and maintenance activities would be less than significant, and no mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT. As discussed in Section 3.11.1(a), the Project would comply with standard construction BMPs and applicable federal, State, and local laws and regulations relating to the transport, storage, use, and disposal of hazardous materials and waste. Operation and maintenance activities would not involve transport, use, or disposal of hazardous materials. As such, impacts related to potential releases or spills of hazardous materials during Project construction or operation and maintenance would be less than significant, and no mitigation is required.

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 IMPACT. There are no schools located within 0.25 miles of the proposed Project. The nearest school is the American Jewish University – Brandeis Bardin Campus, (1101 Peppertree Lane, Brandeis, CA), approximately 200 feet south of the Project site. The proposed Project would not require the use of hazardous materials or acutely hazardous materials, other than fuel and lubricants associated with operation of typical construction equipment and operation/maintenance equipment and vehicles. The construction contractor would be required to comply with all applicable federal, State, and local laws and regulations that pertain to the transport, storage, use, and disposal of hazardous materials and waste. Additionally, Project construction would comply with SWPPP BMPs in compliance with the Construction General Permit and City standard construction BMPs. Compliance with laws and regulations regarding the transport, storage, use, and disposal of hazardous materials and the Project BMPs would reduce the potential for adverse effects from hazardous materials with 0.25 miles of a school to less than significant. No mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT. The Project site is not listed on the State Water Resources Control Board (SWRCB) GeoTracker database as a hazardous materials site (SWRCB, 2024b). Eight leaking underground storage tank (LUST) cleanup sites are located within one mile of the Project site with Case Closed statuses (SWRCB, 2024b). One cleanup site was identified by the Department of Toxic Substances Control (DTSC) Envirostor Database approximately 0.2 miles northeast on the Project site (DTSC, 2024). The voluntary agreement cleanup site in an aerospace manufacturing/maintenance facility has an active cleanup status as of January 20, 2023.

No other hazardous materials sites pursuant to Government Code §65962.5 are located at or near the Project site (SWRCB, 2024b; DTSC, 2024). Due to the lack of known hazardous materials sites at the proposed Project, it is unlikely that any known hazardous material sites would result in adverse effects during construction or operation of the proposed Project, therefore there is a less-than-significant impact for significant hazard to the public or environment from being located on a hazardous material site. No mitigation is required.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

NO IMPACT. The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the project site is the Van Nuys Airport, located approximately 14 miles east of the Project. Additionally, the Project site is not located within the vicinity of a private airstrip. Therefore, no impact would occur, and no mitigation is required.

- 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 proposed Project would not cause any changes that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Simi Valley Emergency Plan Operations Plan identifies the Law Branch (primarily the Police Lieutenant) as the responsible entity for coordinating with Public Works Branch traffic engineering to determine evacuation routes depending on the type of emergency (City of Simi Valley, 2008). It is assumed that primary transportation routes, such as Tapo Canyon Road, Royal Avenue, Tapo Street, and East Los Angeles Avenue would be primary evacuation routes in the event of a wildfire emergency. The proposed Project would not involve any full or partial lane closures on these roads. Temporary lane closures may occur on Guardian Street but would not obstruct any of the primary roads that would likely be used as evacuation routes. Upon completion of construction, lane closures would not occur. Therefore, impacts would be less than significant, and no mitigation is required.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

LESS-THAN-SIGNIFICANT IMPACT. Although the proposed Project is not located within a moderate, high, or very high fire hazard severity zone (FHSZ), it is adjacent to very high FHSZ to the east, south, and west (CAL FIRE, 2024). The Project is considered to be in the urban-wildlife interface and could be vulnerable to wildfire hazards and post-wildfire topographical instability. The Project site elevation gradually increases from southwest to northeast; the low elevation is along the western border at approximately 960 feet, and the high elevation is approximately 1,105 feet along its eastern boundary (South Environmental, 2023a). Project construction would occur within the existing developed footprint. Retaining walls would be constructed to provide soil support along adjacent slopes and would offer protection from potential post-fire downslope hazards. Additionally, the Project site does not fall within a landslide zone (Gorian & Associates, 2023). Therefore, the Project would have a less-than-significant impact on exposing people and structures to downslope flooding or landslides as a result of post-fire slope instability and drainage changes. No mitigation is required.

3.12. Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water 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 type="checkbox"/>	<input checked="" 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:				
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 type="checkbox"/>	<input checked="" 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"/>

3.12.1. Environmental Impacts

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

LESS-THAN-SIGNIFICANT IMPACT. Project construction could generate water pollutants, including soil sediment and petroleum-based fuels or lubricants associated with construction equipment. Project construction would result in temporary demolition, excavation, and grading activities. If not properly addressed, stormwater pollution and erosion may occur, which could affect surface water quality during construction. Impacts to surface water quality during construction would be minimized through implementation of standard construction erosion control measures (e.g., silt fence, sediment traps, fiber rolls, and storm drain inlet protection measures) (USEPA, 2007) per the construction SWPPP, as well as the City of Simi Valley construction BMPs. Compliance with the construction SWPPP, Ventura County SQUIP, and incorporation of BMPs would result in less-than-significant impacts to surface water quality. No groundwater is expected to be encountered during construction, as it was not encountered during the previous site investigation or during previous grading (Delane Engineering, 2024). Therefore, Project construction would not affect groundwater quality, and no mitigation is required.

During Project operations, drainage from the Project site would be treated before discharging to the on-site storage system. The Project would be designed to allow water to be treated through "Point Source and Treatment Train" treatment methods. The "treatment train" would include several methods for removing pollutants in successive order. The treatment train would begin with routine maintenance of

the site, such as manual removal of physical trash and debris. Storm flows would drain to grated inlets installed with pretreatment devices. A Contech Detention System (CDS) unit would be installed at the inlet to the detention basin to filter stormwater before it is detained and discharged from the site. These filters prevent trash from entering the storm drain system. Filtered storm flows would be discharged into the existing catch basin at the northwest corner of the Project site, ultimately discharging to Meier Canyon Creek via an existing outfall (Delane Engineering, 2024). Incorporation of stormwater pretreatment devices would result in less-than-significant impacts to surface water quality during operations, and no mitigation is required.

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?

NO IMPACT. Per the Geotechnical Site Update report prepared for the proposed Project, groundwater was not encountered during the previous site investigation or during site rough grading for the existing development on site (Gorian & Associates, 2023). Construction of the proposed Project would not require dewatering of groundwater or use of any groundwater supplies.

Operation of the proposed Project would not withdraw groundwater or interfere with groundwater recharge. According to the Drainage Report, the Project is underlain by shallow bedrock; under existing conditions, the site is not conducive to groundwater recharge. Therefore, there would be no impacts relating to decreasing groundwater supplies or interfering with groundwater recharge, and no mitigation is required.

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?

LESS-THAN-SIGNIFICANT IMPACT. Project construction activities would include earthwork such as excavation and grading, potentially exposing soil to erosion or siltation. Construction activities would comply with the SWPPP in accordance with the Construction General Permit, as required under the NPDES General Permit for Stormwater Discharges Associate with Construction and Land Disturbance Activities (SWRCB, 2022). Typical SWPPP construction BMPs may include erosion and sedimentation control measures, such as silt fencing, sediment traps, fiber rolls, and storm drain inlet protection measures (USEPA, 2007). These BMPs would ensure that erosion and siltation impacts during construction would be less than significant.

Although the Project would construct a new warehouse building and re-pave the site, operational conditions would be similar to existing conditions, as the site would remain paved and developed, and site drainage patterns would not substantially change. Exposed soil from excavation would be restored with asphalt, and stormwater would continue to be diverted to Meier Canyon Creek via the existing outfall. The site topography would be restored similar to existing conditions, and substantial erosion or siltation would not occur. Therefore, impacts would be less than significant, and no mitigation is required.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

LESS-THAN-SIGNIFICANT IMPACT. Per the Preliminary Drainage Report, the existing site was assigned a 65 percent impervious value, and the proposed Project was assigned a 71 percent impervious value, representing a six percent increase in impervious surfaces (Delane Engineering, 2024). Under existing conditions, the majority of the existing condition drainage flows northeasterly towards Guardian Street (Delane Engineering, 2024). During Project operations, runoff would be collected by new on-site inlets

and conveyed offsite to Meier Canyon Creek, utilizing an existing outfall located along the northwest boundary of the Project site (Delane Engineering, 2024). Once constructed, conditions would be similar to existing conditions, as the site would remain paved and developed, and site drainage patterns would not substantially change. Project storm drains, gutters, and inlets would be designed to adequately convey a 100-year storm off site towards the northwest corner of Peppertree Lane and Guardian Street (Delane Engineering, 2024). Therefore, surface runoff rates would remain similar to existing conditions, and impacts would be less than significant, and no mitigation is required.

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?

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would slightly increase the amount of impervious surface by approximately six percent (Delane Engineering, 2024). Construction ground disturbance activities such as excavation, and the presence of construction equipment may temporarily contribute to polluted runoff. Implementation of SWPPP BMPs as required by the Construction General Permit would reduce potential runoff pollution during construction.

During Project operations, runoff would be collected by new on-site inlets and conveyed offsite to Meier Canyon Creek, utilizing an existing outfall located along the northwest corner of the Project site (Delane Engineering, 2024). Once constructed, the site would include new stormwater drainage systems, inlets, and gutters to adequately convey the 100-year storm off site towards the northwest corner of Peppertree Lane and Guardian Street (Delane Engineering, 2024). Pretreatment devices would be installed in every inlet. A Contech Detention System (CDS) unit would be installed at the inlet to the detention basin to provide treatment for stormwater flows from small storm events before they are detained and discharged from the site. As such, the proposed Project would increase the capacity of the site's stormwater drainage system to prevent flooding, and include pretreatment devices to capture pollutants, sediment, and trash before flows are discharged offsite. Therefore, the Project would install stormwater drainage systems that would adequately convey runoff and would not provide substantial additional sources of polluted runoff. Impacts would be less than significant, and no mitigation is required.

iv. Or impede or redirect flood flows?

NO IMPACT. The Federal Emergency Management Agency's (FEMA) National Flood Insurance Program Flood Insurance Rate Map shows the Project site primarily within an area designated as Zone X, or an area of minimal flood hazard (Delane Engineering, 2024). Because the Project would not be constructed within a mapped flood hazard area, and would result in development similar to existing conditions, it would not impede or redirect flood flows. No impact would occur, and no mitigation is required.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

NO IMPACT. There are no large bodies of water, such as lakes or oceans, near the Project site that could cause a seiche or tsunami. The closest body of water to the Project site is Meier Canyon Creek, an intermittent stream that is located approximately 450 feet west of the Project site, which has no potential to cause a seiche or tsunami. As discussed in Section 3.12.1(c)(iv), the Project site is located within FEMA Flood Insurance Rate Map Zone X, an area of minimal flood hazard (Delane Engineering, 2024). Therefore, impacts relating to the risk of pollutants in a flood, tsunami, or seiche zone would not occur, and no mitigation is required.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project is required to comply with the Clean Water Act, Porter-Cologne Water Quality Control Act, and Ventura Countywide Stormwater Quality Management Program. The Applicant would obtain a Construction General Permit under the NPDES System General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities and Waste Discharge Requirements for Stormwater and Non-Stormwater Discharges (Permit No. CAS004004, Order No. R4-2021-0105) (RWQCB, 2021; SWRCB 2010). Construction and post-construction SWPPP BMPs would be implemented to meet the requirements of these permits. Therefore, this impact would be less than significant, and no mitigation is required.

3.13. Land Use and Planning

LAND USE PLANNING

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
(a) Physically divide an established community?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>

3.13.1. Environmental Impacts

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 linear features, such as a major 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. The proposed Project would redevelop the existing site for a new single warehouse facility. No residential communities exist within the Project boundaries. Surrounding local roads would remain open to facilitate continuous mobility. As such, the Project would not create a barrier that could divide the surrounding community. Therefore, no impact would occur, and no mitigation is required.

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?

NO IMPACT. The proposed Project would be subject to the policies and ordinances of the City of Simi Valley General Plan and the Brandeis-Bardin Institute Specific Area Plan. According to the General Plan and the Specific Plan, the Project site's zoning and land use designations are Business Park (City of Simi Valley, 2011; 2023; 2024a). Construction and operation of the proposed Project would not conflict with the designated zoning or land use, as they would be consistent with the uses permitted and all requirements under the Business Park zone and land use. As noted in Section 2.7, Anticipated Permits and Approvals, coordination with several regulatory local and regional agencies would be required to allow for construction, operation, and maintenance of the proposed Project. As such, the proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, no impact would occur, and no mitigation is required.

3.14. Mineral Resources

MINERAL RESOURCES				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<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"/>

3.14.1. Environmental Impacts

- 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?**

NO IMPACT. The Ventura County General Plan's Resource Protection Map indicates that no designated Mineral Resource Areas are located in proximity to the Project site (Ventura County, 2010). The EIR prepared for the City's General Plan indicates that the Project site is within Mineral Resource Zone (MRZ)-1, defined as an area where adequate information indicates that no significant mineral deposits are present (City of Simi Valley, 2012a). In addition, according to the Department of Conservation (DOC) Geologic Energy Management Division, no oil and gas wells or fields are located within the Project site boundary. The nearest oil or gas wells are approximately 0.2 miles east of the Project site (DOC, 2024b). Construction activities would not prevent access to the two neighboring oil or gas wells or affect existing activities because the wells are located offsite and the statuses are indicated as plugged and idle, respectively. Therefore, the proposed Project would not prevent future oil extraction or conflict with existing oil extraction activities. The proposed Project would not 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. Therefore, the proposed Project would have no impact on a known mineral resource, and no mitigation is required.

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

NO IMPACT. As described in Section 3.14.1(a), the Project site is not located within an area indicative of significant mineral deposits or an area that contains active oil and gas wells. The proposed Project would not conflict with existing oil extraction land use or prevent future oil extraction. As such, the proposed Project would not 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. Therefore, no impacts would occur, and no mitigation is required.

3.15. Noise

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 type="checkbox"/>	<input checked="" 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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1. Setting

General Information on Noise

This section introduces general information on noise and provides data on the existing noise settings and detailed analysis on Project noise impacts, provided in detail in the Acoustical Assessment for 4100 Guardian Street Warehouse Project, prepared by Kimley-Horn and Associates, Inc. This report is incorporated by reference and provided in Appendix F:

Kimley-Horn. 2024c. *Acoustical Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California*. February.

A brief background on the fundamentals of environmental acoustics is helpful in understanding how humans perceive various sound levels. Although extremely loud noises can cause temporary or permanent damage, the primary environmental impact of noise is annoyance. The objectionable characteristic of noise often refers to its loudness. Loudness represents the intensity of the sound wave, or the amplitude of the sound wave height measured in decibels (dB). Decibels are calculated on a logarithmic scale; thus, a 10-dB increase represents a 10-fold increase in acoustic energy or intensity, while a 20 dB increase represents a 100-fold increase in intensity. Decibels are the preferred measurement of environmental sound because of the direct relationship between a sound's intensity and the subjective "noisiness" of it. The A-weighted decibel system (dBA) is a convenient sound measurement technique that weights selected frequencies based on how well humans can perceive them.

Noise Effects on Humans. The range of human hearing spans from the minimal threshold of hearing (approximately 3 dBA) to that level of noise that is past the threshold of pain (approximately 120 dBA). In general, human sound perception is such that a change in sound level of 3 dB is just barely noticeable, while a change of 5 dB is clearly noticeable. A change of 10 dB is perceived as a doubling (or halving) of sound level. Noise levels are generally considered low when they are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss if exposure is sustained.

Ambient environmental noise levels can be characterized by several different descriptors. The energy equivalent level (Leq) describes the average or mean noise level over a specified period of time. Leq

provides a useful measure of the impact of fluctuating noise levels on sensitive receptors over a period of time. Other descriptors of noise incorporate a weighting system that accounts for human's susceptibility to noise irritations at night. Community Noise Equivalent Level (CNEL) is a measure of cumulative noise exposure over a 24-hour period, where a 5 dB penalty is added to evening hours (7:00 p.m. to 10:00 p.m.) and a 10 dB penalty is added to night hours (10:00 p.m. to 7:00 a.m.). Day/Night Average Noise Level (Ldn) is essentially the same as CNEL, with the exception that the evening penalty is dropped.

Noise Propagation. In air, sound from a point source radiates according to inverse square laws either spherically or hemispherically from the source, depending upon whether the noise source is near a reflecting surface such as the ground. Consequently, sound will decrease at a rate of 6 dB per doubling of distance from a point source. Additional decreases will occur due to sound absorption in the air, interaction with the ground, and shielding by intervening obstacles such as terrain (hills), wall, or buildings. A noise source which is relatively long, such as a constant stream of traffic, is called a line source, and the sound spreads cylindrically, at a rate of 3 dB per doubling of distance.

General Information on Vibration

Vibration from objects in contact with the ground will propagate energy through the ground and can be perceptible by humans and animals in the form of perceptible movement or in the form of rumbling sound caused by the vibration of room surfaces. The latter is described as ground-borne noise. High levels of vibration can result in architectural damage and structural damage depending upon the amplitude of the vibration and the fragileness of the building or structure.

Vibration is an oscillatory motion through a solid medium, in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. When assessing damage potential, vibration is often measured and reported in terms of peak particle velocity (PPV). For evaluating human response, the accepted manner to measure and report vibration is in terms of the root mean square amplitude. Like noise, vibration is normally expressed in terms of decibels (VdB) with a reference velocity of 1×10^{-6} inches per second (in/sec).

Noise Environment in the Project Area

Simi Valley is impacted by various noise sources. Mobile sources of noise, especially cars, trucks, and trains are the most common and significant sources of noise. Other noise sources are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise (Kimley-Horn, 2024c).

The primary mobile noise source in the Project area is from vehicle traffic along Guardian Street and Tapo Canyon Road. According to the National Transportation Noise Map, the Project site is located within the 45-50 dBA Leq noise contour for Guardian Street (Kimley-Horn, 2024c).

The primary stationary noise source in the Project area is from commercial uses to the north and the existing on-site office building. Typical stationary noise sources from these uses include mechanical equipment (use of heating, ventilation, and air conditioning units), parking lot activities (cars parking, opening and closing doors, truck movements, and loading activities), conversations, and radio and music. The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise (Kimley-Horn, 2024c).

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to

impacts such as sleep disturbance. Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Sensitive land uses nearest to the Project include single-family residences, located approximately 965 feet to the north, and American Jewish University – Brandeis Bardin Campus, located approximately 200 feet to the south (Kimley-Horn, 2024c).

Noise Measurements

The Applicant's consultant, Kimley-Horn, conducted five short-term (10-minute) measurements on August 14, 2023. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. Refer to Appendix F for additional details on noise measurements. The average noise levels and sources of noise measured at each location are listed in Table 8 and locations shown in Figure 3.

Table 8. Existing Noise Level Measurements

Site	Location	Date	Time	Duration	Leq (dBA) 1
ST-1	Near the southeast corner of Tapo Canyon Road and Guardian Street.	8/14	9:24 a.m. – 9:34 a.m.	10 Minutes	60.2
ST-2	End of the residential cul-de-sac on Hi Drive, adjacent to the bike path.	8/14	9:58 a.m. – 10:08 a.m.	10 Minutes	51.4
ST-3	South corner of Lark Street and Hi Drive.	8/14	10:12 a.m. – 10:22 a.m.	10 Minutes	47.0
ST-4	Southwest corner of Ish Drive and Tapo Street.	8/14	10:27 a.m. – 10:37 a.m.	10 Minutes	57.0
ST-5	Near the hill south of the existing complex on the Project site.	8/14	9:38 a.m. – 9:48 a.m.	10 Minutes	45.3

Noise measurements were taken by Kimley-Horn and Associates on August 14, 2023.

Source: Kimley-Horn, 2024c, provided as Appendix F.

Figure 3. Noise Measurement Locations



Source: Kimley-Horn, 2024c.

3.15.2. Environmental Impacts

- 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 IMPACT.

Construction

During construction, exterior noise levels could affect sensitive receptors surrounding the construction site, as discussed in *Noise Environment in the Project Area*, above. Project construction would occur within an area bounded by residential and commercial business park uses to the north, commercial uses to the east, and industrial uses to the west. The nearest sensitive receptors are the residents at American Jewish University – Brandeis Bardin Campus located approximately 200 feet to the south of the Project site.

Construction activities would include demolition, site preparation, grading, building construction, paving, and architectural coating. Such activities could require concrete saws, excavators, and dozers during demolition; dozers and tractors during site preparation; excavators, graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, and paving equipment during paving; and air compressors during architectural coating.

Typical noise levels associated with individual construction equipment are listed in Table 9. As indicated in Table 9, sensitive receptors can be exposed to high noise levels when located near active construction equipment.

Simi Valley Municipal Code §5-16.02(i) (Construction and repair of buildings) exempts noise sources associated with construction activities from the City's established noise standards as long as the activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels. The City's permitted hours of construction are required in recognition that construction activities undertaken during daytime hours are a typical part of living in an urban environment and do not cause a significant impact. However, this analysis uses the Federal Transportation Authority's (FTA) thresholds of 80 dBA (residential), 85 dBA (commercial), and 90 dBA (industrial) to evaluate construction noise at adjacent uses.

Table 9. Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 100 feet from Source ¹
Air Compressor	80	74
Backhoe	80	74
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Crane, Derrick ²	88	82
Crane, Mobile	83	77
Dozer	85	79
Generator	82	76
Grader	85	79
Impact Wrench	85	79
Jack Hammer	88	82

Loader	80	74
Paver	85	79
Pile-driver (Impact) ²	101	95
Pile-driver (Sonic) ²	95	89
Pneumatic Tool	85	79
Pump	77	71
Roller	85	79
Saw	76	70
Scraper	85	79
Shovel	82	76
Truck	84	78

1- Calculated using the inverse square law formula for sound attenuation: $dBA2 = dBA1 + 20\log(d1/d2)$

Where: dBA2 = estimated noise level at receptor; dBA1 = reference noise level; d1 = reference distance; d2 = receptor location distance

2- Equipment not anticipated for Project construction.

Source: Kimley-Horn, 2024c.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to calculate the worst-case construction noise levels at nearby sensitive receptors surrounding the Project site during construction. The modeled receptor locations represent the closest existing receiving land uses to Project construction activities. Noise levels at other sensitive receptors surrounding the Project site would be located further away and would experience lower construction noise levels than the closest receptors modeled. The noise levels calculated in Table 10, Project Construction Noise Levels, show the exterior construction noise without accounting for attenuation from existing physical barriers, which have been estimated using RCNM. The nearest noise-sensitive receptors are the residents at the American Jewish University – Brandeis Bardin Campus located approximately 200 feet south of the Project boundary and 546 feet from the center of construction activity. Following FTA methodology, all equipment is assumed to operate at the center of the Project site because equipment would operate throughout the site and not a fixed location for extended periods of time. These assumptions represent a worst-case noise scenario as construction activities would routinely be spread throughout the construction site further away from noise sensitive receptors.

Table 10. Project Construction Noise Levels

Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA Leq)	Noise Threshold (dBA Leq)	Exceeded?
	Land Use	Direction	Distance (feet)			
Demolition	Residential	South	546	45.3	80	No
	Office Commercial	North	444	67.5	85	No
	Residential	North	1,376	57.7	80	No
	Industrial	West	658	64.1	90	No
Site Preparation	Residential	South	546	66.9	80	No
	Office Commercial	North	444	68.7	85	No
	Residential	North	1,376	58.8	80	No
	Industrial	West	658	65.2	90	No
Grading	Residential	South	546	66.5	80	No
	Office Commercial	North	444	68.3	85	No
	Residential	North	1,376	58.5	80	No
	Industrial	West	658	64.9	90	No

Building Construction	Residential	South	546	67.6	80	No
	Office Commercial	North	444	69.4	85	No
	Residential	North	1,376	59.6	80	No
	Industrial	West	658	66.0	90	No
Paving	Residential	South	546	65.8	80	No
	Office Commercial	North	444	67.6	85	No
	Residential	North	1,376	57.7	80	No
	Industrial	West	658	64.1	90	No
Architectural Coating	Residential	South	546	53.0	80	No
	Office Commercial	North	444	54.8	85	No
	Residential	North	1,376	44.9	80	No
	Industrial	West	658	51.3	90	No

Source: Kimley-Horn, 2024c.

As depicted in Table 10, construction noise levels would range between 44.9 dBA and 69.4 dBA at the nearest properties surrounding the Project site and would not exceed the FTA's construction noise thresholds for residential, commercial, and/or industrial uses. Additionally, compliance with Simi Valley Municipal Code §5-16.02 would minimize potential impacts from construction noise, as construction would be limited to the hours between 8:00 a.m. and 5:00 p.m. Because Project construction noise levels would not exceed any applicable standards and would be required to comply with the City's allowable construction hours, construction noise impacts would be less than significant.

The proposed Project operations would create new sources of noise in the Project vicinity. The major noise sources associated with the Project are anticipated to including the following:

- Mechanical equipment (i.e., trash compactors, air conditioners, etc.);
- Slow moving trucks on the Project site, approaching and leaving the loading areas;
- Activities at the loading areas (i.e., maneuvering and idling trucks, equipment noise);
- Parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and
- Off-Site traffic noise.

Mechanical Equipment

Potential stationary noise sources related to long-term operation of the Project site would include mechanical equipment. Mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment) typically generates noise levels of approximately 52 dBA at 50 feet. On-site mechanical equipment would be positioned on the rooftop of the proposed warehouse building. To ensure a conservative analysis, it is assumed that mechanical equipment would be located at the nearest building footprint, approximately 285 feet from the nearest sensitive receptors to the south. At this distance, mechanical equipment noise levels would attenuate to approximately 33.9 dBA, which is below the City's noise standard of 63 dBA for residential uses. Therefore, the proposed Project operations would result in a less-than-significant impact related to mechanical equipment noise levels.

Truck and Loading Dock Noise

Truck Loading Activities

During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting braking activities; backing up toward the docks; dropping down the dock ramps; and maneuvering away from the docks. Loading or unloading activities would occur on the eastern façade of the warehouse building. Typically, heavy truck operations generate a noise level of 70 dBA at a distance of 50 feet. The closest residences would be located approximately 575 feet from the truck loading area. Based on distance attenuation and the sound reduction from the intervening

warehouse building, noise levels from truck loading operations would be approximately 38.8 dBA at the nearest residences to the south, which is below the City's noise standards of 63 dBA for residential uses. It should also be noted that the loading dock doors would be surrounded with protective aprons, gaskets, or similar improvements that, when a trailer is docked, would serve as a noise barrier between the interior warehouse activities and the exterior loading area. This would attenuate noise emanating from interior loading activities to negligible noise levels outside of the warehouse building, and as such, interior loading and associated activities would comply with SVMC §5-16.02 during all hours of the day.

Cargo Forklift Operations

Cargo forklifts could be used at the outdoor loading dock area during daytime hours for truck loading/unloading activities. Cargo forklifts generate noise levels of approximately 85 dBA at 3 feet. The closest residences would be located approximately 575 feet from where cargo forklifts would operate at the Project site. Based on distance attenuation and the sound reduction from the intervening warehouse building, noise levels from cargo forklift operations would be approximately 29.4 dBA and would not exceed the City's noise standard of 63 dBA for residential uses.

Truck Back-Up Alarms

Medium and heavy-duty trucks reversing into loading docks would produce noise from back-up alarms (also known as back-up beepers). Back-up beepers produce a typical volume of 97 dBA at one meter from the source. The closest residences would be located approximately 575 feet from the truck loading area. Based on distance attenuation and the sound reduction from the intervening warehouse building, the noise level from back-up beepers would be approximately 42.1 dBA, which is below the City's noise standards of 63 dBA for residential uses. Further, it is noted that back-up beeper noise is short in duration and would occur intermittently throughout the day/night. Therefore, back-up beeper noise would not exceed the City's applicable noise standards and would comply with the provisions of SVMC §5-16.02.

Parking Noise

The proposed Project would provide a total of 129 parking stalls. Parking stalls would surround the proposed warehouse to the north, south, and west. Based on warehousing trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual, the Project would generate up to 35 passenger car equivalent (PCE) trips per hour. Please refer to Appendix F for a detailed calculation of a conservative quantitative estimate of the noise levels generated by vehicles in the parking lot. Conservatively assuming that all vehicles would park at a location nearest to sensitive receptors rather than dispersed throughout all available parking and based on distance attenuation and the sound reduction from intervening buildings and walls/structures, parking lot noise at the nearest sensitive receptor would be 26.7 dBA, which is below the City's noise standard of 63 dBA for residential uses. Parking lot noise would be consistent with the existing noise in the vicinity and would be partially masked by background noise from traffic along area roadways. Therefore, noise impacts from parking lots would be less than significant, and no mitigation is required.

Composite Operational Noise

For the purposes of this analysis, a 3 dBA increase in operational noise levels over existing ambient noise levels at a noise-sensitive use is conservatively used as the significance criterion to determine Project impacts.

An evaluation of the combined noise levels from the Project's various operational noise sources (i.e., composite noise level) was conducted to conservatively determine the potential maximum Project-related noise level increase that may occur at the nearest noise-sensitive receptors. Table 11 details the on-site noise levels from the Project site at the nearest residential uses. It should be noted that these are

conservative noise level estimates, as it was assumed all equipment and operational activity at the Project site would occur in a constant, simultaneous manner. In reality, these noise sources would occur intermittently throughout the day (except for the HVAC, which may operate in a steady-state manner).

Table 11. On-Site Composite Noise Levels

Receiving Land Use	Maximum On-Site Noise Levels by Source					Combined Noise Level at Receptor (dBA Leq)	Ambient Noise Level (dBA Leq)	Ambient + Combined Project Noise (dBA Leq) ¹	Incremental Increase over Ambient (dBA Leq)
	Mechanical Equipment	Truck and Loading	Forklift	Backup Alarms	Parking				
American Jewish University Brandeis Bardin Campus Residents (south)	33.9	38.8	29.4	42.1	26.7	44.4	45.3	47.9	2.6

Source: Kimley-Horn, 2024c.

Notes:

- Noise levels for all stationary Project sources (mechanical equipment, truck and loading, forklift, backup alarms, and parking) were logarithmically added together and conservatively assumed to operate in a simultaneous, constant manner.

As shown in Table 11, the Project would generate a combined noise level of approximately 44.4 dBA at the nearest sensitive receptors to the south of the Project site. When added to the measured ambient noise levels, Project noise levels at the nearest sensitive receptors would be approximately 47.9 dBA and would result in a maximum 2.6 dBA increase compared to existing conditions. Thus, composite Project operational noise levels would be below the City's noise standard of 63 dBA for residential uses and would not exceed the barely perceptible noise increase criterion of 3 dBA. On-site operational noise levels from the Project would be less than significant, and no mitigation is required.

Off-Site Traffic Noise

Implementation of the Project would generate increased traffic volumes along nearby roadway segments. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable. Generally, traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA would be less than significant.

According to the Simi Valley General Plan EIR, traffic volumes along Tapo Canyon Road ranges from 2,700 to 30,000 average daily vehicles per day. Based on trip generation data from the ITE Trip Generation Manual, the warehouse use proposed with the Project would result in fewer daily vehicle trips (non-PCE) than the existing use of the site as an office building and thus would not generate a noticeable increase in traffic noise levels. Any potential traffic noise increases along Tapo Canyon Road and other nearby streets would not be noticeable due to the existing traffic noise in the area. Traffic noise effects would not create a noticeable change in traffic noise levels in the area and impacts be less than significant, and no mitigation is required.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels generation of excessive groundborne vibration or groundborne noise levels?

LESS-THAN-SIGNIFICANT IMPACT.

Construction Vibration

Construction on the Project site would have the potential to result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

The nearest off-site structure (commercial building) is located approximately 80 feet to the north, and the nearest sensitive receptor is located approximately 200 feet south of the Project site. Table 12, Typical Construction Equipment Vibration Levels, lists vibration levels at 25 feet and 80 feet for typical construction equipment. Ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in Table 12, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 to 0.210 in/sec PPV at 25 feet from the source of activity.

Table 12. Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 80 Feet (in/sec) ¹
Vibratory Roller	0.210	0.037
Large Bulldozer/Caisson Drilling	0.089	0.016
Loaded Trucks	0.076	0.013
Jackhammer	0.035	0.006
Small Bulldozer/Tractors	0.003	0.001

1- Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.

Source: Kimley-Horn, 2024c.

As noted above, the nearest structure to the Project construction site is approximately 80 feet away. Table 12 shows that at 80 feet, the vibration velocities from construction equipment would be a maximum of 0.037 in/sec PPV, which is below the FTA's 0.20 in/sec PPV threshold for building damage and below the 0.4 in/sec PPV annoyance threshold. Construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. Therefore, vibration impacts associated with Project construction would be less than significant, and no mitigation is required.

Operational Vibration

Project operations would include truck movement activity at the Project site. These movements would generally be low-speed (i.e., less than 15 miles per hour) and would occur over new, smooth surfaces. Caltrans notes that the highest traffic-generated vibrations are along freeways and state routes. Since the Project's truck movements would be at low speed (not at freeway speeds) and would be over smooth surfaces (not under poor roadway conditions), Project-related vibration associated with truck activity would not result in excessive ground-borne vibrations; no passenger vehicle-generated vibration impacts would occur. In addition, there are no sources of substantial ground-borne vibration associated with the Project, such as rail or subways. The Project's operational vibration impacts would be less than significant, and no mitigation is required.

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

NO IMPACT. The nearest airport to the Project site is the Van Nuys Airport located approximately 14 miles to the east. Thus, the Project is not within two miles of a public airport or within an airport land use plan. Additionally, there are no private airstrips located within the Project vicinity. Therefore, the Project would not expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels, and no impact would occur. No mitigation is required.

3.16. Population and Housing

POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" 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"/>

3.16.1. Environmental Impacts

- 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)?**

NO IMPACT. The proposed Project would demolish the existing office building and construct a new warehouse facility. The Project's construction period is anticipated to last approximately 18 months and would require up to 70 construction personnel during peak construction activities. While the future tenant of the proposed building is to be determined, the number of operational employees is estimated to be 180. Ventura County has a considerable construction workforce of nearly 25,000 employees (U.S. Census Bureau, 2022). Because the proposed Project is located within a well-established, heavily populated urban community, existing housing stock and established infrastructure is sufficient. As such, the proposed Project would not indirectly induce substantial unplanned population growth. Therefore, no impacts on population and housing would occur, and no mitigation is required.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

NO IMPACT. The proposed Project would not remove existing housing from the available supply, and displacement would not occur which could otherwise require the construction of replacement housing. As such, the proposed Project would not displace people or require the construction of replacement housing. Therefore, no impact would occur, and mitigation is not required.

3.17. Public Services

PUBLIC SERVICES

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.17.1. Environmental Impacts

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:

a. Fire protection?

LESS-THAN-SIGNIFICANT IMPACT. Construction and operation of the proposed Project would not affect the area's population, and therefore, the proposed Project would not create a need for new or altered fire protection facilities. Ventura County Fire Department (VCFD) Station #41 is located at 1910 Church Street and is approximately 1.25 miles northwest from the Project site (VCFD, 2024). Although temporary construction access and partial lane closures along Guardian Street could adversely affect emergency service and response times during Project construction, notification would be provided to emergency service providers to ensure that emergency response is not impaired. Alternative public routes such as Tapo Canyon Road and Tapo Street would be available. Peppertree Lane, a private road, would remain open for individuals accessing the American Jewish University – Brandeis Bardin Campus located south of the Project site. While construction vehicles and equipment would be accessing the Project site during construction, no road closures or long-term interruptions would occur such that emergency access to and from the American Jewish University – Brandeis Bardin Campus would be rendered inadequate. Once construction is completed, any potential impacts to emergency service response times would cease. The proposed Project would be designed in accordance with all applicable fire safety codes, and the Applicant would be required to submit a Fire Protection Plan as part of the formal planning application review. The Fire Protection Plan would be prepared to determine the acceptability of fire protection and life safety measures at the property in compliance with the State Minimum Fire Safe Regulations and VCFD Ordinance and Standards. As such, the proposed Project's construction and operation would not require the need for new or physically altered governmental facilities to the Project area. Therefore, the proposed Project would have a less-than-significant impact on fire protection services, and no mitigation is required.

b. Police Protection?

NO IMPACT. As discussed in Section 3.16.1(a), the proposed Project would not induce any population growth that would require expanded police protection. Thus, no new or altered police facilities would be needed as a result of the proposed Project. Therefore, operation and construction of the proposed Project would have no impact on police or sheriff protection services, and no mitigation is required.

c. Schools?

NO IMPACT. The need for new schools is generally associated with an increase in the school-aged population or a decrease in the accessibility and availability of existing schools. Residential development would not occur under the proposed Project, and the school-aged population would not increase. As such, construction and operation of the proposed Project would not affect the operation of existing school facilities, and new or physically altered facilities would not be needed. Therefore, the no impacts would occur, and no mitigation is required.

d. Parks?

NO IMPACT. The proposed Project would not develop new parks or reduce existing park facilities. Furthermore, the Project site would be confined to the Project boundaries and would not induce population growth that would increase demand for parks beyond the existing facilities. Therefore, no impacts to existing parks or need for new parks would occur, and no mitigation is required.

e. Other Public Facilities?

NO IMPACT. As previously discussed in Section 3.17.1(a), the proposed Project does not include development that would induce substantial unplanned population growth that would increase the use of libraries, community centers, hospitals, or other public facilities. As such, a substantial increase in use of these public facilities would not occur. Therefore, no impacts on other public facilities would occur, and no mitigation is required.

3.18. Recreation

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
RECREATION				
(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"/>

3.18.1. Environmental Impacts

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

NO IMPACT. Demand for neighborhood and regional parks or other recreational facilities is generally associated with an increase in the number of permanent residents in the area. No residential facilities or features would be developed under the proposed Project that would result in an increase in the number of residents at existing recreational facilities. As such, increased use of existing parks or other recreational facilities would not occur. Therefore, no impacts would occur, and no mitigation is required.

- 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. As discussed in Section 3.16.1(a), Population and Housing, the proposed Project would not impact the area's population, and thus no increase in the demand for recreational facilities would occur. Additionally, operation and maintenance would not require the construction or expansion of recreational facilities. Therefore, no impacts on recreational facilities would occur, and no mitigation is required.

3.19. Transportation

TRANSPORTATION

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<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"/>

3.19.1. Environmental Impacts

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 City of Simi Valley General Plan Mobility and Infrastructure element establishes goals and policies including the following: supporting a safe and efficient transportation system, providing regional transportation facilities, establishing safe roadway designs and level of service, providing traffic controls, providing sufficient parking, and encouraging bicycle travel and public transit (City of Simi Valley, 2012a). The proposed Project's transportation components would be constructed in compliance with City standards, including required fire access lanes, driveway apron, bicycle racks, and spaces for regular, electric, and ADA vehicle parking. The Project would accommodate passenger vehicles, trucks, and bicyclists and would not alter or construct new roadways or other features that would conflict with the City's circulation system. Impacts would be less than significant, and no mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT. CEQA Guidelines § 15064.3 subdivision (b) provides criteria for analyzing transportation impacts. The guidelines state that a significant impact may occur if vehicle miles traveled (VMT) exceed an applicable threshold of significance. Per the Trip Generation Memorandum prepared by Kimley-Horn for the proposed Project (Appendix G), the existing site is estimated to generate approximately 1,447 passenger car trips on a daily basis with 203 passenger car trips in the morning peak hour and 193 passenger car trips in the evening peak hour. Project operations trips are estimated to generate 404 passenger car equivalent (PCE) trips, with 32 PCE trips in the morning peak hour and 35 PCE trips in the evening peak hour (Kimley-Horn, 2024d).

Per the City of Simi Valley Guidelines for the Preparation of Traffic Impact Reports, a traffic impact report is required if a project's trip generation exceeds the existing site trip generation by at least 110 daily trips. After subtracting the trip generation of the existing office building, the Project is estimated to generate a net of -1,043 daily trips, with -171 morning peak hour trips and -158 evening peak hour trips (Kimley-Horn, 2024d). Based on the trip generation provided in the Trip Generation Memorandum, the proposed Project is anticipated to fall below the defined threshold, and therefore the Project would not require a traffic impact report. As such, the impact is considered less than significant, and no mitigation is required.

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. The proposed Project does not include any modifications to existing roads or construction of new roads that may have hazardous designs. The proposed Project would include reconstruction of the existing driveway to accommodate passenger vehicles and trucks per City standards. No new intersections or changed traffic conditions would occur as a result of the proposed Project. The proposed Project does not include incompatible uses, as warehouse operations are consistent with the permitted uses under the Business Park zone and land use. Impacts would be less than significant, and no mitigation is required.

d. Would the project result in inadequate emergency access?

LESS-THAN-SIGNIFICANT IMPACT. During construction, vehicles would travel on local roads including Tapo Canyon Road and Guardian Street to access the Project site to transport materials, construction equipment, and workers. Construction equipment and vehicles may impede emergency access on these local roads. However, this effect would be temporary and intermittent, as construction activities would be limited to the hours of 8:00 a.m. and 5:00 p.m. and last approximately 18 months. Additionally, notification would be provided to emergency service providers to ensure that emergency response is not impaired. Alternative public routes such as Tapo Canyon Road and Tapo Street would be available. Peppertree Lane, a private road, would remain open for individuals accessing the American Jewish University – Brandeis Bardin Campus located south of the Project site. While construction vehicles and equipment would be accessing the Project site during construction, no road closures or long-term interruptions would occur such that emergency access to and from the American Jewish University – Brandeis Bardin Campus would be rendered inadequate. Fire apparatus access road would comply with Public Roads Standards, Ventura County Fire Apparatus Access Code: Ordinance 29 and Ventura County Fire Department Standard 501. Any potential temporary impacts to emergency access would cease during operations, as operations would consist of the movement of regular passenger vehicles and cargo trucks. Therefore, the proposed Project would result in a less-than-significant impact, and no mitigation is required.

3.20. Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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 §5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Background on Tribal Cultural Resources

Tribal Cultural Resources (TCRs) include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a California Native American tribe (Tribe). To qualify as a TCR, the resource must either: (1) be listed on, or be eligible for listing on, the CRHR or other local historic register; or (2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC §21074). AB 52, passed in 2014, also states that tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of TCRs within their traditional and cultural affiliated geographic areas. Therefore, the identification and analysis of TCRs should involve government-to-government tribal consultation between the CEQA lead agency and interested tribal groups and/or tribal persons. (PRC§ 21080.3.1(a)).

Approach to Analysis of Tribal Cultural Resources

Information presented in this section was gathered through AB 52 government-to-government consultation between the City and the California Native American Tribes that have cultural affiliations with the proposed Project site and that have requested to consult on the proposed Project. Supplementary information was gathered from the cultural resources literature and records search, intensive pedestrian survey, and the NAHC SLF search.

Project Notification

AB 52 requires that within 14 days of the lead agency determining that a project application is complete, a formal notice and invitation to consult about the proposed Project is to be sent to all tribal representatives who have requested, in writing, to be notified of projects that may have a significant effect on TCRs located within the proposed Project area (PRC § 21080.3.1(d)).

AB 52 notification letters were sent to the following tribes identified by the NAHC Native American Contact List on June 7, and June 8, 2024:

- Barbareño/Ventureño Band of Mission Indians
- Fernandeno Tataviam Band of Mission Indians (FTBMI)
- Gabrielino-Tongva Tribe

AB 52 Tribal Consultation

To date, two responses were received by the Santa Ynez Band of Chumash Indians and FTBMI. The Santa Ynez Band of Chumash Indians requested no further consultation on the proposed Project on July 16, 2024.

One request to consult was received from the FTBMI on June 11, 2024. The City conducted AB 52 consultation with the FTBMI on July 8, 2024. The FTBMI emphasized the sensitivity of the surrounding area and recommended measures to protect TCRs through full-time monitoring and following recommended protocols in the event of inadvertent discoveries of TCRs or human remains. Consultation concluded on July 15, 2024, after FTBMI reviewed and approved the mitigation measures drafted for this proposed Project.

3.20.1. Environmental Impacts

- 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)?**

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. No resources have been identified within the Project site that area listed or eligible for listed in the CRHR or local register through the AB 52 consultation process, thus none would be impacted by the proposed Project. Given the high sensitivity of the area, it is possible that archaeological deposits could be encountered during ground disturbing activity. Therefore, a Worker Environmental Awareness Program (WEAP) training session is required before construction, and archaeological and Native American monitoring is required for all ground disturbance. Impacts to historical resources would be reduced by implementation of MMs CUL-2, CUL-3, and CUL-4 by requiring a WEAP training before construction, archaeological and Native American monitoring, and protocols for unanticipated discovery of cultural resources and human remains. With implementation of MMs CUL-2, CUL-3, and CUL-4, impacts to unknown cultural resources that could be considered TCRs would be less than significant with mitigation. Please see Section 3.7 Cultural Resources above for the full text of the mitigation measures.

- 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 WITH MITIGATION INCORPORATED. No TCRs have been identified within the Project site that were determined by the lead agency to be significant through the AB 52 consultation process; thus, no TCRs would be impacted by the Project. Given the high sensitivity of the area, it is possible that archaeological deposits could be encountered during ground disturbing activity. Therefore, a WEAP training session is recommended before construction, and archaeological and Native American monitoring is recommended for all ground disturbance. Impacts to historical resources would be reduced by implementation of MMs CUL-2, CUL-3, and CUL-4 by requiring a WEAP training before construction, archaeological and Native American monitoring, and protocols for the unanticipated discovery of cultural resources and human remains. With implementation of MMs CUL-2, CUL-3, and CUL-4, impacts to unknown cultural resources that could be considered TCRs would be less than significant with mitigation. Please see Section 3.7 Cultural Resources above for the full mitigation measures.

3.21. Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>

3.21.1. Environmental Impacts

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

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would include the construction of new stormwater drains and route all utilities to existing connections. These activities would occur within a developed area with existing utility facilities and therefore would not cause significant environmental effects. During operations, Project would not require the construction of new utility facilities. Impacts would be less than significant, and no mitigation is required.

- 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. The proposed Project would require water supplies during construction primarily for dust suppression and concrete production. However, the demand for water supplies would be temporary and occur intermittently primarily during the earthwork phase of the approximately 12-month construction period. As such, water demand during construction would not require new or expanded water supply resources. Operation of the proposed Project would require water for the four proposed restrooms and irrigation of the landscaped areas. The Project's landscape plan would comply with the requirements of the City of Simi Valley Municipal Code and State Model Water Efficient Landscape Ordinance. Therefore, the proposed Project would result in a less-than-significant impact, and no mitigation is required.

- 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?**

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would generate small amounts of wastewater from portable restrooms during the construction period. The volume of wastewater would be negligible compared to the overall wastewater generated by the City of Simi Valley, as an estimated peak number of 70 workers would be present on site during the anticipated 12-month construction period. Construction-generated wastewater would likely be hauled by the contractor and treated by the City of Simi Valley Sanitation Services Division (City of Simi Valley, 2024a). The City's Water Quality Control Plant treats approximately 10 million gallons of wastewater daily from a variety of sources, including discharges from local businesses and industries (City of Simi Valley, 2024b). According to the City of Simi Valley Department of Public Works, equivalent dwelling units (EDUs) (defined as the unit of measure, which is based on the flow characteristics of an average single-family residence in terms of sewage quantity and constituent quality) produce 275 gallons of sewage per day. The proposed warehouse use is assumed to be equivalent to 0.08 EDUs per 1,000 SF of building (City of Simi Valley, 2006b). Therefore, the proposed warehouse is estimated to generate approximately 3,950 gallons of sewage per day, which is well within the maximum capacity of the City's Water Quality Control Plant $[(0.08 \text{ EDU} \times 275 \text{ gallons}) \times (179,490 \text{ SF} / 1,000 \text{ SF})]$. Neither construction nor operation of the proposed Project would create a substantial additional demand on the wastewater treatment provider. Impacts would be less than significant, and no mitigation is required.

- 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?**

LESS-THAN-SIGNIFICANT IMPACT. Construction activities would include demolition and excavation; the largest potential source of solid waste during construction would be demolition waste and excavated material. Construction is anticipated to be hauled offsite to the Simi Valley Landfill, which accepts construction and demolition debris, and supports the State's regulations requiring diversion of at least 50 percent of construction and demolition materials from landfills (Waste Management, 2024). The Simi Valley Landfill processes over 2 million tons of waste annually and has an estimated remaining permitted capacity of 80 million CY.

During operations, waste generated by the Project would be primarily limited to commercial waste, such as cardboard, plastics, and other packaging waste, as well as domestic waste from workers. Operations would not generate a large quantity of solid waste in excess of the capacity of the Simi Valley Landfill. Project operations would comply with AB 341, Mandatory Commercial Recycling, passed in 2011, which requires businesses that generate 4 CY or more of commercial solid waste per week to arrange for recycling services (CalRecycle, 2024). Recycling waste would further divert a portion of operational waste from landfills. Impacts would be less than significant, and no mitigation is required.

- e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

NO IMPACT. The proposed Project would be required to comply with the City of Simi Valley Building and Safety Division's Construction and Demolition Debris Waste Management and Recycling Program. This program requires recycling of 100 percent of asphalt and concrete materials and a minimum of 65 percent of other construction or demolition debris (City of Simi Valley Building and Safety Division, 2023). The Project would also conform to AB 939, also known as the California Integrated Waste Management Act, passed in 2021 (Public Resources Code §§ 40000 et seq.). AB 939 requires each jurisdiction in California to divert at least 50 percent of its waste away from landfills through waste reduction, recycling, or other

means (City of Simi Valley, 2024c). As discussed in Section 3.21.1(d), the Project would also comply with AB 341 to meet State goals of increasing recycling and reducing greenhouse gas emissions. Therefore, the proposed Project would be consistent with related laws pertaining to solid waste disposal. The proposed Project would have no impact, and no mitigation is required.

3.22. Wildfire

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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

3.22.1. Environmental Impacts

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would not cause any changes that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Applicant would be required to prepare a Fire Protection Plan as part of the formal planning application review to ensure fire protection and life safety measures are incorporated in the Project, as required by the State Minimum Fire Safe Regulations and VCFD Ordinance and Standards. The Simi Valley Emergency Plan Operations Plan identifies the Law Branch (primarily the Police Lieutenant) as the responsible entity for coordinating with Public Works Branch traffic engineering to determine evacuation routes depending on the type of emergency (City of Simi Valley, 2008). It is assumed that primary transportation routes, such as Tapo Canyon Road, Royal Avenue, Tapo Street, and East Los Angeles Avenue would be primary evacuation routes in the event of a wildfire emergency. The proposed Project would not involve any full or partial lane closures on these roads. Temporary lane closures may occur on Guardian Street but would not obstruct any of the primary roads that would likely be used as evacuation routes. Upon completion of construction, lane closures would not occur. Therefore, impacts would be less than significant, and no mitigation is required.

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?

LESS-THAN-SIGNIFICANT IMPACT. According to the Simi Valley Emergency Plan, the southern portion of Simi Valley has a greater risk exposure to fire due to the predominance of north-facing slopes that are more thickly vegetated than south-facing slopes. Within the southern portions of Simi Valley, the highest fire risk areas are located in the hilly regions southwest of Santa Susana Knolls (City of Simi Valley, 2001). Additionally, according to the California Department of Forestry and Fire Prevention (CAL FIRE), the Project is adjacent to a Very High FHSZ to the east, south, and west (CAL FIRE, 2024). The proposed Project

is within a Local Responsibility Area outside of a Moderate, High, and Very High FHSZ, and all construction activities would occur in an urbanized setting that is currently developed as an office building and parking lot. Although the Project site is adjacent to open space primarily consisting of grasslands, construction activities would not pose a substantial risk of wildfire, as the Project would comply with federal and State regulations for construction fire safety, such as requiring spark arrester protection in vehicles to reduce the potential of ignition. The nearest fire station, VCFD Station #41, is approximately 1.25 miles northwest from the Project site (1910 Church Street) and would provide sufficient fire protection services in the event of a fire during construction or operation. Once operational, the proposed Project would be operated as a warehouse facility and would not pose a substantial risk of fire, as the site would be developed and paved. The proposed Project would not introduce a new risk of fire hazards, as open flames and other flammable materials or activities would not be present on-site during operations. The Project area is unlikely to support favorable conditions for a wildfire; landscaping would be maintained with irrigation. Therefore, the Project would have a less-than-significant impact on exacerbating wildfire risks and exposing people to pollutants from a wildfire, and no mitigation is required.

- 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?**

LESS-THAN-SIGNIFICANT IMPACT. The proposed Project would include the demolition of an existing office building and the construction of a warehouse building. No new roads, fuel breaks, or new utility infrastructure would be needed. Utility work would be limited to connecting electrical, water, sewer, natural gas, and telecommunications systems to existing connections within their respective rights-of-way. Construction activities would occur in an existing urbanized area, and the Project would comply with federal and State regulations for construction fire safety. As described in Section 3.22.1(b), the proposed Project is not located within a FHSZ nor would it exacerbate the risk of a wildfire due to the developed nature of the site and compliance with construction fire safety regulations. As a result, impacts would be less than significant, and no mitigation is required.

- 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?**

LESS-THAN-SIGNIFICANT IMPACT. Although the proposed Project is not located within a moderate, high, or very high FHSZ, it is adjacent to a very high FHSZ to the east, south, and west (CAL FIRE, 2024). The Project is considered to be in the urban-wildlife interface and could be vulnerable to wildfire hazards and post-wildfire topographical instability. The Project site elevation gradually increases from southwest to northeast; the low elevation is along the western border at approximately 960 feet, and the high elevation is approximately 1,105 feet along its eastern boundary (South Environmental, 2023a). Project construction would occur within the existing developed footprint. Retaining walls would be constructed to provide soil support along adjacent slopes and would offer protection from potential post-fire downslope hazards. Additionally, the Project site does not fall within a landslide zone (Gorian & Associates, 2023). Therefore, the Project would have a less-than-significant impact on exposing people and structures to downslope flooding or landslides as a result of post-fire slope instability and drainage changes. No mitigation is required.

3.23. Mandatory Findings of Significance

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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>			<input 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 IMPACT WITH MITIGATION INCORPORATED.

- As discussed in Section 3.6, Biological Resources, the Project site and surrounding areas are developed and lack native habitats and were not observed to contain any listed plant or wildlife species. Although one candidate species for listing under the CESA, Crotch bumble bee (*Bombus crotchii*), does have a potential to be present in the Project site, they are expected to leave on their own and impacts would therefore be less than significant. Additionally, one CDFW watch list species, Cooper's hawk (*Accipiter cooperii*), has a high potential to forage within the Project site and a low potential to nest there and was determined to have no potential to be present. If present, impacts to Cooper's hawk would be avoided or minimized through the implementation of MM BIO-1, therefore any impacts would be less than significant. The Project has the potential to impact nesting birds and their nursery sites; however, these impacts would be reduced to less than significant with implementation of MM BIO-1 that would require preconstruction nesting bird surveys and monitoring during construction activities. As such, the proposed Project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal with mitigation.
- As discussed in Section 3.7, Cultural Resources, a record search and NAHC SLF search were conducted, and a review of the NRHP, CRHR, Historic Resources Inventory, and local inventories were conducted. The record searches and literature reviews identified one previously recorded prehistoric site within the Project site, one previously recorded cultural resource within the 0.5-

mile search radius, three previous cultural resource studies intersecting the Project site, and 16 studies within the 0.5-mile records search radius. The SLF search produced negative results. As discussed in Section 3.7.2, implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4 would reduce impacts to historical and archeological resources to a less-than-significant level by requiring a WEAP training before construction, archaeological and Native American monitoring, and protocols for unanticipated discovery of cultural resources and human remains. As such, impacts to major examples of California history or prehistory would be less than significant with mitigation.

Overall, the proposed Project would have less-than-significant impacts with mitigation incorporated regarding the potential to degrade the quality of the environment, reduce habitat and wildlife populations, eliminate plant or animal communities, reduce the range of special-status species, and eliminate California historical resources.

- 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, effects of other current projects, and the effects of probable future projects.)**

LESS-THAN-SIGNIFICANT IMPACT. As discussed in each issue area in Sections 3.3 through 3.22, the proposed Project would have no potentially significant impacts, and mitigation would reduce impacts to less than significant for biological resources, cultural resources, geology and soils, and tribal cultural resources. In the absence of significant Project-level impacts and a relatively small area of impact, the incremental contribution of the proposed Project would not be cumulatively considerable. Generally, contributions to air quality and greenhouse gas emissions impacts are cumulative due to the regional and global nature of air pollution and climate change, respectively. As described in Sections 3.4, Air Quality, and 3.10, Greenhouse Gas Emissions, the proposed Project would have less-than-significant impacts to these issue areas. All projects in the region would comply with applicable laws, further reducing their cumulative impacts to air quality and GHG emissions. Therefore, the proposed Project would not have a cumulatively considerable impact regarding these issues. Impacts are less than significant, and no mitigation is required.

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

LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Based on the analyses in Sections 3.2 through 3.22, the proposed Project would not have any significant impacts that would cause substantial adverse effects on human beings, either directly or indirectly. All impacts related to adverse effects on human beings, such as aesthetics, air quality, greenhouse gases, hazards and hazardous materials, hydrology and water quality, noise, and wildfire are less than significant. Impacts related to hazards associated with expansive soils would be less than significant with MM GEO-1 incorporated.

4. MITIGATION MONITORING AND REPORTING PROGRAM

Per CEQA Guidelines Section 15097, in order to ensure that the mitigation measures identified in the mitigated negative declaration are implemented, the lead agency must adopt a mitigation monitoring and/or reporting program to mitigate or avoid significant environmental impacts. The Mitigation Monitoring and Reporting Program (Table 13) identifies the mitigation measures and procedures for the proposed Project as identified in the IS/MND.

Table 13. Mitigation Monitoring and Reporting Program

Environmental Factor	Reference No.	Mitigation Measures	Responsible Party	Timing
3.6 Biological Resources	3.6.1(a, d)	<p>BIO-1 Pre-construction Nesting Bird Survey and Avoidance.</p> <ul style="list-style-type: none"> Ground-disturbing activities and vegetation removal (including tree trimming) may only occur outside the bird nesting season (September 1-January 31). If ground-disturbing activities or vegetation removal (including tree trimming) are scheduled during the bird nesting season (February 1-August 31), a pre-construction survey for nesting birds must be conducted by a qualified avian biologist with prior experience conducting nest bird surveys for construction projects. A qualified biologist must meet the minimum qualifications for Biological Consultants as listed below: <ul style="list-style-type: none"> Must have an undergraduate or graduate degree with coursework in biology, botany, wildlife biology, natural resources, ecology, conservation biology, or environmental biology; Have an up-to-date subscription to and experience using the California Natural Diversity Database/BIOS; Be able to map survey findings in GIS or have access to an individual or firm with the ability to map survey findings in GIS. To conduct biological field surveys and construction monitoring; and Must have at least four years of experience conducting wildlife surveys for biological groups located within the region and be able to identify Ventura County's designated Locally Important Species. The study area includes the Project site and a 100-foot buffer around the Project site. If no active nests are found, no additional measures are required. 	Permittee	Prior to construction

		<ul style="list-style-type: none"> If active nests are found, the avian biologist must map the location and document the species and nesting stage. The qualified avian biologist must implement an avoidance buffer area appropriate to the species. The avian biologist may change the avoidance buffer if field observations of bird behavior and biology to ensure the nest is unaffected by Project activities, avoiding a risk of nest failure. The nest site would be fenced and/or flagged in all directions, and this area may not be disturbed until the nest becomes inactive. 		
3.7 Cultural Resources	3.7.2 (a-c)	<p>CUL-1 Cultural Resources WEAP Training. Before construction, the Permittee must contract with a qualified archaeologist and local Native American monitor to develop Worker Environmental Awareness Program (WEAP) for all personnel involved in Project construction, including field consultants and construction workers. The one-time WEAP training session must be conducted before any Project-related construction activities in the Project site. The WEAP will include relevant information regarding the archaeological sensitivity of the area, including applicable regulations, protocols for unanticipated discoveries, and consequences of violating state laws and regulations. The WEAP will also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located at the Project site and will outline further steps needed and who to contact if any potential cultural resources or tribal cultural resources are encountered. The WEAP will emphasize the requirement for confidentiality.</p> <p>The Permittee must submit the WEAP to the City of Simi Valley (City) for review and approval before implementation. All workers, contractors, and visitors must attend the WEAP before entering the Project site and performing any work. The Permittee must provide copies of the training attendance sheets monthly to City staff as a record of compliance with this measure.</p>	Permittee	Prior to construction
3.7 Cultural Resources, 3.20 Tribal Cultural Resources	3.7.2 (a-c), 3.20(a)(ii)	<p>CUL-2 Archeological and Native American Monitoring. Prior to the commencement of construction, the Permittee will secure the services of a Native American Monitor from the Fernandeano Tataviam Band of Mission Indians and a qualified archaeological monitor to observe all ground-disturbing activity (i.e clearing, grubbing, grading, trenching, etc.) on a full-time basis. A copy of the contracts or monitoring agreements will be sent to the City of Simi Valley for their review and approval.</p>	Permittee	During construction
3.7 Cultural Resources, 3.20	3.7.2 (a-c), 3.20(a)(ii)	<p>CUL-3 Unanticipated Discovery of Cultural Resources. If archaeological resources are encountered during ground</p>	Permittee	During construction

Tribal Cultural Resources		<p>disturbing activity on the site, all activity within a 100-foot radius of the find must be stopped, the City of Simi Valley must be notified, and a qualified archaeologist and Fernandeano Tataviam Band of Mission Indians Native American monitor must examine the find. The archaeological and Native American monitors must evaluate the find to determine if it meets the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. The City of Simi Valley will consult in good faith with the Fernandeano Tataviam Band of Mission Indians on the disposition and treatment of any tribal cultural resource encountered. If the find(s) do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeological and Native American monitor. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, Native American Heritage Commission (tribal cultural resources), and the South Central Coastal Information Center.</p> <p>The Permittee will ensure that construction personnel do not collect or move any cultural material and will ensure that any fill soils that may be used for construction purposes does not contain any archaeological materials.</p>		
3.7 Cultural Resources, 3.20 Tribal Cultural Resources	3.7.2 (a-c), 3.20(a)(i)(ii)	<p>CUL-4 Unanticipated Discovery of Human Remains. If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Ventura County Coroner must be notified immediately and will determine whether the remains are of Native American origin or an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist will recover scientifically valuable information, as appropriate and in accordance with the</p>	Permittee	During construction

		recommendations of the MLD. A report of findings documenting any data recovery must be submitted to the City of Simi Valley, the South Central Coastal Information Center, and the MLD.		
3.9 Geology and Soils	3.9.1 (d)	<p>GEO-1 Drainage and Landscaping Maintenance. The construction contractor must adhere to the following maintenance protocols for construction on expansive soils on the Project site:</p> <ul style="list-style-type: none"> • Positive drainage should be continually provided and maintained away from structures and should not be changed creating an adverse drainage condition. Plumbing leaks should be immediately repaired so the subgrade soils underlying the structure do not become saturated. • Initial landscaping must be undertaken in unpaved areas adjacent to structures. Trees and shrubbery must not be planted where roots can grow under foundations and hardscape when they mature. • Landscaped areas must be maintained in a uniformly moist condition and not allowed to dry out. 	Permittee	During and prior to construction
3.9 Geology and Soils	3.9.1 (f)	<p>GEO-2 Paleontological Resource Monitoring and Mitigation Plan. Before the start of any Project-related construction activities, the Permittee must retain a State-approved paleontologist (Project Paleontologist) to prepare and implement a project-specific Paleontological Resource Monitoring and Mitigation Plan (PRMMP), which must be approved by the City of Simi Valley Environmental Services Director. The Project Paleontologist is responsible for implementing all the paleontological conditions of approval and for using qualified paleontologists to assist in work and field monitoring. A qualified Project Paleontologist is defined by the Society of Vertebrate Paleontology standards as a practicing scientist who is recognized in the paleontological community as a professional and can demonstrate familiarity and proficiency with paleontology in a stratigraphic context. A Project Paleontologist must have the equivalent of the following qualifications:</p> <ul style="list-style-type: none"> • A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience; • At least two full years professional experience as assistant to a Project Paleontologist with administration and project management 	Permittee	Prior to construction

		<p>experience; supported by a list of projects and referral contacts;</p> <ul style="list-style-type: none"> • Proficiency in recognizing fossils in the field and determining their significance; • Expertise in local geology, stratigraphy, and biostratigraphy; and • Experience collecting vertebrate fossils in the field. <p>At a minimum, information to be contained in the PRMMP, in addition to other information required under the guidelines of the Society of Vertebrate Paleontology (SVP), is as follows:</p> <ul style="list-style-type: none"> • Description of the Project site and planned earthwork and excavation, and a map identifying locations where excavations and ground disturbing activities will or will be likely to encounter paleontological resources. • The museum or repository that has agreed to accept the recovered fossils must be identified in the PRMMP. • The PRMMP must detail methods of monitoring, recovery, preparation, and analysis of specimens, data analysis, reporting, and the final curation location of specimens at an identified repository. • Identification of personnel with authority and responsibility to temporarily halt or divert ground disturbance activities to allow for recovery of significant specimens. • The PRMMP must be submitted to the City of Simi Valley Environmental Services Director for review and approval 60 days before the start of Project construction. 		
3.9 Geology and Soils	3.9.1 (f)	<p>GEO-3 Paleontological Resources WEAP Training. Before the start of Project-related construction activities, a WEAP must be developed by the Project Paleontologist. The WEAP must address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the obligations to preserve and protect such resources consistent with Society of Vertebrate Paleontology standard procedures. The training program must also include the set of reporting procedures that workers are to follow if paleontological resources are encountered during Project activities. The WEAP may be combined with other environmental training programs for the Project. All field personnel will receive WEAP training on paleontological resources before Project-related construction activities.</p>	Permittee	Prior to construction
3.9 Geology and Soils	3.9.1 (f)	<p>GEO-4 Paleontological Monitoring and Fossil Recovery. The Project Paleontologist must monitor the Project site.</p>	Permittee	During construction

		<p>Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. If the Project Paleontologist determines full-time monitoring is no longer warranted, based on the geologic conditions at depth, he or she may recommend to the City of Simi Valley Environmental Services Director that monitoring be reduced or cease entirely.</p> <ul style="list-style-type: none"> • If fossils are discovered, the Project Paleontologist must temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. The Paleontological Monitor, and/or Project Paleontologist must evaluate the discovery and determine if the fossil may be considered significant, and if significant, recover the fossil. • Upon completion of Project ground disturbing activities, all significant fossils collected would be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossil specimens must be identified to the lowest taxonomic level practical before curation at an accredited museum. The fossil specimens must be delivered to the approved repository (identified in the Paleontological Resource Mitigation Plan) and receipt(s) of collections submitted sent to the City of Simi Valley Environmental Services Director no later than 60 days after all ground disturbing activities are completed. 		
3.9 Geology and Soils	3.9.1 (f)	<p>GEO-5 Paleontological Resources Monitoring Report.</p> <p>The Permittee must prepare a paleontological resource mitigation and monitoring report by the Project Paleontologist following completion of ground disturbing activities. The contents of the report must include, but not be limited to a description and inventory list of recovered fossil materials (if any); a map showing the location of paleontological resources found in the field; determinations of scientific significance; proof of accession of fossil materials into the pre-approved museum or other repository; and a statement by the Project Paleontologist that Project impacts to paleontological resources have been mitigated.</p>	Permittee	After construction

5. LIST OF PREPARERS

Table 14. CEQA Lead Agency: City of Simi Valley

Name	Project Role
Zarui Chaparyan, Associate Planner	Project Manager
Naren Gunasekera, Principal Planner/Zoning Administrator	Project Manager

Table 15. CEQA Consultant Team: Aspen Environmental Group

Name	Project Role
Stephanie Tang	Project Manager, Hydrology/Water Quality, Noise, Transportation, Utilities/Service Systems, Wildfire
Avery Robinson	Aesthetics, Agriculture & Forestry Resources, Air Quality, Cultural Resources, Energy, Geology/Soils, Greenhouse Gas Emission, Hazards & Hazardous Materials, Land Use/Planning, Mineral Resources, Population/Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Mandatory Findings of Significance
Brewster Birdsall, PE, QEP	Air Quality, GHG, Noise
Lauren DeOliveira, RPA	Cultural Resources, Tribal Cultural Resources
Justin Wood, MS, CFB	Biological Resources

6. LIST OF ACRONYMS AND ABBREVIATIONS

Acronyms/Abbreviations	Definition
AB	Assembly Bill
ADA	Americans with Disabilities Act
APNs	Assessor's Parcel Numbers
AQMP	Air Quality Management Plan
ATCM	Air Toxic Control Measure
BMPs	best management practices
BP	Business Park
CAAQS	California Ambient Air Quality Standards
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CDS	Contech Detention System
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historical Resources Information Center
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CRHR	California Register of Historical Resource
CY	cubic yard
DOC	Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EDUs	equivalent dwelling units
EIR	Environmental Impact Report
EV	Electric vehicle
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency

FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FTA	Federal Transportation Authority
GHG	greenhouse gas
GWP	global warming potential
HVAC	heating ventilation and air conditioning
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
IS	Initial Study
LOS	level of service
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MM	mitigation measure
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MTCO _{2e}	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	National American Heritage Commission
NO _x	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
PCE	passenger car equivalent
PM _{2.5}	fine particulate matter
PM ₁₀	coarse particulate matter
PRC	Public Resources Code
ppm	parts per million
PPV	peak particle velocity
PRMMP	Paleontological Resource Monitoring and Mitigation Plan

RCNM	Roadway Construction Noise Model
ROG	Reactive Organic Gases
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments.
SCCAB	South Central Coast Air Basin
SCCIC	South Central Coastal Information Center
SF	square foot
SLF	Sacred Lands File
SO ₂	Sulfur Dioxide
SQUIMP	Storm Water Quality Urban Impact Mitigation Management Plan
SVMC	Simi Valley Municipal Code
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCRs	Tribal Cultural Resources
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VCAPCD	Ventura County Air Pollution Control District
VCFD	Ventura County Fire Department
VCOG	Ventura Council of Governments
VdB	vibration decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program
ZEV	zero-emission vehicle

7. REFERENCES

- CAL FIRE (California Department of Forestry and Fire Prevention). 2024. Fire Hazard Severity Zones in State Responsibility Area. [Online]: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>. Accessed June 14, 2024.
- CalRecycle. 2024. Mandatory Commercial Recycling. [Online]: <https://calrecycle.ca.gov/recycle/commercial/>. Accessed June 27, 2024.
- Caltrans (California Department of Transportation). 2018. California State Scenic Highway System Map. [Online]: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed June 15, 2023.
- CDFW (California Department of Fish and Wildlife). 2022. CDFW Seeks Public Comment Related to Crotch's Bumble Bee, Franklin's Bumble Bee, Suckley's Cuckoo Bumble Bee and Western Bumble Bee. December 14. [Online]: <https://wildlife.ca.gov/News/Archive/cdfw-seeks-public-comment-related-to-crotch-s-bumble-bee-franklin-s-bumble-bee-suckleys-cuckoo-bumble-bee-and-western-bumble-bee>. Accessed June 12, 2024.
- _____. 2024. Choosing the Right CESA Permit. [Online]: <https://wildlife.ca.gov/Conservation/CESA/Permitting/Permits#:~:text=Take%20Prohibition%20of%20CESA&text=Code%20Regs.%2C%20tit.,catch%2C%20capture%2C%20or%20kill>. Accessed June 27, 2024.
- City of Long Beach. 2023. Long Beach Energy Resources Subsidence. [Online]: <https://www.longbeach.gov/energyresources/about-us/oil/subsidence/>. Accessed June 10, 2024.
- City of Simi Valley. 2001. City of Simi Valley SEMS Multi-Hazard Functional Plan (Emergency Plan). [Online]: <https://www.simivalley.org/home/showpublisheddocument/8043/636948916296900000>. Accessed June 14, 2024.
- _____. 2006a. Chapter 9-38 - Tree Preservation, Cutting, and Removal. https://library.municode.com/ca/simi_valley/codes/code_of_ordinances?nodeId=TIT9DECOSIVAMUCO_CH9-38TRPCURE. Accessed June 11, 2024.
- _____. 2006b. Manual & Standard Plans for the Design and Construction of Sanitary Sewerage Facilities. [Online]: <https://www.simivalley.org/home/showpublisheddocument/6115/636306346286630000>. August 28. Accessed June 15, 2024.
- _____. 2008. Operations Section Handbook. [Online]: <https://www.simivalley.org/home/showpublisheddocument/6527/636306346286630000>. Accessed June 14, 2024.
- _____. 2011. Brandeis-Bardin Institute Specific Plan. [Online]: <https://www.simivalley.org/home/showpublisheddocument/1882/638327204331770000>. Accessed June 10, 2024.
- _____. 2012a. Simi Valley General Plan, Environmental Impact Report, SCH No. 2009121004, Volume 1: Final EIR. June. [Online]: <https://www.simivalley.org/departments/environmental-services/planning-division/documents-applications-and-development-activity/general-plan>. Accessed June 7, 2024.
- _____. 2012b. City of Simi Valley Climate Action Plan. [Online]: https://www.ca-ilg.org/sites/main/files/file-attachments/simi_valley-climate_action_plan_0.pdf?1472519071. Prepared by Atkins. Adopted June 4. Accessed June 17, 2024.

- _____. 2021. General Plan Chapter 6. Natural Resources. [Online]: <https://www.simivalley.org/home/showpublisheddocument/6867/636306346286630000>. Accessed June 14, 2024.
- _____. 2023. City of Simi Valley General Plan Land Use Map. [Online]: <https://www.simivalley.org/home/showpublisheddocument/24714/638289835458270000>. Accessed June 5, 2024.
- _____. 2024a. Zoning Simi Valley. [Online]: <https://www.arcgis.com/home/item.html?id=b20ec935fa594a90a6e7128fd4f96268>. Accessed June 5, 2024.
- _____. 2024b. Operations: Collections & Treatment. [Online]: <https://www.simivalley.org/departments/public-works/sanitation-services/operations-collections-treatment>. Accessed June 15, 2024.
- _____. 2024c. Solid Waste Services. [Online]: <https://www.simivalley.org/departments/public-works/environmental-compliance/solid-waste-services>. Accessed June 15, 2024.
- City of Simi Valley Building and Safety Division. 2023. Construction and Demolition Debris Waste Management and Recycling Program. [Online]: <https://www.simivalley.org/home/showpublisheddocument/27020/638245746953570000>. Accessed June 15, 2024.
- Delane Engineering. 2024. Preliminary Drainage Report. Prepared for Dunn Simi, LP. February. PDF.
- DOC (California Department of Conservation). 2022. California Important Farmland Finder. [Online]: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed June 7, 2024.
- _____. 2024a. Earthquake Zones of Required Investigation. [Online]: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed June 10, 2024.
- _____. 2024b. Well Finder CalGEM GIS. [Online]: <https://maps.conservation.ca.gov/doggr/wellfinder/>. Accessed June 7, 2024.
- DRS Engineering, Inc. 2024. SK-1 – Preliminary Design Plan. PDF.
- Gorian & Associates. 2023. Geotechnical Site Update, Proposed Industrial Building, 4100 Guardian Street, Simi Valley, California. Prepared for Dunn Simi, LP. September 18.
- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. *Bombus crotchii*. The IUCN Red List of Threatened Species 2015: e. T44937582A46440211. <https://www.iucnredlist.org/species/44937582/46440211>. Accessed July 12, 2024.
- iNaturalist. 2024. Crotch's Bumble Bee. [Online]: <https://www.inaturalist.org/taxa/271451-Bombus-crotchii>. Accessed June 12, 2024.
- Innes, John K. 2024. 4100 Guardian Street, CUP-S-2023-0013, Tree Report Review #2. Memorandum to Zarui Chaparyan, Assistant Planner.
- Kimley-Horn. 2024a. Air Quality Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California. February.
- _____. 2024b. Greenhouse Gas Emissions Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California. February.
- _____. 2024c. Acoustical Assessment, 4100 Guardian Street Warehouse Project, City of Simi Valley, California. February.
- _____. 2024d. Trip Generation Memorandum for the Proposed Warehousing Project at 4100 Guardian Street in the City of Simi Valley. Prepared for Justin Link, PE, TE, QSD/P. February 28.
- Municode. 2023. City of Simi Valley Code of Ordinances. Chapter 21 – Security Standards for Buildings § 8-21.04 – Definitions. [Online]:

- https://library.municode.com/ca/simi_valley/codes/code_of_ordinances?nodeId=TIT8BUCO_CH21SESTBU_8-21.03SC. Accessed June 28, 2024.
- SCAQMD (South Coast Air Quality Management District). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. [Online]: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf). Accessed July 11, 2024.
- South Environmental. 2023a. Biological Resources Assessment, 4100 Guardian Street Project. Prepared for Jack Herrill. August. PDF.
- _____. 2023b. Cultural Resources Assessment. Prepared for Dunn Simi, LP. November.
- SWRCB (State Water Resources Control Board). 2010. Order R4-2010-0108, NPDES Permit No. CAS004002, Waste Discharge Requirements for Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein. July 8. [Online]: https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/ventura_ms4/AdoptedVenturaCountyms4/Order.pdf. Accessed June 14, 2024.
- _____. 2021. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [Online]: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf. Accessed June 13, 2024.
- _____. 2022. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order WQ 2022-0057-DWQ, NPDES No. CAS000002. [Online]: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_order.pdf. Accessed June 14, 2024.
- _____. 2024a. Welcome to the Construction Stormwater Program. [Online]: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed June 13, 2024.
- _____. 2024b. Geotracker. [Online]: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=los+angeles+harbor+college>. Accessed June 10, 2024.
- Tree Care Consulting. 2024. Protected Tree Report. Prepared for Dunn Simi, LP. February 29.
- U.S. Census Bureau. 2022. DP03 Selected Economic Characteristics Ventura County. [Online]: <https://data.census.gov/table/ACSDP1Y2022.DP03?g=050XX00US06111>. Accessed June 7, 2024.
- USEPA (United States Environmental Protection Agency). 2007. Developing Your Stormwater Pollution Prevention Plan. A Guide for Construction Sites. [Online]: https://www.epa.gov/sites/default/files/2015-10/documents/sw_swppp_guide.pdf. Accessed June 14, 2024.
- USGS (United States Geological Survey). U.S. Quaternary Faults. 2024a. [Online]: <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed June 10, 2024.
- _____. 2024b. Areas of Land Subsidence in California. [Online]: https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed June 10, 2024.

- Ventura County. 2010. Ventura County General Plan Resource Protection Map. [Online]: https://docs.vcrma.org/images/pdf/planning/tree-permits/Resource_Protection_Map_South.pdf. Accessed June 7, 2024.
- VCFD (Ventura County Fire Department). 2024. Station 41. [Online]: <https://vcfd.org/station-41/>. Accessed June 7, 2024.
- Waste Management. 2024. Simi Valley Landfill & Recycling Center. [Online]: https://www.wmsolutions.com/pdf/factsheet/Simi_Valley_Landfill.pdf. Accessed June 15, 2024.

Appendix A

Air Quality Assessment

Air Quality Assessment
4100 Guardian Street Warehouse Project
City of Simi Valley, California

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APPENDICES

Appendix A: Air Quality Modeling Data

LIST OF ABBREVIATED TERMS

AQMP	air quality management plan
AB	Assembly Bill
ADT	average daily traffic
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CO	carbon monoxide
cy	cubic yards
DPM	diesel particulate matter
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
H ₂ S	hydrogen sulfide
Pb	lead
LST	local significance threshold
µg/m ³	micrograms per cubic meter
mg/m ³	milligrams per cubic meter
NAAQS	National Ambient Air Quality Standards
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
O ₃	ozone
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
ppm	parts per million
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SVMC	Simi Valley Municipal Code
SRA	source receptor area
SCCAB	South Central Coast Air Basin
SCAG	Southern California Association of Governments
sf	square foot
SR	State Route
SO ₄₋₂	sulfates
SO ₂	sulfur dioxide
TAC	toxic air contaminant
C ₂ H ₃ Cl	vinyl chloride
VCAPCD	Ventura County Air Pollution Control District
VOC	volatile organic compound

1 INTRODUCTION

This report documents the results of an Air Quality Assessment completed for the 4100 Guardian Street Warehouse Project (Project). The purpose of this Air Quality Assessment is to evaluate the potential construction and operational emissions associated with the construction and operation of the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location

The Project is located at 4100 Guardian Street in the City of Simi Valley, California (City), approximately 1.11 miles south of California State Route 118 (SR-118) (Ronald Reagan Freeway). The 10.3-acre Project site is located at the southeast corner of Tapo Canyon Road and Guardian Street intersection and consists of one parcel (Assessor's Parcel Number 626-005-2065). The Project site is currently occupied by an office building and surface parking lot.

Existing uses surrounding the Project Include:

- North: Tapo Canyon Business Park;
- East: Light industrial (under construction as of July 9, 2023) and vacant land;
- South: American Jewish University; and
- West: Vacant land.

Refer to **Exhibit 1: Regional Location Map** and **Exhibit 2: Project Vicinity Map**, for the Project site location.

1.2 Project Description

The Project site currently consists of a single office park building, totaling 133,490 square feet (SF) in addition to surface parking and landscaping. The proposed Project would demolish the existing structure and construct a 179,490 SF warehouse building with associated parking and loading docks. The building includes 6,000 SF of office space in addition to 173,490 SF of warehouse space for a total of 179,490 SF; refer to **Exhibit 3: Conceptual Site Plan**. The existing parking aisles/spaces will be reconfigured to accommodate new on-site truck and vehicular traffic flow as part of the Project. Access to the Project site would be provided via the existing full-movement driveway on Guardian Street. A total of 54 parking stalls would be provided on-site.

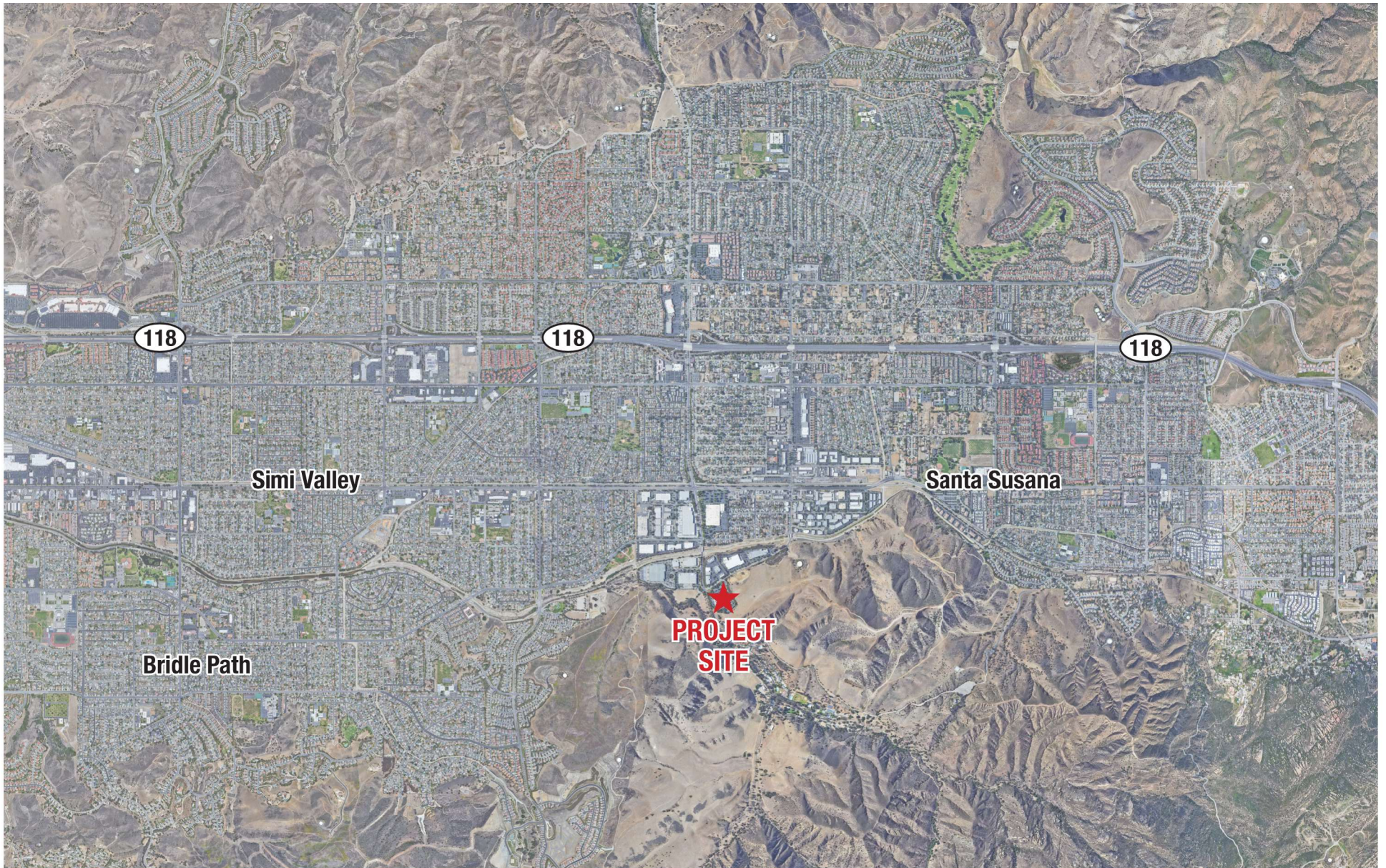


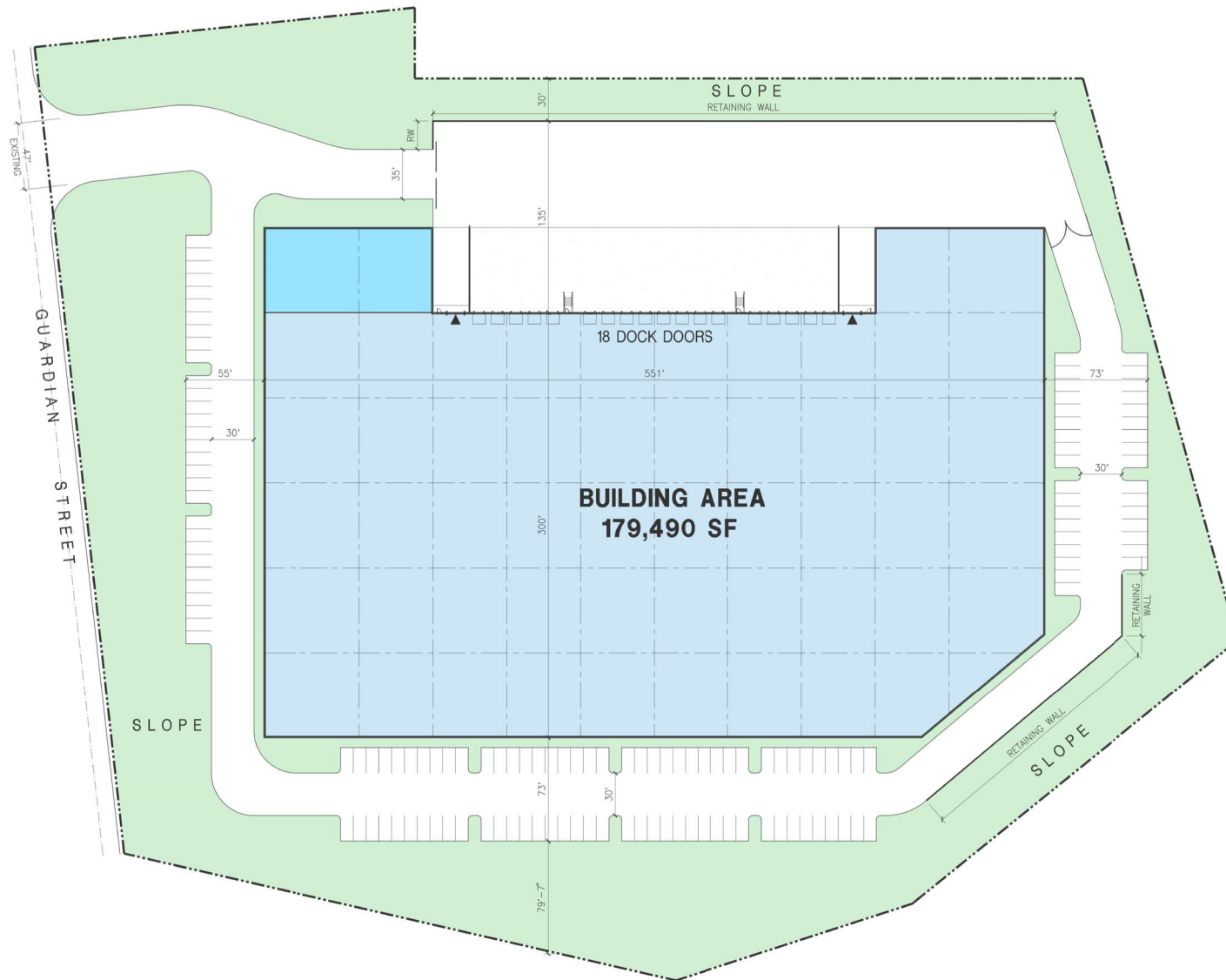
EXHIBIT 1: Regional Location Map
4100 Guardian Street Warehouse Project
City of Simi Valley





EXHIBIT 2: Project Vicinity Map
4100 Guardian Street Warehouse Project
City of Simi Valley





Legend

- POTENTIAL OFFICE WITH 2ND FLOOR
- WAREHOUSE
- DRIVE THRU DOOR

EXHIBIT 3: Conceptual Site Plan
4100 Guardian Street Warehouse Project
City of Simi Valley



Not to Scale

2 ENVIRONMENTAL SETTING

2.1 Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Project is located within the South Central Coast Air Basin (SCCAB), which includes all of Ventura, Santa Barbara, and San Luis Obispo counties. Climate in the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the high-pressure cell in the northwestern Pacific. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

The SCCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is characterized by warm, dry summers and cool winters with occasional rainy periods. This Mediterranean-type climate is also subject to seasonal Santa Ana winds. The annual average temperature throughout the SCCAB is typically cool, humid marine air causes frequent fog and low clouds along the coast, during the night and morning hours in the late spring and early summer months.

The vertical dispersion of air pollutants in the Oxnard Plain Airshed is limited by the presence of persistent temperature inversions. Because air cools under decreased atmospheric pressure, temperatures typically decrease with altitude. A reversal of this state in the atmosphere, where temperature increases with height, is known as an inversion. The base of the inversion, or the mixing height, represents an abrupt change in the density of the atmosphere so that the air below the inversion base does not mix with the air above the base. Two types of temperature inversions (warmer air on top of colder air) are created in the area: subsidence and radiational (surface). The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from a high-pressure area to the low-pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but is most evident during the summer months. Surface inversions are formed by the more rapid cooling of air near the ground at night, especially during winter. This type of inversion is typically lower and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed. Ozone (O_3) is the primary air pollutant of concern during the subsidence inversions, while carbon monoxide (CO) and nitrogen oxide (NO_x) are of greatest concern during winter inversions.

2.2 Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by state and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_x), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_x , SO_2 , PM_{10} , and $PM_{2.5}$ are criteria pollutants. ROG and NO_x are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O_3) is formed by a chemical reaction between ROG and NO_x in the presence of sunlight. O_3 and nitrogen dioxide (NO_2)

are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 1: Air Contaminants and Associated Public Health Concerns**.

Table 1: Air Contaminants and Associated Public Health Concerns		
Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM ₁₀ and PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) ¹ and nitrogen oxides (NO _x) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO ₂)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to O ₃ . Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
¹ Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).		
Source: U.S. Environmental Protection Agency, Criteria Air Pollutants, https://www.epa.gov/criteria-air-pollutants , Accessed November 2023.		

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e. chronic, carcinogenic or cancer causing) adverse human health effects (i.e. injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. These stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project are documented by measurements made by the Ventura County Air Pollution Control District (VCAPCD), the air pollution regulatory agency in the SCCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Pollutants of concern in the SCCAB include O₃, PM₁₀, and PM_{2.5}. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the Simi Valley – Cochran Street Monitoring Station (located approximately 1.8 miles to the northeast). Local air quality data from 2020 to 2022 are provided in **Table 2: Ambient Air Quality Data**, which lists the monitored maximum concentrations and number of exceedances of state or federal air quality standards for each year.

Table 2: Ambient Air Quality Data			
Criteria Pollutant	2020	2021	2022
Ozone (O₃)¹			
1-hour Maximum Concentration (ppm)	0.108	0.090	0.094
8-hour Maximum Concentration (ppm)	0.095	0.078	0.083
<i>Number of Days Standard Exceeded</i>			
CAAQS 1-hour (>0.09 ppm)	5	0	0
NAAQS 8-hour (>0.070 ppm)	22	8	10
Carbon Monoxide (CO)			
1-hour Maximum Concentration (ppm)	NA	NA	NA
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>35 ppm)	NA	NA	NA
CAAQS 1-hour (>20 ppm)	NA	NA	NA
Nitrogen Dioxide (NO₂)¹			
1-hour Maximum Concentration (ppm)	0.042	0.035	0.046
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>100 ppm)	NA	NA	NA
CAAQS 1-hour (>0.18 ppm)	NA	NA	NA
Particulate Matter Less Than 10 Microns (PM₁₀)¹			
National 24-hour Maximum Concentration	90.5	103.7	45.8
State 24-hour Maximum Concentration	90.1	101.5	44.1
State Annual Average Concentration (CAAQS=20 µg/m ³)	NA	21.9	20.5
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>150 µg/m ³)	0	0	0
CAAQS 24-hour (>50 µg/m ³)	NA	3	0
Particulate Matter Less Than 2.5 Microns (PM_{2.5})¹			
National 24-hour Maximum Concentration	34.9	32.9	22.7
State 24-hour Maximum Concentration	34.9	32.9	22.7
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>35 µg/m ³)	0	0	0
NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m ³ = micrograms per cubic meter; NA = not measured/not available			
¹ Measurements taken at the Simi Valley – Cochran Street Monitoring Station at 5400 Cochran Street, Simi Valley, California (CARB# 56434)			
Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (https://www.arb.ca.gov/adam) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System (https://www.arb.ca.gov/qaweb/siteinfo.php).			

2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive land uses nearest to the Project are shown in **Table 3: Sensitive Receptors**.

Table 3: Sensitive Receptors	
Receptor Description	Distance and Direction from the Project
Single-Family Residences	965 feet to the north
American Jewish University	200 feet to the south
Source: Google Earth, 2023	

3 REGULATORY SETTING

3.1 Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the United States Environmental Protection Agency (EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O₃, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of Federal notification, the EPA is required to develop a Federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. The EPA has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in **Table 4: State and Federal Ambient Air Quality Standards**.

3.2 State of California

California Air Resources Board

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 4**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA) requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a state standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 4**.

Table 4: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards ¹	Federal Standards ²
Ozone (O ₃) ^{2, 5, 7}	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm
	1 Hour	0.09 ppm (180 µg/m ³)	NA
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)
	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	0.10 ppm ¹¹
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)
Sulfur Dioxide (SO ₂) ⁸	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)
	Annual Arithmetic Mean	NA	0.03 ppm (80 µg/m ³)
Particulate Matter (PM ₁₀) ^{1, 3, 6}	24-Hour	50 µg/m ³	150 µg/m ³
	Annual Arithmetic Mean	20 µg/m ³	NA
Fine Particulate Matter (PM _{2.5}) ^{3, 4, 6, 9}	24-Hour	NA	35 µg/m ³
	Annual Arithmetic Mean	12 µg/m ³	9 µg/m ³
Sulfates (SO ₄₋₂)	24 Hour	25 µg/m ³	NA
Lead (Pb) ^{10, 11}	30-Day Average	1.5 µg/m ³	NA
	Calendar Quarter	NA	1.5 µg/m ³
	Rolling 3-Month Average	NA	0.15 µg/m ³
Hydrogen Sulfide (H ₂ S)	1 Hour	0.03 ppm (0.15 µg/m ³)	NA
Vinyl Chloride (C ₂ H ₃ Cl) ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	NA

ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; – = no information available.

¹ California standards for O₃, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM₁₀, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e. all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard.

² National standards shown are the "primary standards" designed to protect public health. National standards other than for O₃, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O₃ standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour O₃ standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³.

³ Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.

⁴ On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour O₃ concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O₃ level in the area.

⁵ The national 1-hour O₃ standard was revoked by the EPA on June 15, 2005.

⁶ In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀.

⁷ The 8-hour California O₃ standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.

⁸ On June 2, 2010, the EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO₂ NAAQS however must continue to be used until one year following EPA initial designations of the new 1-hour SO₂ NAAQS.

⁹ In February 2024, U.S. EPA strengthened the annual PM_{2.5} NAAQS from 12.0 to 9.0 µg/m³. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is 90 days following the publication of the notice of final rulemaking in the Federal Register (pending).

¹⁰ CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.

¹¹ National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.

Source: South Coast Air Quality Management District, *Air Quality Management Plan*, 2016; California Air Resources Board, *Ambient Air Quality Standards*, May 6, 2016.

3.3 Regional

Ventura County Air Pollution Control District

The VCAPCD is the air pollution control agency for Ventura County. The agency's primary responsibility is ensuring that state and federal ambient air quality standards are attained and maintained in the SCCAB. The VCAPCD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to VCAPCD rules and regulations in effect at the time of construction.

The VCAPCD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The VCAPCD adopted the *2022 Ventura County Air Quality Management Plan* (2022 AQMP) on December 13, 2022. The purpose of the 2022 AQMP is to set forth a combined state and local strategy for attaining the 2015 federal 8-hour O₃ standards by August 3, 2027. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the SCAG's 2020 Connect SoCal *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and updated emission inventory methodologies for various source categories.

The VCAPCD has published the Ventura County Air Quality Assessment Guidelines (VCAPCD Guidelines) (first adopted in 1980 and have been revised several times since with the most recent change dated October 2003). The VCAPCD Guidelines help local government agencies and consultants to develop environmental documents required by California Environmental Quality Act (CEQA) and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the VCAPCD Guidelines and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The VCAPCD periodically provides supplemental guidance and updates to the handbook on their website.

The state and federal attainment status designations for the SCCAB are summarized in **Table 5: South Central Coast Air Basin Attainment Status**. The SCCAB is currently designated as a nonattainment area with respect to the State O₃ and PM₁₀, as well as the national 8-hour O₃ standards. The SCCAB is designated as attainment or unclassified for the remaining state and federal standards.

Table 5: South Central Coast Air Basin Attainment Status		
Pollutant	State	Federal
Ozone (O ₃) (1 Hour Standard)	Non-Attainment	Non-Attainment
Ozone (O ₃) (8 Hour Standard)	Non-Attainment	Non-Attainment (Serious)
Particulate Matter (PM _{2.5}) (24 Hour Standard)	Attainment	Unclassified/Attainment
Particulate Matter (PM _{2.5}) (Annual Standard)	Attainment	Attainment
Particulate Matter (PM ₁₀) (24 Hour Standard)	Non-Attainment	Unclassified
Particulate Matter (PM ₁₀) (Annual Standard)	Non-Attainment	Attainment
Carbon Monoxide (CO) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Carbon Monoxide (CO) (8 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO ₂) (Annual Standard)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO ₂) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO ₂) (24 Hour Standard)	Attainment	–
Lead (Pb) (30 Day Standard)	Attainment	Attainment
Lead (Pb) (3 Month Standard)	Attainment	–
Sulfates (SO ₄₋₂) (24 Hour Standard)	Attainment	–
Hydrogen Sulfide (H ₂ S) (1 Hour Standard)	Unclassified	–

Source: Ventura County Air Pollution Control, *Air Quality Management Plan*, 2022; United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants (Green Book)*, <https://www3.epa.gov/airquality/greenbook/ancl.html>, 2020; California Air Resources Board, *Ambient Air Quality Standards Designation Tool* (<https://ww2.arb.ca.gov/aaqs-designation-tool>), 2023.

The following is a list of VCAPCD rules that are required of construction activities associated with the Project:

- Rule 51 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- Rule 55 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.

- a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - b) All on-site roads are paved as soon as feasible, watered regularly, or chemically stabilized.
 - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down following the work day to remove soil from pavement.
- **Rule 74.2 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

3.4 Local

City of Simi Valley General Plan

The City of Simi Valley General Plan (SVGP) is a roadmap that encompasses the hopes, aspirations, values and dreams of the community. The SVGP does not mention specific standalone air quality goals and policies for the City. Instead, the SVGP has goals and policies to improve air quality through transportation infrastructure. Since there are limited Project-relevant policies specific to air quality, related policies are mentioned in this section. Where inconsistencies exist, if any, they are addressed in the respective impact analysis below. SVGP policies related to air quality include the following:

Policy LU-1.2: **Development Location.** Limit development to lands within the Simi Valley City Urban Restriction Boundary (CURB), as shown in Figure LU-1, thereby protecting existing agriculture, open space, viewsheds, wildlife, and watersheds surrounding the City from development impacts and limiting urban sprawl.

Policy LU-20.7: **Buffering from Adjacent Properties.** Ensure that business and industrial park developments are positive additions to the City's community setting, incorporating adequate landscaped buffers to minimize any negative impacts to surrounding neighborhoods and development, and controlling on-site lighting, noise, odors, vibrations, toxic materials, truck access, and other elements that may impact adjoining non-business-park and non-industrial uses.

Goal NR-9: Air Quality in the City and the Simi Valley environs is improved.

Policy NR-9.6: **Construction and Operation.** Evaluate development project applications, including for particulate matter, by using the procedures and thresholds established in the most recent version of the Ventura County Air Quality Assessment Guidelines as published by the Ventura County Air Pollution Control District, and ensure that projects incorporate all applicable construction and operation mitigation measures contained therein.

Goal IU-6: Reliable Energy Resources. Affordable, reliable, and environmentally sensitive energy resources are available for the City's residents and businesses.

Policy IU-6.3: **Energy Conservation.** Install energy efficient appliances and alternative energy infrastructure such as photovoltaic panels (solar power panels) on all City facilities.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Air Quality Thresholds

To evaluate the proposed Project's potential impacts to air quality, the following sources were consulted during the development of thresholds of significance: Appendix G of the CEQA Guidelines and the VCAPCD Guidelines. The criteria for these sources are identified below.

CEQA Thresholds

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a Project normally would result in impacts related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable state or federal ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

VCAPCD Thresholds

The significance criteria established by VCAPCD may be relied upon to make the above determinations. Based on the VCAPCD Guidelines, an air quality impact is considered significant if the Project would:

- Generate daily emissions exceeding 25 pounds of reactive organic compounds (ROG) or nitrogen oxides (NO_x).
- Be inconsistent with goals and policies of the 2022 AQMP.
- Create a human health hazard by exposing sensitive receptors to toxic air emissions.
- Create objectionable odors affecting a substantial number of people.
- Cause an exceedance or make a substantial contribution to an exceedance of an ambient air quality standard.
- Directly or indirectly cause the exceed the population forecasts in the most recently adopted AQMP.

The VCAPCD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in **Table 6: Ventura County Air Pollution Control District Emissions Thresholds (Maximum Lbs/Day)**. According to the VCAPCD Guidelines, projects that generate more than 25 pounds per day (lbs/day) of ROG and NO_x may jeopardize attainment of the federal and State ozone standard, resulting in significant impacts on air quality. The ROG and NO_x threshold of 25 lbs/day are not intended to be counted towards construction emissions since these emissions are temporary.

With regard to particulate matter, the VCAPCD has not established quantitative thresholds for either construction or operation. However, the VCAPCD has indicated that a project may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable

number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (see California Health and Safety Code, Division 26, §41700) would have a significant adverse air quality impact. This threshold would be applicable to the generation of fugitive dust during construction grading operations.

Table 6: Ventura County Air Pollution Control District Emissions Thresholds (Maximum Lbs/Day)		
Criteria Air Pollutants and Precursors	Construction-Related	Operational-Related
Reactive Organic Gases (ROG)	None	25
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO _x)	None	25
Sulfur Oxides (SO _x)	None	None
Coarse Particulates (PM ₁₀)	None	None
Fine Particulates (PM _{2.5})	None	None

Source: Ventura County Air Pollution Control District, *Ventura County Air Quality Assessment Guidelines*, October 2003.

Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the Project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project are above State and federal CO standards (the more stringent California standards are 20 ppm for 1-hour and 9 ppm for 8-hour). The SCCAB has been designated as attainment under the 1-hour and 8-hour standards.

4.2 Methodology

This air quality impact analysis considers construction and operational impacts associated with the Project. Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Air quality impacts were assessed according to methodologies recommended by CARB and the VCAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a Statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Air Quality Analysis

Threshold 5.1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the state and federal ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the SCCAB and is under the jurisdiction of the VCAPCD. The VCAPCD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SCCAB is in nonattainment. To reduce such emissions, the VCAPCD adopted the 2022 AQMP. The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2022 AQMP is a regional and multi-agency effort including the VCAPCD, the CARB, the SCAG, and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the VCAPCD's AQMP.

According to the VCAPCD Guidelines, the purpose of the consistency finding is to determine if a project is inconsistent with the goals of the AQMP, such as directly or indirectly causing the existing population to exceed the population forecasts in the most recently adopted AQMP. The VCAPCD Guidelines state that project consistency with the AQMP can be determined by comparing the actual population growth in the County with the projected growth rates used in the AQMP. However, if there are more recent population forecasts that have been adopted by the Ventura Council of Governments (VCOG) where the total County population is lower than that included in the most recently adopted AQMP population forecasts, lead agencies may use the more recent VCOG forecasts for determining AQMP consistency.

The proposed Project consists of a light industrial development that would not result in a direct increase in population since the proposed buildings would not accommodate any new residents. As such, the Project would not result in substantial unplanned growth or unaccounted for growth in the General Plan or growth projections used by the VCAPCD to develop the 2022 AQMP. Thus, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Threshold 5.2 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 state or federal ambient air quality standard?

Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O₃-precursor pollutants (i.e. ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the VCAPCD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from demolition, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

Construction is expected to commence in September 2024 and be completed by late 2025. Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See **Appendix A: Air Quality Modeling Data** for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the Project are summarized in **Table 7: Construction-Related Emissions**.

Table 7: Construction-Related Emissions						
Construction Year	Emissions (Maximum Pounds Per Day)					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO₂)	Coarse Particulate Matter (PM₁₀)	Fine Particulate Matter (PM_{2.5})
2024	3.72	36.06	33.99	0.08	11.89	5.47
2025	14.80	19.55	29.02	0.04	2.22	1.08
Notes: VCAPCD Rule 55 Fugitive Dust applied. The Rule 55 reduction/credits include the following action to minimize fugitive dust: securing tarps over truckloads of soil material; watering exposed soil surfaces and bulk material stockpiles; limited speeds on unpaved roads. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.						
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.						

Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. The greatest emissions of fugitive dust would occur during the construction phases, site preparation and grading, from the use of earth-moving equipment. VCAPCD Rules 51 and 55 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. VCAPCD Rule 74.2 (architectural coatings) is also applicable to the Project and would limit the VOC content for specific coating categories that may be used during construction. The Project would be subject to these applicable VCAPCD rules to minimize fugitive dust and limit VOC content in specific coatings. As noted above, VCAPCD does not intend for the

significance threshold of 25 lbs/day for ROG and NO_x to be applied to construction emissions since these emissions are temporary. Compliance with VCAPCD Rules 51, 55, and 74.2 would ensure that Project construction emissions would not result in a cumulatively considerable net increase of any criteria pollutant. Therefore, impacts related to temporary construction activities would be less than significant.

Operational Emissions

Project-generated emissions would be primarily associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings. **Table 8: Operational Emissions** shows the estimated operational emissions for the existing office building on-site and for the proposed Project. **Table 8** shows the estimated net long-term emissions for the proposed Project. As shown in **Table 8**, the Project's overall net operational emissions would be lower than the existing office building for all criteria pollutants except for NO_x. While the Project's operational emissions would be slightly higher than the existing office building for NO_x, the Project's net operational emissions would be below the VCAPCD daily emissions thresholds of 25 lbs/day for NO_x.

Table 8: Operational Emissions						
Source	Emissions (Maximum Pounds Per Day)					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Existing Operational Emissions						
Area Source Emissions	3.98	0.05	5.80	<0.01	0.01	0.01
Energy Emissions	0.05	0.95	0.80	0.01	0.07	0.07
Mobile Emissions	7.42	8.13	63.78	0.15	1354	3.51
Total Emissions	11.45	9.13	70.39	0.16	13.62	3.59
Proposed Project Operational Emissions						
Area Source Emissions	5.37	0.07	7.81	<0.01	0.01	0.01
Energy Emissions	0.05	0.95	0.79	0.01	0.07	0.07
Mobile Emissions	1.41	6.65	15.61	0.07	4.86	1.32
Forklift Emissions	1.71	15.70	21.37	0.03	1.10	1.01
Generator Emissions	1.69	4.71	4.30	0.01	0.25	0.25
Total Emissions	10.23	28.08	49.88	0.12	6.29	2.66
Total Net Operational Emissions						
Total Net Emissions	-1.22	18.95	-20.51	-0.04	-7.33	-0.93
<i>VCAPCD Threshold</i>	25	25	None	None	None	None
Exceeds Threshold?	No	No	N/A	N/A	N/A	N/A
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.						
Note: Total values are from CalEEMod and may not add up 100% due to rounding.						

Area Source Emissions

Area source emissions would be generated due to on-site equipment, architectural coating, and landscaping. As shown in **Table 8**, the Project's net area source emissions would not exceed VCAPCD thresholds.

Energy Source Emissions

Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be for miscellaneous equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in **Table 8**, the Project's net energy source emissions would not exceed VCAPCD thresholds for criteria pollutants.

Mobile Source

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern. NO_x and ROG react with sunlight to form O₃, known as photochemical smog. Additionally, wind currents readily transport PM₁₀ and PM_{2.5}. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition and incorporated into CalEEMod as recommended by the VCAPCD. The Project would generate 325 daily trips. When the existing office building is demolished, the vehicle trips currently generated by the current land use will no longer utilize the roadway system. Therefore, emissions associated with the vehicle trips from the existing office use (1,447 daily trips) have been applied as a credit for the Project's overall net emissions. As shown in **Table 8**, the anticipated net mobile source emissions from the Project would not exceed VCAPCD thresholds for criteria pollutants.

Off-Road Equipment Emissions

Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. It was conservatively assumed that the Project would include 4 diesel forklifts per SCAQMD data.¹

Emergency Backup Generator

As the Project is a warehouse, it is conservatively assumed that a backup generator would be used in the event of a power failure. Generators would not be part of the Project's normal daily operations. Nonetheless, emissions associated with one emergency backup generator was included to be conservative. Emissions from an emergency backup generator was calculated separately from CalEEMod; refer to **Appendix A**. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the VCAPCD prior to installation. Emergency backup generators must comply with the California Air Toxic Control Measure for Stationary Diesel Engines and VCAPCD Rule 74.9 (Stationary Internal Combustion Engines), which would minimize emissions.

Cumulative Short-Term Emissions

The SCCAB is designated nonattainment for O₃ and PM₁₀ for State standards and nonattainment for O₃ for Federal standards. The VCAPCD's significance thresholds are designed to ensure compliance with both NAAQS and CAAQS and are based on an inventory of projected emissions in the SCCAB. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative impact on air quality in the SCCAB would not be cumulatively considerable for those

¹ SCAQMD, *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results*, June 2014.

pollutants that are in nonattainment in the SCCAB. As identified above, the VCAPCD has not established quantitative thresholds for temporary construction impacts, however the VCAPCD recommends minimizing fugitive dust through dust control measures. The Project would be required to comply with VCAPCD Rule 55 to implement dust control measures during construction in order to ensure construction dust emissions are not generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. The proposed Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

Cumulative Long-Term Impacts

The VCAPCD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The VCAPCD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCCAB's existing air quality conditions. Therefore, a project that exceeds the VCAPCD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in **Table 8**, the Project's net operational emissions would not exceed VCAPCD thresholds. As a result, operational emissions associated with the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, adherence to VCAPCD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Threshold 5.3 Would the Project expose sensitive receptors to substantial pollutant concentrations?

Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The SCCAB is currently designated as attainment for both the 1-Hour and 8-Hour State and federal CO standards. The primary sources of diesel exhaust particulates in the Project vicinity are vehicles traveling along Guardian Street and Tapo Canyon Road. According to the *Simi Valley General Plan Environmental Impact Report* (June 2012) (SVGP Final EIR), Tapo Canyon Road from Los Angeles Avenue to Royal Avenue

has a volume of 14,300 average daily trips and 2,700 average daily trips from Royal Avenue to Guardian Way. Tapo Canyon Road is therefore considered a high volume roadway, which produce pollutants near the Project site. According to the Project's estimated trip generation, the Project would result in a net decrease of 1,122 (non-passenger car equivalent) less trips compared to the existing office use operating on-site. Thus, the reduced daily trips from the Project would actually contribute less CO than the existing use at the Project site. A project's localized air quality impact is considered significant if CO emissions create a hotspot where either the State one-hour standard of 20 ppm or the federal and state eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (level of service [LOS] E or worse). Because the Project would result in reduced daily trips when compared to the existing on-site office use, traffic generated by the Project would not result in exposing existing sensitive receptors to substantial pollutant concentrations. The Project would not result in a CO hotspot and would have less than significant impacts in regard to sensitive receptors.

Construction-Related Diesel Particulate Matter

Construction would result in the generation of DPM emissions from the use of off-road diesel equipment. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e. potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short-term and exhaust from construction equipment would dissipate rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction would be temporary and transient throughout the Project site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time which would limit the exposure of any proximate individual sensitive receptor to TACs.

Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited.

Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location, and the highly dispersive properties of DPM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions. Impacts would be less than significant.

Operational Diesel Particulate Matter

The CARB Land Use Handbook includes recommendations for siting new sensitive land uses near specific sources of air pollution such as distribution centers. Recommended minimum separation between

sensitive land uses and existing sources of pollutants are intended to reduce health risks from air pollution. Based on CARB recommendations, siting new sensitive receptors within 1,000 feet of a distribution center that generates more than 100 trucks per day should be avoided. According to Project trip generation estimates, the proposed Project would generate 52 daily trucks. Therefore, considering the anticipated number of daily trucks, highly dispersive properties of DPM, and the distance of the nearest sensitive receptors, sensitive receptors would not be exposed to substantial concentrations of operational TAC emissions. Impacts would be less than significant.

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] Cal.5th, Case No. S219783). The VCAPCD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme O₃ nonattainment areas such as the SCCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and VCAPCD Rule 26 for new or modified sources. The NSR Program² was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the VCAPCD's emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

NO_x and ROG are precursor emissions that form O₃ in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O₃ may be formed at a distance downwind from the sources. Breathing ground-level O₃ can result health effects that include: reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O₃ concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O₃ can make asthma symptoms worse and can increase sensitivity to asthma triggers.

The VCAPCD's 2022 AQMP focuses on the 2018 8-hour ozone standard and presents a combined local and state clean air strategy based on concurrent ROG and NO_x emission reductions. The largest source of NO_x emissions (an O₃ precursor) in 2018 were related to on-road sources. Although vehicle miles traveled in the SCCAB continue to increase, NO_x and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2022 AQMP demonstrates that the VCAPCD can achieve attainment of the 2015 federal 8-hour standard by 2027. In addition, since NO_x emissions also lead to the formation of PM_{2.5}, the NO_x reductions

² Code of Federal Regulation (CFR) [i.e. PSD (40 CFR 52.21, 40 CFR 51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S)]

needed to meet the O₃ standards will likewise lead to improvement of PM_{2.5} levels and attainment of PM_{2.5} standards.

There are significant challenges with correlating specific health effects that will occur as a result of a project's significant criteria air pollutant emissions. Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. In addition, such modeling efforts are costly, and the value of a project-specific analysis may be modest in relation to that cost. Furthermore, the results, while costly to produce, may not be particularly useful. For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level.

The mass emissions thresholds developed by VCAQMD and used by CEQA lead agencies throughout southern California to determine potential significance of project-related regional changes in the environment are not directly indicative of exceedances of applicable ambient air standards. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O₃ or PM. The effects on ground-level ambient concentrations of pollutants that may be breathed by people are also influenced by the spatial and temporal patterns of the emission sources. In other words, the effect on O₃ and PM concentrations from a given mass of pollutants emitted in one location may vary from the effect if that same mass of pollutants was emitted in an entirely different location in the SCCAB. The same effect may be observed when the daily and seasonal variation of emissions is taken into account. Regional-scale photochemical modeling, typically performed only for NAAQS attainment demonstration and rule promulgation, account for these changes in the spatial, temporal, and chemical nature of regional emissions.

Emissions from Project construction and operation would vary by time of day, month, and season, and the majority of Project-related emissions, being generated by mobile sources driving to and from the site, would be emitted throughout a wide area defined by the origins and destinations of people travelling to and from the proposed Project. As SCAQMD has stated "it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region."³

Specifically, for extremely large regional projects, the South Coast Air Quality Management District (SCAQMD) states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NO_x and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O₃. Based on its recent experiences applying regional scale models to relatively small

³ South Coast Air Quality Management District, *Amicus Brief in Support of Neither Party, Sierra Club v. County of Fresno*, 2015.

increase in emissions, SCAQMD stated in its Amicus Brief in the Sierra Club v. County of Fresno case: “[A] project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels.”⁴ The Brief makes it clear that SCAQMD does not believe that there must be a quantification of a project's health risks in CEQA documents prepared for individual projects. Any attempt to quantify the proposed Project's health risks would be considered unreliable and misleading. Also, the Project does not generate anywhere near 6,620 pounds per day of NO_x or 89,190 pounds per day of ROG (VOC) emissions, which SCAQMD stated was a large enough emission to quantify O₃-related health impacts. Therefore, the Project's emissions are not sufficiently high enough to use regional modeling program to correlate health effects on a basin-wide level.

As previously discussed, Project emissions would be less than significant and would not exceed VCAPCD thresholds (refer to **Table 8**). Localized effects of on-site Project emissions on nearby receptors were also found to be less than significant. Short- and long-term emissions from the Project are not expected to cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standards. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. A less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Threshold 5.4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The VCAPCD Guidelines identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the VCAPCD as odor sources.

During construction-related activities, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g. diesel exhaust from grading and construction equipment). These odors are a temporary short-term impact that is typical of construction projects and would disperse rapidly. The Project would not include any of the land uses that have been identified by the VCAPCD as odor sources. Therefore, the Project would not create objectionable odors.

Mitigation Measures: No mitigation is required.

Level of Significance: No impact.

⁴ South Coast Air Quality Management District, *Amicus Brief in Support of Neither Party, Sierra Club v. County of Fresno*, 2015.

6 REFERENCES

1. California Air Pollution Control Officers Association (CAPCOA), *Health Risk Assessments for Proposed Land Use Projects*, 2009.
2. California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM)*, 2020, 2021, 2022.
3. California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.
4. California Air Resources Board, *Current Air Quality Standards*, 2016.
5. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.
6. City of Simi Valley, *General Plan*, 2012.
7. City of Simi Valley, *Municipal Code*, 2020.
8. Federal Highway Administration, *Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*, 2016.
9. HPA Architecture, *4100 Guardian Street Conceptual Site Plan*, March 20, 2023.
10. Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, 2015.
11. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy*, 2020.
12. Ventura County Air Pollution Control District, *2022 Ventura County Air Quality Management Plan*, December 2022.
13. Ventura County Air Pollution Control District, *Ventura County Air Quality Assessment Guidelines*, 2003.
14. United States Environmental Protection Agency, *Criteria Air Pollutants*, 2023
15. United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants*, 2020.

Appendix A

Air Quality Modeling Data

Demolition Estimates

Building Area (Square Feet):	133,490 ft ²
Building Volume (Cubic Feet):	1,334,900 ft ³
Waste Volume (Cubic Feet):	333,725 ft ³
Waste Volume (Cubic Yards):	12,360 yd ³
Building Waste (Tons):	6,180 tons

Pavement Area	5.14 Acre
	74,339.11 Sqft
Pavement Thickness	0.5 feet
Pavement Volume	37,169.56 cubic feet
Pavement Density	145 lbs/cubic foot
	5,389,585.48 pounds
	2,695 tons

Demo:

Total demo of building:	133,490	SF	Based on the Project Description
Total demo of pavement:	5.14	Acre	Estimated using Google Earth
Total Demolition Material	8,875	tons	

Soil Import: 2,500 Based on the Project Description

Emergency Backup Generator Emissions

					UNMITIGATED			
	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	1	750	0.74	50	1	750	37,500

Emissions Rates (g/hp-hr)											
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.140	1.020	1.120	2.600	2.850	521.640	0.150	0.150	0.150	0.005	0.021

Source: User Guide for CalEEMod Version 2022.1, Appendix G, Table G-40.

Emissions (pounds/day)											
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.23	1.69	1.85	4.30	4.71	862.51	0.25	0.25	0.25	0.01	0.00
Total	0.23	1.69	1.85	4.30	4.71	862.51	0.25	0.25	0.25	0.01	0.00

Emissions (tons/year)											
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00
Total	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00

GHG Emissions (metric tons)	CO ₂	CH ₄	CO ₂ e
Project	19.56	0.00	19.56

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Ventura
Calendar Year: 2025
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumption	Total_Activity	Total_Population	Horsepower_Hours	
Ventura	2025	Industrial - Forklifts	Aggregate	100	Diesel	0.000518	0.000627	0.000746	0.007855	0.005773	1.348302	0.000404	0.000372	1.27722E-05		0	43813.32138	45353.79	110.9944433	764318.3755

g/hph											
	HC	ROG	TOG	CO	Nox	CO2	PM10	PM2_5	Sox	NH3	Fuel_gphr
2026	0.2245054	0.2716516	0.3232878	3.4032622	2.5008802	584.12919	0.1752262	0.1612081	0.005533343	0	18981379.94

Project Forklifts

4

HP 89
Hours per Day 8
Days per Year 365
1 pound = 453.5924 grams

Emissions Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	MT/yr	PM10 tons/yr
Project Forklifts	1.71	15.70	21.37	0.03	1.10	1.01	3,668	607.21	0.201

Based on aggregated emission rates obtained from CARB OFFROAD Version 1.0.3.
Number of forklifts per SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

4100 Guardian Existing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	4100 Guardian Existing
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	1.80
Location	4100 Guardian St, Simi Valley, CA 93063, USA
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	133	1000sqft	3.06	133,490	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.24	11.5	8.26	70.4	0.16	0.19	13.4	13.6	0.18	3.41	3.59	112	20,081	20,193	12.3	0.76	66.3	20,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.12	10.4	9.08	62.9	0.15	0.18	13.4	13.6	0.18	3.41	3.58	112	19,529	19,642	12.3	0.81	2.04	20,193
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.60	9.01	6.98	49.7	0.12	0.16	10.1	10.3	0.15	2.56	2.72	112	15,962	16,074	12.2	0.63	21.8	16,589
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	1.64	1.27	9.07	0.02	0.03	1.84	1.87	0.03	0.47	0.50	18.6	2,643	2,661	2.01	0.11	3.60	2,747

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

Mobile	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Area	1.03	3.98	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	9.24	11.5	8.26	70.4	0.16	0.19	13.4	13.6	0.18	3.41	3.59	112	20,081	20,193	12.3	0.76	66.3	20,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Area	—	3.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	8.12	10.4	9.08	62.9	0.15	0.18	13.4	13.6	0.18	3.41	3.58	112	19,529	19,642	12.3	0.81	2.04	20,193
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.98	5.46	6.00	46.1	0.11	0.08	10.1	10.2	0.08	2.56	2.64	—	11,141	11,141	0.49	0.49	21.4	11,322
Area	0.51	3.50	0.02	2.86	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	6.60	9.01	6.98	49.7	0.12	0.16	10.1	10.3	0.15	2.56	2.72	112	15,962	16,074	12.2	0.63	21.8	16,589
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874
Area	0.09	0.64	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96

Energy	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	757	757	0.05	< 0.005	—	760
Water	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4
Waste	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	1.20	1.64	1.27	9.07	0.02	0.03	1.84	1.87	0.03	0.47	0.50	18.6	2,643	2,661	2.01	0.11	3.60	2,747

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Total	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Total	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874

Total	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874
-------	------	------	------	------	------	------	------	------	------	------	------	---	-------	-------	------	------	------	-------

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571
Total	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.02	< 0.005	—	189
Total	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.02	< 0.005	—	189

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect ural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	1.03	0.95	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Total	1.03	3.98	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	2.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	3.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	0.09	0.09	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96
Total	0.09	0.64	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Total	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Total	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4
Total	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4

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

General Office Building	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Total	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Total	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8
Total	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
General Office Building	1,447	295	93.4	397,517	18,997	3,873	1,227	5,218,660

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	200,235	66,745	—

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)
General Office Building	2,358,491	532	0.0330	0.0040	3,544,299

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	23,725,678	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	124	—

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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General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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)
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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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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6

Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373

Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235
Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9

Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—
Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0

Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip Generation, ITE land use 710

4100 Guardian Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	4100 Guardian
Construction Start Date	9/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	1.80
Location	4100 Guardian St, Simi Valley, CA 93063, USA
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Unrefrigerated Warehouse-No Rail	173	1000sqft	3.98	173,490	0.00	—	—	—
General Office Building	6.00	1000sqft	3.43	6,000	143,296	—	—	—
Parking Lot	2.89	Acre	2.89	0.00	0.00	—	—	—

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	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.8	34.6	29.0	0.08	1.15	10.7	11.9	1.06	1.88	2.94	—	10,758	10,758	0.31	1.17	16.8	11,132
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.8	36.1	34.0	0.08	1.60	10.7	11.9	1.47	3.99	5.47	—	10,750	10,750	0.31	1.17	0.44	11,108
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.51	9.12	13.5	0.02	0.35	1.46	1.79	0.33	0.45	0.76	—	3,009	3,009	0.12	0.12	1.85	3,050
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	1.67	2.46	< 0.005	0.06	0.27	0.33	0.06	0.08	0.14	—	498	498	0.02	0.02	0.31	505

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.84	34.6	25.0	0.08	1.15	10.7	11.9	1.06	1.88	2.94	—	10,758	10,758	0.31	1.17	16.8	11,132
2025	14.8	19.4	29.0	0.04	0.79	1.43	2.22	0.73	0.34	1.08	—	6,016	6,016	0.23	0.21	7.41	6,093
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.72	36.1	34.0	0.08	1.60	10.7	11.9	1.47	3.99	5.47	—	10,750	10,750	0.31	1.17	0.44	11,108
2025	14.8	19.6	28.5	0.04	0.79	1.43	2.22	0.73	0.34	1.08	—	5,963	5,963	0.23	0.21	0.19	6,033
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.82	8.37	7.18	0.02	0.33	1.46	1.79	0.31	0.45	0.76	—	1,894	1,894	0.07	0.09	0.58	1,923
2025	3.51	9.12	13.5	0.02	0.35	0.81	1.17	0.33	0.20	0.52	—	3,009	3,009	0.12	0.12	1.85	3,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.15	1.53	1.31	< 0.005	0.06	0.27	0.33	0.06	0.08	0.14	—	314	314	0.01	0.02	0.10	318
2025	0.64	1.67	2.46	< 0.005	0.06	0.15	0.21	0.06	0.04	0.10	—	498	498	0.02	0.02	0.31	505

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.81	7.31	24.2	0.08	0.17	4.77	4.95	0.17	1.23	1.40	170	10,602	10,772	17.6	0.92	30.3	11,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.55	7.60	15.8	0.08	0.16	4.76	4.92	0.16	1.23	1.39	170	10,411	10,581	17.6	0.92	0.80	11,297

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.16	7.64	19.5	0.08	0.17	4.77	4.93	0.16	1.23	1.39	170	10,476	10,646	17.6	0.92	13.1	11,374
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.12	1.39	3.57	0.01	0.03	0.87	0.90	0.03	0.22	0.25	28.1	1,734	1,763	2.91	0.15	2.17	1,883

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	6.30	15.6	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,525	7,525	0.19	0.71	30.3	7,771
Area	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	6.81	7.31	24.2	0.08	0.17	4.77	4.95	0.17	1.23	1.40	170	10,602	10,772	17.6	0.92	30.3	11,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.41	6.65	15.0	0.07	0.09	4.76	4.85	0.08	1.23	1.31	—	7,366	7,366	0.19	0.71	0.78	7,584
Area	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

Total	5.55	7.60	15.8	0.08	0.16	4.76	4.92	0.16	1.23	1.39	170	10,411	10,581	17.6	0.92	0.80	11,297
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	6.66	14.9	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,415	7,415	0.19	0.72	13.1	7,646
Area	4.72	0.03	3.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	6.16	7.64	19.5	0.08	0.17	4.77	4.93	0.16	1.23	1.39	170	10,476	10,646	17.6	0.92	13.1	11,374
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.25	1.22	2.72	0.01	0.02	0.87	0.89	0.02	0.22	0.24	—	1,228	1,228	0.03	0.12	2.16	1,266
Area	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
Energy	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	434	434	0.03	< 0.005	—	436
Water	—	—	—	—	—	—	—	—	—	—	13.1	70.0	83.1	1.34	0.03	—	126
Waste	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	1.12	1.39	3.57	0.01	0.03	0.87	0.90	0.03	0.22	0.25	28.1	1,734	1,763	2.91	0.15	2.17	1,883

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

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

Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	8.71	8.71	—	1.32	1.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	8.71	8.71	—	1.32	1.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.50	1.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	206	206	0.01	< 0.005	—	207
Demolition	—	—	—	—	—	0.53	0.53	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.3
Demolition	—	—	—	—	—	0.10	0.10	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.88	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	9.67	2.24	0.05	0.09	1.83	1.91	0.09	0.51	0.60	—	7,128	7,128	0.16	1.14	15.9	7,487
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.92	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	196	196	0.01	0.01	0.02	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	10.0	2.28	0.05	0.09	1.83	1.92	0.09	0.51	0.60	—	7,129	7,129	0.16	1.14	0.41	7,473
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.61	0.14	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	430	430	0.01	0.07	0.41	451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.11	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.1	71.1	< 0.005	0.01	0.07	74.6

3.3. Site Preparation (2024) - Unmitigated

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

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

Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.07	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	228	228	0.01	0.01	0.03	231

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.30	6.30	< 0.005	< 0.005	0.01	6.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading/Infrastructure (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	5.17	4.55	0.01	0.22	—	0.22	0.20	—	0.20	—	994	994	0.04	0.01	—	998
Dust From Material Movement	—	—	—	—	—	0.54	0.54	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.94	0.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	165	165	0.01	< 0.005	—	165
Dust From Material Movement	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.12	1.22	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	261	261	0.01	0.01	0.03	264
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.13	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	402	402	0.01	0.06	0.02	422
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.6	39.6	< 0.005	< 0.005	0.08	40.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.6	60.6	< 0.005	0.01	0.06	63.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.55	6.55	< 0.005	< 0.005	0.01	6.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.0	10.0	< 0.005	< 0.005	0.01	10.5

3.7. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.24	7.79	0.01	0.26	—	0.26	0.24	—	0.24	—	1,432	1,432	0.06	0.01	—	1,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	1.14	1.42	< 0.005	0.05	—	0.05	0.04	—	0.04	—	237	237	0.01	< 0.005	—	238
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.33	4.70	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	1,000	1,000	0.05	0.04	4.03	1,016
Vendor	0.03	1.13	0.35	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	907	907	0.02	0.14	2.56	951
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.40	4.27	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	955	955	0.05	0.04	0.10	968
Vendor	0.02	1.18	0.36	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	907	907	0.02	0.14	0.07	948
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.24	2.55	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	575	575	0.03	0.02	1.04	583
Vendor	0.02	0.70	0.21	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	542	542	0.01	0.08	0.66	567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.46	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	95.2	95.2	< 0.005	< 0.005	0.17	96.5
Vendor	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.7	89.7	< 0.005	0.01	0.11	93.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.76	2.35	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Paving	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.32	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.0	59.0	< 0.005	< 0.005	—	59.2
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.94	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	0.01	0.01	0.81	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.08	0.86	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	192	192	0.01	0.01	0.02	194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.5	45.5	< 0.005	< 0.005	0.08	46.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.53	7.53	< 0.005	< 0.005	0.01	7.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

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

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

Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	13.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	13.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.1	24.1	< 0.005	< 0.005	—	24.2
Architectural Coatings	2.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.00	4.00	< 0.005	< 0.005	—	4.01
Architectural Coatings	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.94	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	200	200	0.01	0.01	0.81	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.08	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	191	191	0.01	0.01	0.02	194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.8	34.8	< 0.005	< 0.005	0.06	35.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	0.01	5.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	5.21	1.49	0.04	0.07	1.52	1.59	0.07	0.41	0.48	—	4,280	4,280	0.06	0.62	16.5	4,481
General Office Building	1.23	1.10	14.1	0.03	0.02	3.25	3.27	0.02	0.82	0.84	—	3,245	3,245	0.12	0.09	13.8	3,289
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	0.00
Total	1.39	6.30	15.6	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,525	7,525	0.19	0.71	30.3	7,771
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	5.39	1.48	0.04	0.07	1.51	1.58	0.07	0.41	0.47	—	4,251	4,251	0.06	0.61	0.43	4,436
General Office Building	1.24	1.26	13.5	0.03	0.02	3.25	3.27	0.02	0.82	0.84	—	3,115	3,115	0.13	0.10	0.36	3,149
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	0.00
Total	1.41	6.65	15.0	0.07	0.09	4.76	4.85	0.08	1.23	1.31	—	7,366	7,366	0.19	0.71	0.78	7,584
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.99	0.27	0.01	0.01	0.28	0.29	0.01	0.07	0.09	—	709	709	0.01	0.10	1.18	740

General Office Building	0.22	0.22	2.45	0.01	< 0.005	0.59	0.60	< 0.005	0.15	0.15	—	519	519	0.02	0.02	0.98	525
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	0.00
Total	0.25	1.22	2.72	0.01	0.02	0.87	0.89	0.02	0.22	0.24	—	1,228	1,228	0.03	0.12	2.16	1,266

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184
General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Total	—	—	—	—	—	—	—	—	—	—	—	1,495	1,495	0.09	0.01	—	1,500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184

General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Total	—	—	—	—	—	—	—	—	—	—	—	1,495	1,495	0.09	0.01	—	1,500
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	195	195	0.01	< 0.005	—	196
General Office Building	—	—	—	—	—	—	—	—	—	—	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	247	247	0.02	< 0.005	—	248

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2

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	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2
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	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.02	< 0.005	—	179
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.45	8.45	< 0.005	< 0.005	—	8.48
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	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	187	187	0.02	< 0.005	—	187

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.28	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Total	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63

Total	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
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4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	24.9	27.0	0.21	0.01	—	33.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	24.9	27.0	0.21	0.01	—	33.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	12.7	65.9	78.6	1.31	0.03	—	121
General Office Building	—	—	—	—	—	—	—	—	—	—	0.34	4.12	4.46	0.03	< 0.005	—	5.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	13.1	70.0	83.1	1.34	0.03	—	126

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	14.6	0.00	14.6	1.45	0.00	—	50.9
General Office Building	—	—	—	—	—	—	—	—	—	—	0.50	0.00	0.50	0.05	0.00	—	1.74
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	9/1/2024	10/1/2024	5.00	22.0	—
Site Preparation	Site Preparation	10/2/2024	10/15/2024	5.00	10.0	—
Grading/Infrastructure	Grading	10/16/2024	12/31/2024	5.00	55.0	—

Building Construction	Building Construction	1/1/2025	10/31/2025	5.00	218	—
Paving	Paving	1/1/2025	4/30/2025	5.00	86.0	—
Architectural Coating	Architectural Coating	8/1/2025	10/31/2025	5.00	66.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading/Infrastructure	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading/Infrastructure	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading/Infrastructure	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading/Infrastructure	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading/Infrastructure	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	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	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	101	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading/Infrastructure	—	—	—	—
Grading/Infrastructure	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading/Infrastructure	Vendor	—	10.2	HHDT,MHDT
Grading/Infrastructure	Hauling	5.69	20.0	HHDT
Grading/Infrastructure	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	74.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	29.4	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	269,235	89,745	7,553

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	8,875	—
Site Preparation	—	—	15.0	0.00	—
Grading/Infrastructure	2,500	—	55.0	0.00	—

Paving	0.00	0.00	0.00	0.00	2.89
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5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
General Office Building	0.00	0%
Parking Lot	2.89	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	532	0.03	< 0.005
2025	0.00	532	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
Unrefrigerated Warehouse-No Rail	52.0	52.0	52.0	18,997	1,728	1,728	1,728	630,706
General Office Building	273	273	273	99,645	4,631	4,631	4,631	1,690,334
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	269,235	89,745	7,553

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)
Unrefrigerated Warehouse-No Rail	809,118	532	0.0330	0.0040	3,360,060
General Office Building	106,008	532	0.0330	0.0040	159,306
Parking Lot	110,278	532	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)
Unrefrigerated Warehouse-No Rail	40,119,563	0.00
General Office Building	1,066,402	1,852,466
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	163	—
General Office Building	5.58	—
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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
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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
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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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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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6
Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373
Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235

Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9
Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—

Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

Appendix A-1

Updated Operations Calculations

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project Schedule provided by Applicant
Operations: Vehicle Data	Trucks accounted for under Unrefrigerated Warehouse Passenger Vehicles accounted for under General Office
Operations: Fleet Mix	Trucks accounted for under unrefrigerated Warehouse Passenger Vehicles accounted for under General Office
Land Use	High -Cube Fulfillment Center Warehouse
Construction: Dust From Material Movement	Import 2500 CY

Operations Only - 4100 Guardian Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Operations Only - 4100 Guardian
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	1.80
Location	4100 Guardian St, Simi Valley, CA 93063, USA
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
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
Parking Lot	142	Space	3.00	0.00	—	—	—	—

General Office Building	6.00	1000sqft	3.40	6,000	—	—	—	—
Unrefrigerated Warehouse-No Rail	174	1000sqft	4.00	173,500	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.53	18.7	32.0	0.11	0.55	4.87	5.42	0.53	1.26	1.79	170	13,919	14,089	17.7	1.30	28.3	14,947
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.23	19.1	23.7	0.11	0.54	4.87	5.41	0.52	1.26	1.78	170	13,762	13,932	17.7	1.31	0.75	14,766
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.78	14.4	24.7	0.10	0.39	4.87	5.25	0.37	1.26	1.62	170	13,253	13,423	17.7	1.30	12.2	14,266
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.24	2.62	4.50	0.02	0.07	0.89	0.96	0.07	0.23	0.30	28.1	2,194	2,222	2.93	0.22	2.02	2,362

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	8.97	15.8	0.09	0.11	4.87	4.98	0.11	1.26	1.37	—	9,557	9,557	0.26	1.08	28.3	9,914
Area	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,629	2,629	0.19	0.01	—	2,637
Water	—	—	—	—	—	—	—	—	—	—	78.9	409	488	8.12	0.20	—	749
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.09	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Off-Road	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Stationary	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Total	8.53	18.7	32.0	0.11	0.55	4.87	5.42	0.53	1.26	1.79	170	13,919	14,089	17.7	1.30	28.3	14,947
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.51	9.44	15.2	0.09	0.11	4.87	4.98	0.11	1.26	1.37	—	9,432	9,432	0.27	1.09	0.73	9,765
Area	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,629	2,629	0.19	0.01	—	2,637
Water	—	—	—	—	—	—	—	—	—	—	78.9	409	488	8.12	0.20	—	749
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.09	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Off-Road	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Stationary	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Total	7.23	19.1	23.7	0.11	0.54	4.87	5.41	0.52	1.26	1.78	170	13,762	13,932	17.7	1.31	0.75	14,766
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.50	9.43	15.1	0.09	0.11	4.87	4.98	0.11	1.26	1.37	—	9,451	9,451	0.26	1.09	12.2	9,795

Area	4.72	0.03	3.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,629	2,629	0.19	0.01	—	2,637
Water	—	—	—	—	—	—	—	—	—	—	78.9	409	488	8.12	0.20	—	749
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.09	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Off-Road	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Stationar y	0.17	0.75	0.43	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	86.4	86.4	< 0.005	< 0.005	0.00	86.7
Total	6.78	14.4	24.7	0.10	0.39	4.87	5.25	0.37	1.26	1.62	170	13,253	13,423	17.7	1.30	12.2	14,266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.27	1.72	2.75	0.02	0.02	0.89	0.91	0.02	0.23	0.25	—	1,565	1,565	0.04	0.18	2.02	1,622
Area	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
Energy	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	435	435	0.03	< 0.005	—	437
Water	—	—	—	—	—	—	—	—	—	—	13.1	67.7	80.7	1.34	0.03	—	124
Waste	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Off-Road	0.06	0.58	0.82	< 0.005	0.03	—	0.03	0.03	—	0.03	—	110	110	< 0.005	< 0.005	—	110
Stationar y	0.03	0.14	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	14.3	14.3	< 0.005	< 0.005	0.00	14.3
Total	1.24	2.62	4.50	0.02	0.07	0.89	0.96	0.07	0.23	0.30	28.1	2,194	2,222	2.93	0.22	2.02	2,362

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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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	0.00
General Office Building	1.44	1.58	14.2	0.04	0.03	3.28	3.31	0.02	0.83	0.86	—	3,625	3,625	0.13	0.14	14.8	3,685
Unrefrigerated Warehouse-No Rail	0.09	7.39	1.58	0.05	0.09	1.59	1.68	0.08	0.43	0.51	—	5,932	5,932	0.13	0.94	13.5	6,229
Total	1.53	8.97	15.8	0.09	0.11	4.87	4.98	0.11	1.26	1.37	—	9,557	9,557	0.26	1.08	28.3	9,914
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	0.00
General Office Building	1.43	1.76	13.6	0.03	0.03	3.28	3.31	0.02	0.83	0.86	—	3,499	3,499	0.14	0.15	0.38	3,548
Unrefrigerated Warehouse-No Rail	0.09	7.67	1.60	0.05	0.09	1.59	1.68	0.08	0.43	0.51	—	5,933	5,933	0.13	0.94	0.35	6,217
Total	1.51	9.44	15.2	0.09	0.11	4.87	4.98	0.11	1.26	1.37	—	9,432	9,432	0.27	1.09	0.73	9,765
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	0.00
General Office Building	0.26	0.32	2.46	0.01	< 0.005	0.60	0.60	< 0.005	0.15	0.16	—	583	583	0.02	0.02	1.06	592

Unrefrigerated Warehouse Rail	0.02	1.41	0.29	0.01	0.02	0.29	0.31	0.02	0.08	0.09	—	982	982	0.02	0.16	0.96	1,030
Total	0.27	1.72	2.75	0.02	0.02	0.89	0.91	0.02	0.23	0.25	—	1,565	1,565	0.04	0.18	2.02	1,622

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	167	167	0.01	< 0.005	—	167
General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184
Total	—	—	—	—	—	—	—	—	—	—	—	1,501	1,501	0.09	0.01	—	1,506
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	167	167	0.01	< 0.005	—	167
General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184
Total	—	—	—	—	—	—	—	—	—	—	—	1,501	1,501	0.09	0.01	—	1,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	27.6	27.6	< 0.005	< 0.005	—	27.7
General Office Building	—	—	—	—	—	—	—	—	—	—	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	195	195	0.01	< 0.005	—	196
Total	—	—	—	—	—	—	—	—	—	—	—	248	248	0.02	< 0.005	—	249

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
Total	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131

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
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
Total	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131
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
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.45	8.45	< 0.005	< 0.005	—	8.48
Unrefrigerated Warehouse-No Rail	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.02	< 0.005	—	179
Total	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	187	187	0.02	< 0.005	—	187

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.28	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Total	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
Total	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	10.6	12.6	0.21	0.01	—	19.4
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
Total	—	—	—	—	—	—	—	—	—	—	78.9	409	488	8.12	0.20	—	749
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	10.6	12.6	0.21	0.01	—	19.4
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
Total	—	—	—	—	—	—	—	—	—	—	78.9	409	488	8.12	0.20	—	749
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.34	1.75	2.09	0.03	< 0.005	—	3.21
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	12.7	65.9	78.6	1.31	0.03	—	121
Total	—	—	—	—	—	—	—	—	—	—	13.1	67.7	80.7	1.34	0.03	—	124

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	308
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.09	0.00	—	318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	308
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.09	0.00	—	318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.50	0.00	0.50	0.05	0.00	—	1.74
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	14.6	0.00	14.6	1.45	0.00	—	50.9
Total	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Total	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664

Total	0.34	3.20	4.52	0.01	0.17	—	0.17	0.16	—	0.16	—	662	662	0.03	0.01	—	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.06	0.58	0.82	< 0.005	0.03	—	0.03	0.03	—	0.03	—	110	110	< 0.005	< 0.005	—	110
Total	0.06	0.58	0.82	< 0.005	0.03	—	0.03	0.03	—	0.03	—	110	110	< 0.005	< 0.005	—	110

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Total	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Total	1.23	5.51	3.14	0.01	0.18	0.00	0.18	0.18	0.00	0.18	0.00	630	630	0.03	< 0.005	0.00	633
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.03	0.14	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	14.3	14.3	< 0.005	< 0.005	0.00	14.3

Total	0.03	0.14	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	14.3	14.3	< 0.005	< 0.005	0.00	14.3
-------	------	------	------	---------	---------	------	---------	---------	------	---------	------	------	------	---------	---------	------	------

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
General Office Building	273	273	273	99,645	4,641	4,641	4,641	1,693,965
Unrefrigerated Warehouse-No Rail	52.1	52.1	52.1	18,998	1,728	1,728	1,728	630,742

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	269,250	89,750	7,841

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	114,476	532	0.0330	0.0040	0.00
General Office Building	106,008	532	0.0330	0.0040	159,306
Unrefrigerated Warehouse-No Rail	809,165	532	0.0330	0.0040	3,360,254

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	0.00
General Office Building	1,066,402	0.00
Unrefrigerated Warehouse-No Rail	40,121,875	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
General Office Building	5.58	—
Unrefrigerated Warehouse-No Rail	163	—

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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
Forklifts	Diesel	Average	4.00	8.00	89.0	0.20

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
Emergency Generator	Diesel	1.00	1.00	50.0	751	0.73

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
----------------	-----------

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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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)
-----------	--------	------------------------------	------------------------------

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3

Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6
Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—

2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373
Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235
Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4

Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9
Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—
Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project Description from Feb 2024 tech studies.
Operations: Vehicle Data	Project vehicles from Feb 2024 trip generation memo. Trip lengths consistent with Feb 2024 air quality study.
Operations: Fleet Mix	For Warehouse use - set fleet mix to 100 percent HHD Trucks.
Operations: Water and Waste Water	No net change in outdoor water use.
Operations: Off-Road Equipment	Project includes 4 forklifts.
Operations: Emergency Generators and Fire Pumps	Project includes 1 diesel backup generator.

Appendix B

Biological Resources Assessment

Biological Resources Assessment

4100 Guardian Street Project

August 2023

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Appendices

- Appendix A: Photograph Exhibit
- Appendix B: Special-Status Species Analysis

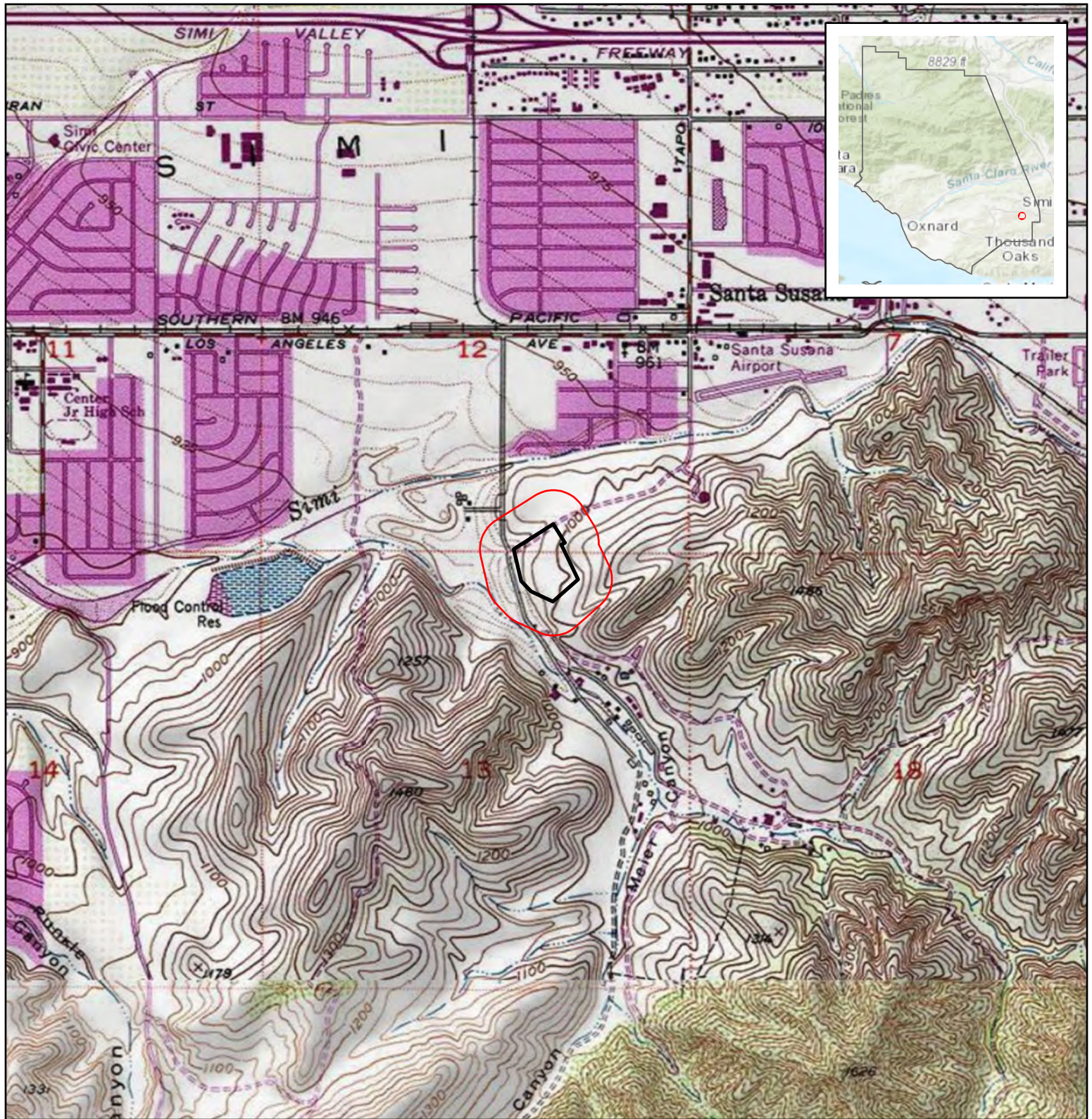
1. Introduction

This report includes findings of a biological resources assessment conducted by South Environmental at 4100 Guardian Street in the City of Simi Valley (City), California at the site of a proposed 4100 Guardian Project (project). The project includes the demolition of the existing building and the construction of a new building, a new loading dock, a new parking lot and driveway, and two new retaining walls (i.e. proposed development). The project site is entirely developed or ornamentally landscaped and currently functions as an office building complex. This report identifies and assesses the potential impacts to sensitive or protected biological resources on the 10.30-acre project site and within a 500-foot buffer study area. The study area is 47.31 acres in size. This report indicates the regulations governing the sensitive biological resources in the region of the study area and discusses recommendations for avoiding or mitigating potential impacts to these resources during the project. The biological resources of the study area were assessed based on a literature review and a field site survey.

Project Description

Location and Setting

As shown in Figure 1 below, the project site is at 4100 Guardian Street in the City of Simi Valley approximately 1.42 miles south of State Route (SR) 118. The project site is within the U.S. Geological Survey (USGS) Simi Valley East 7.5 Minute Topographical Quadrangle, and within Sections 12 and 13 of Township 02 North (02N) and Range 18 West (18W). Regional access to the Project site is via SR 118, Tapo Canyon Road, and Guardian Street. As shown in Figure 2 below, the 10.30-acre project site is located at 4100 Guardian Street (Assessor Parcel Numbers [APN] 6260052065 and 6260052095) and is entirely developed, ornamentally landscaped. A small portion of the southeast part of the study area is within unincorporated Ventura County. The project site is surrounded by developed, agricultural, and undeveloped land uses. Office and industrial uses surround the project site on the north, northwest, and northeast. Developed agricultural use, pasture agricultural use, and undeveloped areas surround the project site to the west, south, and east. The project site is approximately 430 feet northeast of an unnamed drainage that flows from southeast to northwest through the 500-foot buffer study area. Photographs of the study area are shown in Appendix A.



Source: ESRI USA Topo Maps and World Topo Map 2023

4100 Guardian Street Project

Figure 1. Regional Location

- Project Site
- Study Area (500-Foot Buffer)

Project Location is within Simi Valley, California, in Ventura County on the USGS Simi Valley East 7.5-minute quadrangle map in Section 12 and Section 13 of Township 02 North and Range 18 West

Center Coordinate (Decimal Degrees):
Latitude: 34.2639872N Longitude: -118.7147858W



0 1,000 2,000 Feet
Scale: 1: 24,000



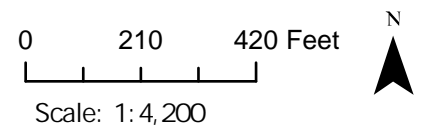


Source: BING Aerial Imagery 2023

4100 Guardian Street Project

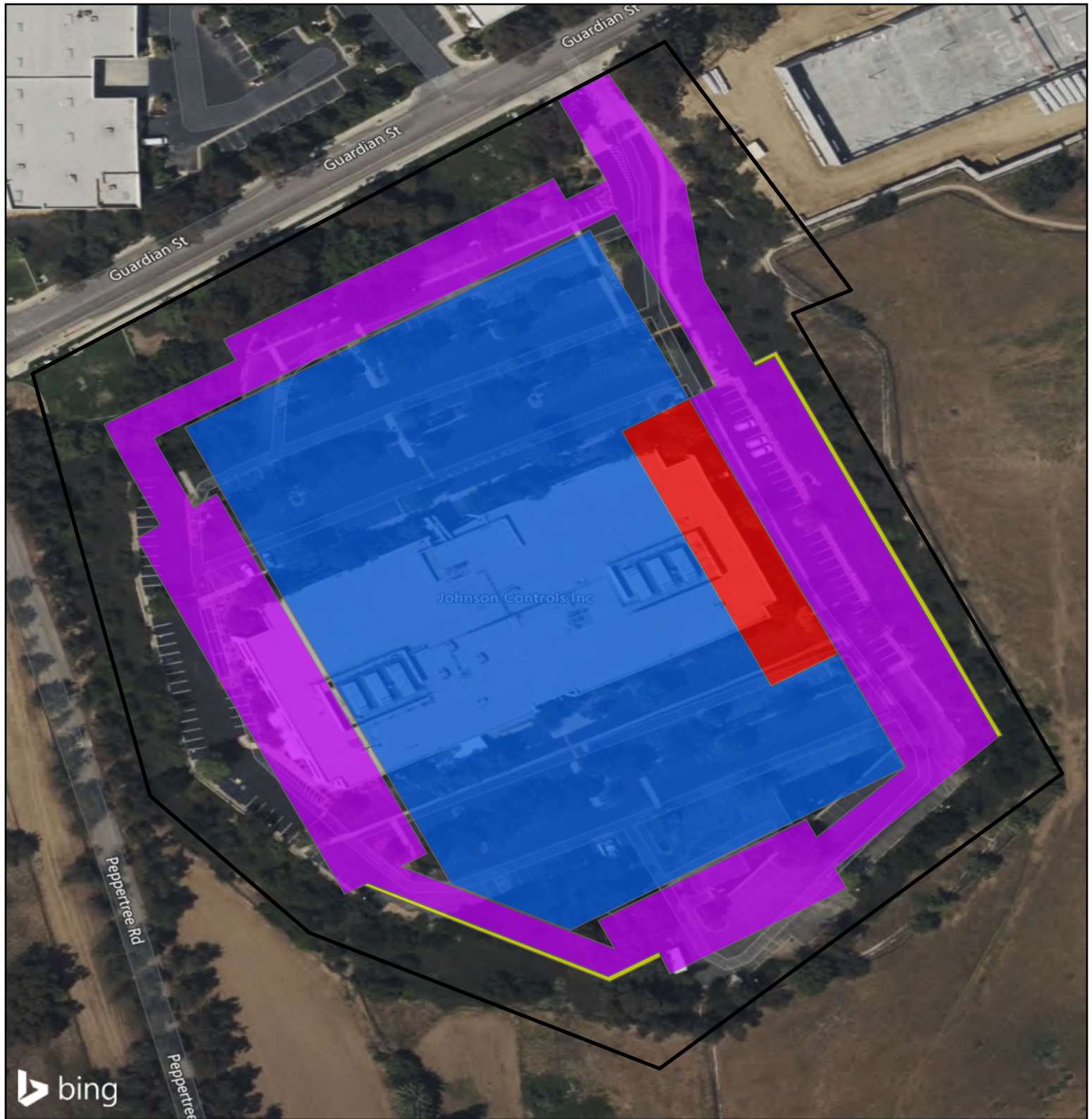
Figure 2. Project Vicinity

- Project Site
- Study Area (500-Foot Buffer)
- USFWS - National Wetland Inventory (NWI)



Proposed Development

As shown in Figure 3 the proposed project includes the demolition of the existing building and the construction of a new building, a new loading dock, a new parking lot and driveway alignment, and two new retaining walls. The development will include landscaping within the newly aligned parking areas and driveways as well as along the building. The construction footprint is entirely within the existing developed area and no new fuel modification or other off-site developments would be required.







Source: BING Aerial Imagery 2023

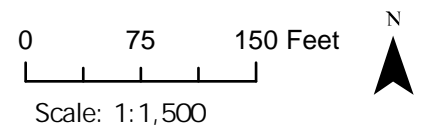
4100 Guardian Street Project

Figure 3. Proposed Development

 Project Site

Proposed Development

-  Building
-  Loading Dock
-  Parking and Driveway
-  Retaining Wall



2. Methodology

This biological resource assessment is based on information compiled through a field reconnaissance and a review of appropriate reference materials and literature regarding the biological resources of the region. A general biological field reconnaissance of plants and animals was conducted by South Environmental biologist James McNutt on July 18, 2023 and the sources and literature referenced in this assessment are provided below in Section 5 Bibliography.

Literature Review

The assessment of the project began with a review of literature relating to the biological resources that are known to occur in the vicinity of the project. The CDFW California Natural Diversity Database (CNDDDB) "Rarefind" query (CDFW, 2023a), the "Special Animals List" query (CDFW 2023b), and the California Native Plant Society (CNPSa; 2023) online Inventory of Rare and Endangered Plants of California were reviewed to identify special-status plants, animals, and natural communities that have previously been recorded in the USGS 7.5" Simi Valley East quad in which the Project site is located, and the eight surrounding USGS 7.5"quads: Piru, Val Verde, Newhall, Simi Valley West, Oat Mountain, Thousand Oaks, Calabasas, and Canoga Park (USGS 2023a). For plants, online sources CalFlora (2023) and Jepson E-flora (2023) were queried for information on current and historic range including elevation. For animals, the California's Wildlife: Life History and Range were consulted (CDFW, 2023c) for information on the current range of wildlife. In addition, queries were conducted of the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Environmental Conservation Online System (ECOS) for federally protected species (USFWS 2023a), the USFWS Designated and Proposed Critical Habitat maps (USFWS 2023b).

The following sources were consulted regarding the potential for wildlife movement corridors and water resources to occur on the study area:

- Google Earth online (Google 2023)
- California Protected Areas Database Map online (CPAD 2023)
- South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion (SC Wildlands 2006).
- National Wetlands Inventory online (USFWS 2022c)
- National Hydrography Dataset online (USGS 2022)

Google Earth online was used to assess the level of connectivity of habitat to the site. The foremost considerations were whether there was a direct connection of high-quality habitat to the Project

site — without interference from development — and whether the connecting habitat linked to large habitat tracts.

Biological Resource Survey Methods

South Environmental biologist James McNutt conducted a field reconnaissance of the project site and a 500-foot buffer (study area) on Tuesday, July 18, 2023, during the morning over a period of two hours. The weather was fair with a temperature of 75-82° F, light wind (7-10 mph) and 25-35% humidity. The purpose of the reconnaissance was to record plants and animals observed on the study area, characterize and map plant communities, and identify other locally significant resources such as native trees or wildlife movement areas.

Plant Community Mapping

Plant communities were mapped over the entire study area. The communities were mapped by hand in the field using aerial photographs of the Development Area at an approximate 1:300' scale by delineating dominant plant and habitat types observed in the field. The areas were later digitized using ArcGIS Pro mapping software to calculate acreages and assess impacts from the Project. Plant community descriptions follow vegetation classifications in the Manual for California Vegetation online (CNPSb, 2023).

Plant and Animal Inventories

All plant and wildlife species observed during the surveys, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Since common names, except for birds, vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter.

Wildlife Movement Assessment

During the South Environmental field reconnaissance, the project site and surrounding 500-foot study area were assessed for their potential use as a wildlife corridor or habitat linkage. The level of disturbance of the site and surrounding areas by way of development including roads, house and commercial structures, fences, and lighting were noted as they pertain to the connectivity of the site to high-quality habitat. The study area was assessed for the presence of a corridor of linkage of habitat that connects the site to adjacent high-quality habitat. Included in this assessment of a corridor was potential stream areas or those with unique natural feature (e.g., rock outcrops) which wildlife are known to frequently use as habitat linkages.

3. Environmental Setting

Physical Characteristics

Landforms and Geology

Regionally, the project site is in the northern foothills of the Santa Monica Mountains. The project site is approximately 25 miles northeast of the Pacific Ocean. Locally, the project site is located approximately 0.25 miles south of Arroyo Simi, approximately 0.54 miles east of Arroyo Simi Community Park, approximately 1.43 miles southwest of Rancho Santa Susana Community Center and Park, approximately 3.15 miles east of Rancho Simi Community Park, and approximately 5.25 miles northeast of Sinaloa Lake. The project site is underlain by surficial sediments from the Holocene epoch. The composite substrate is alluvial gravel and sand and clay of valleys and floodplain areas.

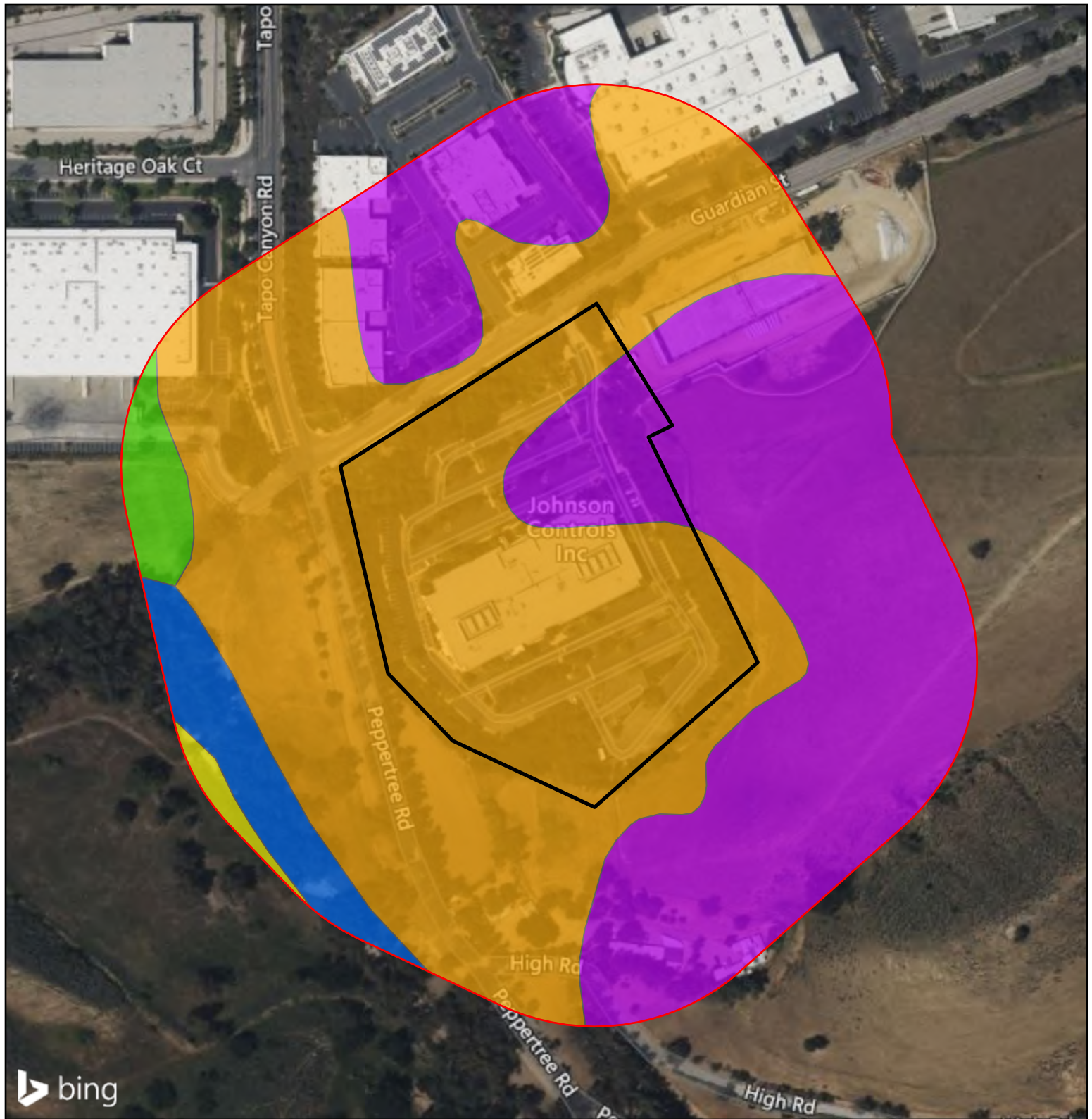
Topography and Climate

The elevation of the project site increases slightly from south to north. The project site has an elevation that increases from southwest to northeast. The low elevation is along the western border at approximately 960 feet, and the high elevation is approximately 1015 along its eastern boundary (Google Earth 2023). Average high and low temperatures for the City are 91°F and 63°F in the summer, respectively, and 67°F and 45°F in the winter, respectively. The region receives an average of 2.64 inches of precipitation per year, with no snowfall and rain occurring on an average of 29 days (about 4 weeks) per year (www.ncei.noaa.com, 2023).

Soils

According to the USDA Soils Database there are five soil complexes on the study area (USDA 2023), and they are shown in Figure 4:

- **Garretson loam, 2° to 9° slopes** occur in the extreme western portion of the study area outside the project site. This is found on alluvial fans and footslopes and is well drained.
- **Los Osos clay loam, warm, 9° to 15° slopes** occur in a large southwest to northeast swath of the study area and most of the project site. This is found on hill slopes, backslopes, and side slopes and is well drained.
- **Pico sandy loam, 2° to 9° slopes** occur in the northwest part of study area and out of the project site. This is found on alluvial fans, backslopes, and treads and is well drained.
- **Riverwash** occurs on a sliver of the western edge of the study area and outside the project site. This is the streambed for the unnamed drainage in the study area.



Source: BING Aerial Imagery 2023

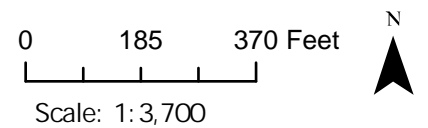
4100 Guardian Street Project

Figure 4. Soils

- Project Site
- Study Area (500-Foot Buffer)

Soils

- Garretson loam, 2 to 9 percent slopes
- Los Osos clay loam, warm, 9 to 15 percent slopes, eroded
- Pico sandy loam, 2 to 9 percent slopes
- Riverwash
- Soper gravelly loam, 30 to 50 percent slopes, eroded



- **Soper gravelly loam, 30° to 50° slopes** occur in the northern, eastern, and southern parts of the project site. This is found on hills, back slopes, and side slopes, and is well drained.

Aquatic Resources and Jurisdictional Features

According to the USGS National Watershed Boundary Dataset (USGS 2023c), the project site is part of the Upper Simi Arroyo Watershed. The unnamed drainage within the western boundary of the study area is an intermittent stream with a streambed that is seasonally flooded. The unnamed drainage has a large floodplain, a large riparian canopy, and a diversity of habitats all of which occur off of the project site. There are no water resources within the project site or proposed development area. The project site is separated from the unnamed drainage by fences and landscaping and has no direct connection to the unnamed drainage.

Biological Characteristics

Plants

The plants observed in the study area and project site were largely non-native ornamental and invasive species with a few native species that have been retained in place. Plants observed on the project site and study area are listed in Table 1. Plant types with an asterisk (*) are considered non-native and invasive as defined by the California Invasive Plant Council. CRPR = California Rare Plant Rank.

Table 1. Summary of Plants on Project Site and Immediate Surroundings

Common name	Scientific name	Native/Non-Native	CRPR
blackwood acacia	<i>Acacia melanoxylon</i>	*Non-Native	--
copper pinwheel	<i>Aeonium decorum</i>	Non-Native	--
lily of the Nile	<i>Agapanthus praecox</i>	Non-Native	--
American century plant	<i>Agave americana</i>	Non-Native	--
foxtail agave	<i>Agave attenuata</i>	Non-Native	--
tall kangaroo paw	<i>Anigozanthos flavidus</i>	Non-Native	--
California sage brush	<i>Artemisia californica</i>	Native	--
slim oat	<i>Avena barbata</i>	*Non-Native	--
Coyote brush	<i>Baccharis pilularis</i>	Native	--
black mustard	<i>Brassica nigra</i>	*Non-Native	--
red brome	<i>Bromus rubens</i>	*Non-Native	--
cheatgrass	<i>Bromus tectorum</i>	*Non-Native	--
crimson bottlebrush	<i>Callistemon citrinus</i>	Non-Native	--
Italian thistle	<i>Carduus pycnocephalus</i>	*Non-Native	--
Maltese star thistle	<i>Centaurea melitensis</i>	*Non-Native	--
poison hemlock	<i>Conium maculatum</i>	*Non-Native	--
entire-leaved contoneater	<i>Cotoneaster integrifolius</i>	Non-Native	--

Pride of Maderia	<i>Echium candicans</i>	Non-Native	--
Canada horseweed	<i>Erigeron canadensis</i>	Native	--
coastal heron's bill	<i>Erodium cicutarium</i>	*Non-Native	--
lemon-scented gum	<i>Eucalyptus citriodora</i>	Non-Native	--
spotted spurge	<i>Euphorbia maculata</i>	Non-Native	--
pencil tree	<i>Euphorbia tirucalli</i>	Non-Native	--
English ivy	<i>Hedra helix</i>	*Non-Native	--
orange daylily	<i>Hemerocallis fulva</i>	Non-Native	--
yellow daylily	<i>Hemerocallis lilioasphodelus</i>	Non-Native	--
shortpod mustard	<i>Hirschfeldia incana</i>	*Non-Native	--
blue jacaranda	<i>Jacaranda mimosifolia</i>	Non-Native	--
California juniper	<i>Juniperus californica</i>	Native	--
crapemyrtle	<i>Lagerstroemia indica</i>	Non-Native	--
lantana	<i>Lantana camara</i>	*Non-Native	--
beauty bush	<i>Linnaea amabilis</i>	Non-Native	--
Japanese privet	<i>Ligustrum japonicum</i>	Non-Native	--
Japanese honeysuckle	<i>Lonicera japonica</i>	Non-Native	--
laurel sumac	<i>Malosma laurina</i>	Native	--
oleander	<i>Nerium oleander</i>	Non-Native	--
Boston ivy	<i>Parthenocissus tricuspidata</i>	Non-Native	--
dallisgrass	<i>Paspalum dilatatum</i>	Non-Native	--
ivy geranium	<i>Pelargonium peltatum</i>	Non-Native	--
Canary Island date palm	<i>Phoenix canariensis</i>	Non-Native	--
slash pine	<i>Pinus elliottii</i>	Non-Native	--
California sycamore	<i>Platanus racemosa</i>	Native	--
Fremont cottonwood	<i>Populus fremontii</i>	Native	--
coast live oak	<i>Quercus agrifolia</i>	Native	--
valley oak	<i>Quercus lobata</i>	Native	--
Indian hawthorn	<i>Rhaphiolepis indica</i>	Non-Native	--
China rose	<i>Rosa chinensis</i>	Non-Native	--
hybrid tea rose	<i>Rosa hybrida</i>	Non-Native	--
Arroyo willow	<i>Salix lasiolepis</i>	Native	--
black sage	<i>Salvia mellifera</i>	Native	--
rosemary	<i>Salvia rosmarinus</i>	Non-Native	--
Mexican elderberry	<i>Sambucus nigra</i>	Native	--
Peruvian peppertree	<i>Schinus molle</i>	*Non-Native	
tumble mustard	<i>Sisymbrium altissimum</i>	Non-Native	--
sow thistle	<i>Sonchus oleraceus</i>	Non-Native	--
St. Augustine grass	<i>Stenotaphrum secundatum</i>	Non-Native	--
nodding needle grass	<i>Stipa cernua</i>	Native	--
desert needle grass	<i>Stipa speciosa</i>	Native	--
red seeded dandelion	<i>Taraxacum officinale</i>	Non-Native	--
star jasmine	<i>Trachelospermum jasminoides</i>	Non-native	--
southern cattail	<i>Typha domingensis</i>	Native	--

Vegetation Communities and Land Cover

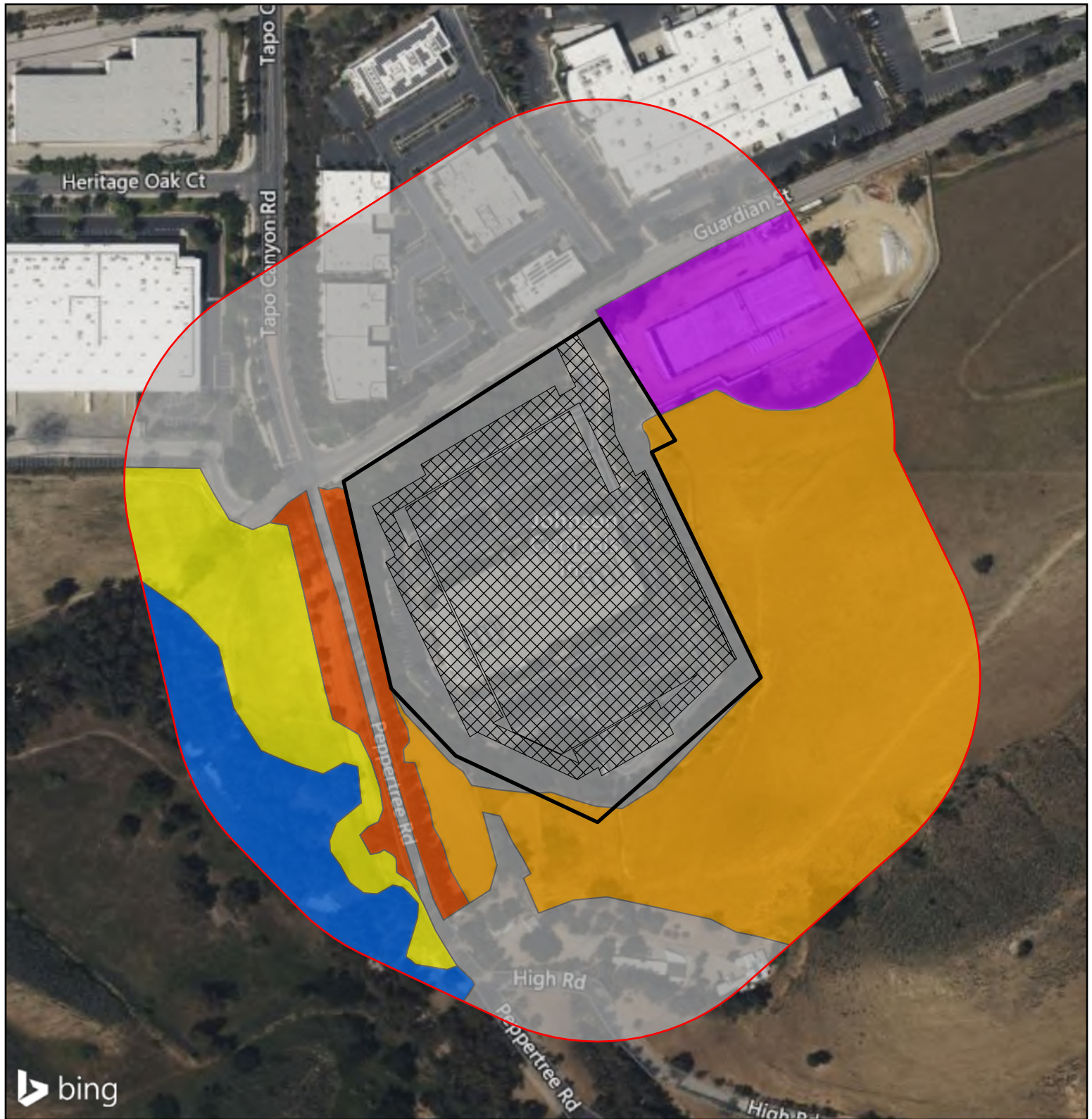
Four plant communities occur in the study area: annual brome grassland, eucalyptus woodland, pepper tree grove and wild oats grassland. Two additional land cover types occur in the project site; developed / ornamental landscaped and an area that is under construction. One plant community and one land cover type occur on the project site: developed / ornamental landscaped and wild oat grassland. Some plant communities contain native vegetation, but none of them are classified as a native plant community. The layout of these plant communities and land cover types in the study area and project site are shown in Figure 4 below and summarized in Table 2 below.

Table 2. Summary of Plant Communities on the Study Area

Community or Cover Type	Study Area (Acres)	Project Site (Acres)	Project Impacts (Acres)
Annual Brome Grassland	3.28	0	0
Developed / Ornamental Landscaped	24.51	10.18	7.10
Eucalyptus Woodland	2.72	0	0
Pepper Tree Grove	1.65	0	0
Under Construction	2.90	0	0
Wild Oats Grassland	12.25	0.12	0
Total	47.31	10.30	7.10

Annual Brome Grassland

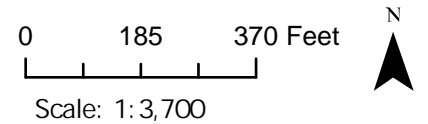
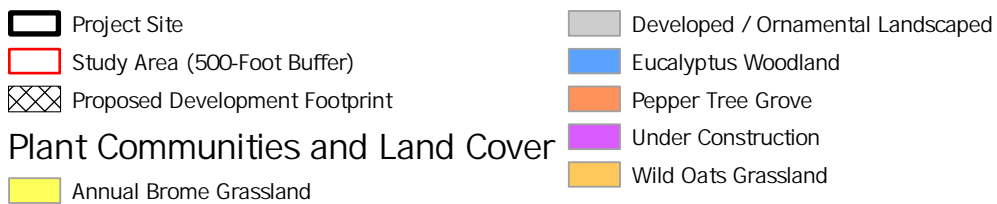
An annual brome grassland is found on 3.28-acres (6.93%) of the study area but does not occur on the project site. This plant community is found within the western part of the study area in a position that is west of Peppertree Road. The area is maintained by weed management practices to manage vegetation overgrowth and abate potential fire hazards. The area has remnants of a potentially native plant community that includes coyote brush (*Baccharis pilularis*) and California sage brush (*Artemisia californica*), but the consistent clearing of vegetation for fire hazard abatement has perpetuated the spreading of non-native and non-native invasive plants. The area is dominated by red brome (*Bromus rubens*) and co-dominated by cheatgrass (*Bromus tectorum*). Among others, also present is black mustard (*Brassica nigra*), Maltese star-thistle (*Centaurea melitensis*), poison hemlock (*Conium maculatum*), Canada horseweed (*Erigeron canadensis*), coastal heron's bill (*Erodium cicutarium*), and shortpod mustard (*Hirschfeldia incana*).



Source: BING Aerial Imagery 2023

4100 Guardian Street Project

Figure 5. Plant Communities and Land Cover



Developed / Ornamental Landscape

Developed / ornamental landscaped areas are found on 24.51-acres (51.81%) of the study area and on 10.18-acres (98.83%) of the project site. This land cover type is found in the northern, central, and southern parts of the study area, as well as nearly all of the project site. These areas are defined by commercial and industrial business with ornamental landscaping along Topo Canyon Road and Guardian Street, as well as commercial agricultural developments along Peppertree Road and High Road. Vegetation found within this land cover type include: blackwood acacia (*Acacia melanoxylon*), copper pinwheel (*Aeonium decorum*), lily of the Nile (*Agapanthus praecox*), American century plant (*Agave americana*), foxtail agave (*Agave attenuata*), tall kangaroo paw (*Anigozanthos flavidus*), crimson bottlebrush (*Callistemon citrinus*), entire-leaved contoneater (*Contoneater integrifolius*), Pride of Maderia (*Echium candicans*), spotted spurge (*Euphorbia maculate*), pencil tree (*Euphorbia tirucalli*), English ivy (*Hedra helix*), orange daylily (*Hemerocallis fulva*), yellow daylily (*Hemerocallis lilioasphodelus*), blue jacaranda (*Jacaranda mimosifolia*), California juniper (*Juniperus californica*), crapemyrtle (*Lagerstroemia indica*), lantana (*Lantana camara*), beauty bush (*Linnaea amabilis*), Japanese privet (*Ligustrum japonicum*), Japanese honeysuckle (*Lonicera japonica*), laurel sumac (*Malosma laurina*), oleander (*Nerium oleander*), Boston ivy (*Parthenocissus tricuspidate*), dallisgrass (*Paspalum dilatatum*), ivy geranium (*Pelaergonium peltatum*), Canary Island date palm (*Phoenix canariensis*), slash pine (*Pinus elliotti*), California sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), Indian hawthorn (*Rhaphiolepis indica*), China rose (*Rosa chinensis*), hybrid tea rose (*Rosa hybrida*), rosemary (*Salvia Rosmarinus*), Peruvian peppertree (*Schinus molle*), St. Augustine grass (*Stenotaphrum secudatum*), nodding needle grass (*Stipa cernua*), desert needle grass (*Stipa speciosa*), red seeded dandelion (*Taraxacum officinale*), star jasmine (*Trachelospermum jasminoides*), and southern cattail (*Typha domingensis*).

Eucalyptus Woodland

A eucalyptus woodland is found on 2.72-acres (5.75%) of the study area but not on the project site. This plant community is found within the western part of the study area in a position that is west of Peppertree Road. The area is part of a riparian area for a riverine that has been recorded by the national wetland inventory (NWI). The area is dominated in the tree canopy by lemon-scented gum (*Eucalyptus citriodora*). Also present in the tree canopy is Fremont cottonwood (*Populus fremonti*), arroyo willow (*Salix lasiolepis*), and Peruvian pepper. Among others at the ground level, this community includes red brome, cheatgrass, and Maltese star-thistle.

Pepper Tree Grove

A pepper tree grove is found on 1.65-acres (3.49%) of the study area and on 0.00-acres (0.0%) of the project site. This plant community is found within the western part of the study area in a position that is on both sides of Peppertree Road. The area is a planted grove area for tree cover

along Peppertree Road that approaches agricultural developments in the southern study area and agricultural developments further to the south of the study area. The area is completely dominated in the tree canopy by Peruvian pepper. Among others at the ground level, this community includes red brome, cheatgrass, and Maltese star-thistle.

Under Construction

An area under construction is found on 2.90-acres (6.13%) of the study area but not on the project site. This land cover type includes a building that is under construction at 4180 Guardian Street. This area contains some ruderal and invasive grasses. Invasive grasses observed in this construction area includes, among others, cheatgrass, red brome, Maltese star-thistle, and Italian thistle (*Carduus pycnocephalus*).

Wild Oats Grassland

A wild oats grassland is found on 12.25-acres (25.89%) of the study area and on 0.12-acres (1.17%) of the project site. This plant community is found within the southern and eastern parts of the study area and in the southern and northeastern parts of the project site. The area is maintained by weed management practices to manage vegetation overgrowth and abate potential fire hazards. The area has remnants of a potentially native plant community that includes coyote brush, and black sage California sage brush, and black sage (*Salvia mellifera*). Near the southeast border of the project site, a lineage of Mexican elderberry (*Sambucus nigra*) helps separate this community from the ornamental landscaping and current developments on the project site. The community is dominated by slender oat (*Avena barbata*). Among others, also present is tumble mustard (*Sisymbrium altissimum*), sow thistle (*Sonchus oleraceus*), Italian thistle, Maltese star-thistle, cheatgrass, red brome, and Canada horseweed.

Wildlife

During the field visit by South Environmental on July 18, 2023, two common bird species were observed: common raven (*Corvus corax*) and California towhee (*Melospiza crissalis*). Several western fence lizard (*Sceloporus occidentalis*) were observed. No amphibians or mammals were observed and there was no other indirect evidence of special-status animals, for example, tracks, scat, carcasses, or bones at the site. Numerous more wildlife may occur within the riparian area of the eucalyptus woodland in the western survey area; however, the area was not visible from the project site and access was limited because the eucalyptus woodland is within fenced private property.

Special-Status Species Assessment

Special-Status Plants

According to the literature review presented in Appendix B, there are 34 special-status plants known to occur in the region. No special-status plants were observed within the project site or proposed development areas during the field visit. Special-status plants are not expected to occur on the project impact areas. This is due to a lack of native habitats, existing developments, and distance from known habitat and existing CNDDDB records. No special-status plant species have been previously recorded to the CNDDDB on the project site or proposed development area. Also, the project site and proposed development areas are not within designated or proposed Critical Habitat for any plant species (CDFW 2023a; USFWS 2023b).

Special-Status Animals

According to the literature review presented in Appendix B, there are 51 special-status animals known to occur in the region. No special-status animals were observed on the project site or proposed development area during the field visit and no other evidence such as tracks, scat, carcasses, or bones of special-status animals were found. No special-status animals have been previously recorded in the CNDDDB on the study area or project site (CDFW 2023b). The nearest USFWS designated Critical Habitat for animals is for coastal California gnatcatcher and it occurs within the Santa Susana Mountains approximately 2.53 miles northeast of the project site. The project site and proposed development is separated from the Santa Susana Mountains by continuous development and there is no habitat for coastal California gnatcatcher on any part of the study area.

No special-status wildlife species were assessed with any potential to occur on the project site. This is due to a lack of native habitats and existing developments that preclude the sites use by special-status animals. Special-status animals occur in native plant communities and habitats, which are absent from the project site. However, the vegetation, ornamental trees, and buildings provide opportunities for nesting birds and raptors protected by the Migratory Bird Treaty Act (MBTA) and California Migratory Bird Protection Act (MBPA) to occur at the site; however, these would be limited to species that are found in urban areas, and special-status species would not occur.

Sensitive Natural Communities

CDFW 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* defines sensitive natural communities as those that are "of limited distribution statewide or within a county or region and are often vulnerable to

environmental effects of projects.” CDFW considers a natural community sensitive if it has a Global or State rarity rank of 1-3, which includes communities that are vulnerable (G3/S3), imperiled (G2/S2), and critically imperiled (G1/S1). CDFW uses the alliances and groups described in the Manual of California Vegetation Online to characterize California’s natural communities and provides the California Natural Communities List online (most current is dated September 9, 2020) to list the current global and state rarity rank for each natural community characterized in the Manual. None of the plant communities in the study area are dominated by native species and therefore, do not have a G/S rank and are not considered sensitive. The eucalyptus groves in the study area and outside of the project site is a sensitive riparian community because riparian areas are considered sensitive and of high biological value due to the species richness and density that typically occurs in these areas.

Protected Trees

The City of Simi Valley protects all historic, all mature native oak trees, and any mature trees associated with a proposal for urban development, or are located on a vacant parcel. Several protected oak trees and numerous other mature trees, including native sycamore were observed on the project site during the South Environmental survey.

Habitat Linkages and Wildlife Migration Corridors

The National Wetlands Inventory and California Protected Areas Database (CPAD) data include parklands and protected native habitats as well as the river and stream systems (USFWS 2023b; CPAD 2023), which are areas of high importance for wildlife movement in the region. The proposed development area is partially surrounded by existing development but there are many undeveloped areas surrounded the project site that are contiguous with large tracts of undeveloped land. These undeveloped areas are connected with large open tracts of land within the Santa Susana Mountains and areas near Simi Peak to the south of the project site. These areas are considered an essential, high-value habitat linkage that would be used by numerous wildlife for migration including for mountain lions that are protected in the region. However, the proposed development area is separated from these areas by fencing and landscaping and some existing developments including agricultural developments. There are no native habitats in the study area that could act as a linkage or wildlife migration corridor from the proposed development to/from the Santa Monica Mountains. The project site is at the southern end of the dense urban development and to the southeast and southwest there are undeveloped areas that are used as wildlife movement corridors.

4. Impacts Analysis

For the purposes of this report, impacts to protected biological resources are analyzed within the context of the regulatory setting, and more specifically the analysis will follow the questions pertaining to biological resources posed in Appendix G Checklist of the California Environmental Quality Act (CEQA). Below is an overview of the federal, state, and local regulations pertaining to protected biological resources on the project site, and an analysis of impacts to those resources that may occur as a result of the project.

Regulatory Setting

Federal Regulations

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

California Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

An Initial Study (IS) is prepared when a proposed action is determined to be a “project” under CEQA. The IS is a checklist that asks specific questions about the project’s level of environmental impacts in many categories, including biological resources. The checklist includes a series of questions to determine the projects level of potential impacts in each of the categories. Potential level of impact includes: No Impacts, Less Than Significant Impact, Less Than Significant with Mitigation Incorporated, and Potentially Significant Impact. For projects that have no impact or less than significant impact a Negative Declaration is prepared, for those with Less Than Significant with Mitigation Incorporated prepare a Mitigated Negative Declaration, and for those with a Potentially Significant Impact prepare an Environmental Impact Report (EIR).

California Endangered Species Act

The California Endangered Species Act (CESA) states that “all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.”

The CDFW oversees the CESA, and reviews and analyzes petitions for the listing of species to CESA. CEQA is typically the driver of the CESA, and projects that are subject to CEQA and have the potential to significantly impact listed species (as determined in an Initial Study or Environmental Impact Report) must consult with CDFW to get an Incidental Take Permit. Similarly, if a species is listed to both the Federal Endangered Species Act and CESA, consultation with the US Fish and Wildlife Service and CDFW will be required and could result in a Consistency Determination.

California Fish and Game Code Section 3500

Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that it is unlawful to take any non-game migratory bird protected under the MBTA.

California Migratory Bird Protection Act

The California Migratory Bird Protect Act (MBPA) was enacted in September 2019 to reinforce the MBTA at the state level. The MBPA states:

- "It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.) before January 1, 2017, any additional migratory nongame bird that may be designated in that federal act after that date, or any part of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act before January 1, 2017, or subsequent rules or regulations adopted pursuant to that federal act, unless those rules or regulations are inconsistent with this code."

This section is inactive on January 20, 2025, and the following language below will be adopted:

- "It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.), or any part of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act."

This section is operative starting on January 20, 2025.

Local Regulations

City of Simi Valley Tree Report and Permitting Requirements

It is the City's desire to preserve protected trees, which include all historic trees, all mature native oak trees, and any mature trees associated with a proposal for urban development, or are located on a vacant parcel (see SVMC Glossary §9-80.020 "Trees" for definitions). Initial project layout, design, and grading shall recognize the desirability of preserving protected trees with appropriate modifications and adjustments to accommodate preservation and maintenance by locating the best candidates in areas where preservation is feasible. SVMC §9-38 should be consulted in the preparation of any Tree Report and plan, and includes criteria for consideration in issuance of a Tree Removal Permit.

Mature Tree is a living tree with a cross-sectioned area of all major stems, as measured four and one-half (4½) feet above the root crown, of 72 or more square inches (9½ inches in diameter if a single trunk).

Mature Native Oak Tree is a living valley, coast live, or scrub oak (*Quercus lobata*, *agrifolia*, *berberidifolia*, or *dumosa*) or hybrids of these species with a cross-sectioned area of all major stems, as measured 4½ feet above the root crown, of 20 or more square inches (5 inches in diameter if a single trunk).

Please be advised that a tree removal permit will be required to be issued prior to any action upon the trees on the site or initiation of grading.

Project Impacts and Recommendations

For the purposes of this Project the impacts to biological resources will be assessed within the context of the questions found in Appendix G of CEQA.

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. No native plant communities or habitats occur on the project site because it is entirely developed or disturbed with an existing building and associated parking areas and developments covering the entire development area. The proposed project's direct impacts would occur in existing developed areas where no habitats occur. The disturbed/developed areas do not support special-status species due to lack of habitat, and the existing developments preclude special-status species from establishing there in the future. Because the project site and surrounding areas are developed and lack native habitats, no direct impacts to habitat would occur from the proposed project. No special-status species are expected to occur at the project site. Therefore, no direct impacts to special-status species would result from the project.

Indirect impacts from noise, vibration, or lighting are not expected to result because the project site is surrounded by existing developments and disturbed communities to the north and south. Peppertree road occurs to the west and non-native grasslands that are not expected to have special-status wildlife occurs to the east, and therefore, there are no special-status species or habitats immediately adjacent to the site that could be impacted by noise or vibration. The project would not result in discharge or other impacts outside the site and the surrounding areas would not be affected by the noise and vibrations because these activities would be similar to the existing developed environment. Therefore, the Project would not result in indirect effects to habitat or special-status species.

However, trees on the project site and adjacent to the project could provide potential nesting structures for birds protected by the MBTA, MBPA, and the California Fish and Game Code. If present at the time of project activities, active nests, eggs, or young could be destroyed or otherwise disturbed to a point at which the young do not survive, which would be a violation of the MBTA, MBPA, and the California Fish and Game Code. In addition, indirect impacts from construction noise or vibration have the potential to disturb an active bird nest to the point of failure if the nest is within immediate proximity to project construction activities, and this would also be a violation of the MBTA and California Fish and Game Code. To avoid impacts to active bird nests, eggs, or young, preconstruction nesting bird surveys and monitoring is required as described in Mitigation Measure Bio-1 below. With the incorporation of recommended BIO-1 the

project's potential impacts to nesting birds would be less than significant with mitigation incorporated.

BIO-1: Preconstruction Nesting Bird Survey and Avoidance

- If possible, ground disturbing activities and vegetation removal (including tree trimming) should be timed to occur outside the bird nesting season (September 1 – January 31).
- If ground disturbing activities or vegetation removal (including tree trimming) are scheduled during the bird nesting season (February 1 – August 31) a preconstruction survey for nesting birds should be conducted within 72 hours prior to initiation of construction activities. The survey should be conducted by a qualified avian biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the Project site and a 100-foot buffer. If no active nests are found, no additional measures are required.
- If active nests are found the avian biologist will map the location and document the species and nesting stage. The avian biologist shall implement an avoidance buffer area appropriate to the species. The qualified avian biologist may change the avoidance buffer if field observations of bird behavior and biology to ensure the nest is unaffected by project activities, avoiding a risk of nest failure. The nest site shall be fenced and/or flagged in all directions, and this area shall not be disturbed until the nest becomes inactive.

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 US Fish and Wildlife Service?

No Impact. The proposed impact areas are entirely developed currently and no native habitat or sensitive natural communities occur there. There is a potential riparian area in the study area outside of the project site and on the opposite side of Peppertree Road, but this area is over 450-feet from the proposed development area and existing roads and barriers will shield the project site from the riparian areas. Therefore, no impacts would occur on sensitive natural communities or riparian because these communities do not occur in the impact areas and are separated by existing developments from the project site.

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. There are no water resources, aquatic resources, or jurisdictional features within the project site, but the project site is 450 feet east of an unnamed intermittent stream, which is

contained in a channelized streambed on the west edge of the study area. The project site has no direct connection to the river. The project will be constructed on an existing developed area, and no direct impacts to wetlands, aquatic resources, or jurisdictional resources would result from the project.

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 at the southern edge of dense urban development, and along an existing road. The site is currently entirely developed and future use will remain as developed. There are surrounding areas from the project that have connectivity to large areas of habitat in the Santa Susana Mountains and Simi Hill, but these are not on the project site and would not be impacted by the project. No new barriers or other developments would be created in the movement areas and all of the developments would occur where existing developments are placed making the conditions following the project identical to current conditions. Therefore, the project would have no impact on habitat linkages or wildlife movement corridors, nor would it impede the use of native wildlife nursery sites.

Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant with mitigation incorporated. Native oaks and mature trees were observed in the landscaped areas on the project site and they could be impacted by the proposed development. Due to the potential to impact them during construction of the project we recommend that an arborist report be prepared and that a permit be obtained for impacts to any protected trees. If a report is prepared and a permit received prior to construction of the project then the impacts to protected trees would be considered less than significant with mitigation incorporated. **Regulatory Compliance Measure #1** requiring an arborist survey of the trees on the parcel, avoidance measures, and mitigation measures in the case of potential damage or removal is recommended as follows.

Regulatory Compliance Measure #1 – Survey of parcel for protected trees and avoidance and mitigation measures

- A survey of all trees and shrubs that may be protected by the City of Simi Valley;
- The tree and shrub survey must be carried out by a qualified arborist;

- If protected trees are found on the site, they must be mapped and assessed in relation to their potential to be destroyed through removal or damaged through encroachment (i.e., root damage) as a result of the project;
- A tree report must be prepared and submitted to the City and a tree removal permit will be required prior to any impacts to the trees.

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. The project site is already developed. The site or surrounding areas are not included in any Habitat Conservation Plan or Natural Community Conservation Plan, or any other approved habitat conservation plan. Therefore, the project would have no impact on any adopted conservation plans.

Conclusion

The proposed project would be constructed in an already developed and disturbed area. No native plant communities or habitats are on the project site or immediately surrounding areas. The nearest protected resource is an unnamed intermittent stream roughly 450 feet west of the project site that has no connection to the project site and would be avoided by the project. Due to the lack of native habitat or water resources on or adjacent to the project site, the project is not expected to result in any direct impact to biological resources. Indirect impacts from noise, vibration, or lighting are not expected to result because the project site is surrounded by existing developments or disturbed grounds. The project would not result in discharge or other impacts outside the site and the surrounding areas would not be affected by the noise and vibrations. The proposed construction would be placed on the existing development and the conditions following the project would be nearly identical to current conditions.

There are native oaks and mature trees that are protected by the City of Simi Valley in the development areas, and they could be impacted by the project. With the implementation of **Regulatory Compliance Measure #2** requiring an arborist survey of the trees and permits for impacts the project impacts would be less than significant with the mitigation incorporated.

Large trees, shrubs, and buildings will be removed that could provide habitat or nesting structure for birds protected by the MBTA, and nesting bird surveys and avoidance measures are proposed for the project to avoid impacts. With the implementation of **Regulatory Compliance Measure #1** and the nesting bird avoidance measures, the Project would not result in any significant impacts to biological resources. With the implementation of the two regulatory compliance

measures recommended in this report the project would result in less than significant impacts to biological resources.

5. Bibliography

- Baldwin, B.G., Goldman, D.H., Keil, D.J, Patterson, R., Rosatti, T.J., and Wilken D.H. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley, California.
- California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Database (CNDDDB) (available by subscription) and Rarefind. Sacramento, California. Accessed online: <https://wildlife.ca.gov/Data/CNDDDB>
- CDFW. 2023b. California Natural Community List, Sacramento, California. Accessed online: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List>
- CDFW. 2023c. California Wildlife Habitat Relationships (CWHR) life history accounts and range maps, Sacramento, California. Accessed online: <https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range>
- CDFW. 2023d. Biogeographic Information and Observation System (BIOS). Accessed online: <https://apps.wildlife.ca.gov/bios6/>
- CDFW. 2023e. Survey of California Vegetation (SCV) Classification and Mapping Standards. Accessed online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline>
- CDFW. 2023f. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities Accessed online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>
- California Native Plant Society (CNPS). 2023a. A Manual of California Vegetation Online. Accessed online: <http://vegetation.cnps.org/>
- CNPS. 2023b. Inventory of Rare and Endangered Plants of California. California Native Plant Society. Accessed online: <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>
- California Protected Areas Database (CPAD). 2023. Database Map. Accessed online: <https://www.calands.org/>
- County of Ventura. 2023. Tree Permits and the Tree Protection Ordinance. Ventura County, California. Effective 1992.
- Dibblee, T.W. Jr. and H.E. Ehrenspeck. 1991. Geologic Map of the San Fernando and North ½ Van Nuys Quadrangles, Los Angeles Counties, California. Dibblee Geology Center & Santa Barbara Museum of Natural History, Santa Barbara, California.

Google Earth online (Google 2023). Accessed online: <https://earth.google.com>

SC Wildlands. 2008. South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion.

United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). 2023. Web Soil Survey Mapper. Accessed online: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

United States Fish and Wildlife Service (USFWS). 2023a. Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC). Accessed online: <https://ecos.fws.gov/ipac/>

USFWS. 2023b. Dedicated and Proposed Critical Habitat GIS Data. Accessed online: <https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#critical-habitat-designations,-maps,-and-gis-data>

USFWS. 2023c. National Wetlands Inventory Online Wetlands Mapper. Accessed online: <https://www.fws.gov/wetlands/data/mapper.html>

United States Geological Service (USGS). 2023. National Hydrography Dataset (NHD) The National Map Viewer. Accessed online: <https://viewer.nationalmap.gov/services/>

Ventura County. 2023. Assessor Portal Accessed online: <https://assessor.countyofventura.org>

Appendix A

Photograph Exhibit



Photo 1. Project site entrance from Guardian Street, facing southeast.



Photo 2. View of intersection of Guardian Street and Peppertree Road, facing southwest.



Photo 3. View of existing building on project site from east side of project site, facing west.



Photo 4. View of existing driveway at eastern project site, facing north.



Photo 5. View of existing driveway at eastern project site, facing south.



Photo 6. View of existing driveway from western part of project site, facing south.



Photo 7. View of existing driveway from western part of project site, facing east.



Photo 8. View of existing driveway from western part of project site, facing north.



Photo 9. View of existing driveway from southwestern part of project site, facing east.



Photo 10. View of existing driveway from southeastern part of project site, facing north.



Photo 11. View of existing driveway from eastern part of project site, facing north.

Appendix B

Special-Status Species Analysis

Special-Status Species Analysis

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special status based on adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status species include:

- Plants or wildlife listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Plants or wildlife that meet the definitions of rare or endangered under CEQA Guidelines Section 15380.
- Plants or wildlife covered under an adopted NCCP/HCP;
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (List 1A, 1B and 2 plants) in California;
- Plants listed by the CNPS as plants in which there is limited information about distribution (List 3);
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.);
- Wildlife designated by CDFW as species of special concern;
- Wildlife "fully protected" in California (California Fish and Game Code Sections 3511, 4700, and 5050); and
- Wildlife protected by the Migratory Bird Treaty Act (MTBA).

Federally-Protected Status

All references to Federally-protected species in this BRA include the most current published status or candidate category to which each species has been assigned by USFWS. For purposes of this assessment the following acronyms are used for Federal status species, as applicable:

FE	Federally-listed as Endangered
FT	Federally-listed as Threatened
FPE	Federally proposed for listing as Endangered
FPT	Federally proposed for listing as Threatened
FPD	Federally proposed for delisting
FC	Federal candidate species (former C1 species)

State-Protected Status

For the purposes of this BRA, the following acronyms are used for State status species, as applicable:

SE	State-listed as Endangered
ST	State-listed as Threatened
SR	State-listed as Rare
SCE	State candidate for listing as Endangered
SCT	State candidate for listing as Threatened
SFP	State Fully Protected
SSC	California Species of Special Concern

California Rare Plant Rank

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of special-status species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2018). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed six categories of rarity known as the California Rare Plant Rank (CRPR), of which Ranks 1A, 1B, 2A, and 2B are particularly considered sensitive:

Rank 1A	Presumed extinct in California.
Rank 1B	Plants Rare, Threatened, or Endangered in California and elsewhere.
Rank 2A	Presumed extinct in California, but more common elsewhere.
Rank 2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
Rank 3	Plants about which we need more information – a review list.
Rank 4	Plants of limited distribution – a watch list.

The CNPS recently added "threat ranks" which parallel the ranks used by the CNDDDB. These ranks are added as a decimal code after the CNPS List (e.g., Rank 1B.1). The threat codes are as follows:

- .1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- .2 Moderately threatened in California (20-80% occurrences threatened);
- .3 Not very threatened in California (<20% of occurrences threatened or no current threats known).

Potential to Occur Assessment

Special-status species that are **present** or are **high** or **medium** potential to occur within the parcel are based on one or more of the following:

- the direct observation of the species within the parcel during any field survey;
- a record reported in the CNDDb; and
- the parcel is within known distribution of a species and contains appropriate habitat.
- present means the species is known to occur, high potential indicates the habitat is ideal and near known occurrences of the species, and medium indicates that the habitat may be less than ideal due to some lacking element but still usable by the species and within the known range.

Special-status species that are **low** potential) to occur are based on one of the following:

- the parcel has the general habitat types but lacks necessary habitat elements such as suitable microhabitat or soils; or
- the parcel is outside the known elevation range or distribution of the species, and has otherwise suitable habitats;

Special-status species that have no potential to occur on the parcel are labeled as **none** due to the absence of suitable habitat.

Special-Status Plants

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	None	1B.1	Jan-Aug	15	2100	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Baccharis malibuensis</i>	Malibu baccharis	None	None	1B.1	Aug	490	1000	Coastal scrub, chaparral, cismontane woodland, riparian woodland.	n Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat.	None. The project site lacks the habitat the species requires.
<i>Berberis nevadensis</i>	Nevin's barberry	FE	SE	1B.1	Mar-Jun	230	2705	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes.	None. The project site lacks the habitat the species requires.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa-lily	None	None	1B.2	Mar-June	1050	3280	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Calochortus fimbriatus</i>	late-flowered mariposa-lily	None	None	1B.3	Jun-Aug	1000	5400	Chaparral, cismontane woodland,	Dry, open coastal woodland,	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
								riparian woodland.	chaparral; on serpentine	
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa-lily	None	None	1B.2	Apr-Jul	2330	7840	Meadows and seeps, chaparral, lower montane coniferous forest.	Vernally moist places in yellow-pine forest, chaparral.	None. The project site lacks the habitat the species requires. Also, the project site is outside the known elevation range for the species.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	None	None	4.2	May-Jul	330	5580	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	Granitic, Rocky	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Calystegia peirsonii</i>	Peirson's morning-glory	None	None	4.2	Apr-Jun	100	4920	Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	Often in disturbed areas or along roadsides or in grassy, open areas	Low. The project site has some disturbed grassland, but the species was not observed, and the nearest record is nearly 22 miles to the northeast.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	None	SE	1B.1	Apr-Jul	490	4005	Coastal scrub, valley and foothill grassland.	Sandy soils.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses. Also, the project site lacks sandy soils.

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None	None	1B.1	Apr-Jun	900	4005	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses. Also, the project site lacks sandy soils.
<i>Delphinium umbraculorum</i>	umbrella larkspur	None	None	1B.3	Apr-Jun	390	6800	Cismontane woodland, chaparral.	Mesic sites	None. The project site lacks the habitat the species requires.
<i>Deinandra minthornii</i>	Santa Susana tarplant	None	SR	1B.2	Jul-Nov	920	2495	Chaparral, coastal scrub.	On sandstone outcrops and crevices, in shrubland.	None. The project site lacks the habitat the species requires.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	dune larkspur	None	None	1B.2	Apr-Jun	0	655	Chaparral, coastal dunes (maritime).	On rocky areas and dunes	None. The project site lacks the habitat the species requires.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE	SE	1B.1	Apr-Jun	655	2495	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils	None. The project site lacks the habitat the species requires.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	None	None	1B.1	Apr-Jun	15	1475	Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Agoura Hills dudleya	FT	None	1B.2	May-Jun	655	1640	Chaparral, cismontane woodland.	Rocky, volcanic breccia.	None. The project site lacks the habitat the species requires.
<i>Dudleya multicaulis</i>	many-stemmed dudleya	None	None	1B.2	Apr - Jul	50	2590	Chaparral, coastal scrub, valley and	In heavy, often clayey soils or grassy slopes.	None. The project site has some grassland, but it is disturbed by

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
								foothill grassland.		nonnative and non-native invasive grasses.
<i>Dudleya parva</i>	Conejo dudleya	FT	None	1B.2	May-Jun	195	1475	Coastal scrub, valley and foothill grassland.	In clay or volcanic soils on rocky slopes and grassy hillsides.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Eriogonum crocatum</i>	conejo buckwheat	None	SR	1B.2	Apr -Jul	165	1905	Chaparral, coastal scrub, valley and foothill grassland.	Conejo volcanic outcrops; rocky sites	None. The project site lacks the habitat the species requires.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	None	None	4.2	Mar-May	65	3135	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Helianthus inexpectatus</i>	Newhall sunflower	None	None	1B.1	Aug-Oct.	1000	1000	Marshes and swamps, riparian woodland.	Freshwater marshes, and seeps.	None. The project site lacks the habitat the species requires.
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	None	None	1B.1	Feb-Jul(Sep)	230	2660	Chaparral, Cismontane woodland, Coastal scrub	Gravelly (sometimes), Sandy (sometimes)	None. The project site lacks the habitat the species requires.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None	None	1B.1	Feb-Jun	5	4005	Marshes and swamps, Playas, Vernal pools		None. The project site lacks the habitat the species requires.
<i>Lupinus paynei</i>	Payne's bush lupine	None	None	1B.1	Mar-Apr	720	1370	Coastal scrub, riparian scrub, valley and foothill grassland.	Sandy	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Malacothamnus davidsonii</i>	Davidson's bush-mallow	None	None	1B.2	Jan, Jun-Dec	605	3740	Coastal scrub, riparian woodland,	Sandy Washes.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
								chaparral, cismontane woodland.		
<i>Monardella hypoleuca ssp. hypoleuca</i>	white-veined monardella	None	None	1B.3	(Apr)May-Aug(Sep-Dec)	165	5005	Chaparral, Cismontane woodland		None. The project site lacks the habitat the species requires.
<i>Navarretia ojaiensis</i>	Ojai navarretia	None	None	1B.1	May-Jul	567	2000	Chaparral, coastal scrub, valley and foothill grassland.	Openings in shrublands or grasslands.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Nolina cismontana</i>	chaparral nolina	None	None	1B.2	May-Jul	460	3600	Chaparral, coastal scrub.	Primarily on sandstone and shale substrates; also known from gabbro	None. The project site lacks the habitat the species requires.
<i>Opuntia basilaris var. brachyclada</i>	short-joint beavertail	None	None	1B.2	Apr – Jun	1395	5905	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam.	None. The project site lacks the habitat the species requires.
<i>Orcuttia californica</i>	California Orcutt grass	FE	SE	1B.1	Apr-Aug	50	2165	Vernal pools.		None. The project site lacks the habitat the species requires.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE	SE	1B.1	Mar-Aug	100	2265	Chaparral, valley and foothill grassland, coastal scrub.	Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks.	None. The project site has some grassland, but it is disturbed by nonnative and non-native invasive grasses.
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	None	None	2B.2	(Jul)Aug-Nov(Dec)	0	6890	Chaparral, Cismontane woodland,	Gravelly, Sandy	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	FESA	CESA	CRPR	Blooming Period	Elevation Low (ft)	Elevation High (ft)	Habitat	Micro Habitat	Potential to Occur on Project Site
								Coastal scrub, Riparian woodland		
<i>Senecio aphanactis</i>	chaparral ragwort	None	None	2B.2	Jan-Apr	50	2625	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats	None. The project site lacks the habitat the species requires.
<i>Symphotrichum greatae</i>	Greata's aster	None	None	1B.3	Jun-Oct	985	6595	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons	None. The project site lacks the habitat the species requires

Special-Status Animals

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Anaxyrus californicus</i>	arroyo toad	Amphibians	Endangered	None	DFW_SSC-Species of Special Concern IUCN_EN-Endangered	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	None. The project site lacks the habitat the species requires.
<i>Rana boylei</i>	foothill yellow-legged frog	Amphibians	None	Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Southern Coast Ranges from Monterey Bay south through San Gabriel Mountains; west of the Salinas River in Monterey Co, south through Transverse Ranges, and east through San Gabriel Mountains. Historically may have ranged to Baja California.	Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Rana draytonii</i>	California red-legged frog	Amphibians	Threatened	None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	None. The project site lacks the habitat the species requires.
<i>Spea hammondi</i>	western spadefoot	Amphibians	None	None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	None. The project site lacks the habitat the species requires.
<i>Taricha torosa</i>	Coast Range newt	Amphibians	None	None	CDFW_SSC-Species of Special Concern	Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow moving streams.	None. The project site lacks the habitat the species requires.
<i>Accipiter cooperii</i>	Cooper's hawk	Birds	None	None	CDFW_WL- Watch List IUCN_LC-Least Concern	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	None. The project site lacks the habitat the species requires.
<i>Agelaius tricolor</i>	tricolored blackbird	Birds	None	Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None. The project site lacks the habitat the species requires.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	Birds	None	None	CDFW_WL- Watch List	Resident in Southern California coastal sage scrub and sparse mixed chaparral	Frequents relatively steep, often rocky hillsides with grass and forb patches.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Ammodramus savannarum</i>	grasshopper sparrow	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	None. The project site lacks the habitat the species requires.
<i>Aquila chrysaetos</i>	golden eagle	Birds	None	None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	None. The project site lacks the habitat the species requires.
<i>Artemisiospiza belli belli</i>	Bell's sparrow	Birds	None	None	CDFW_WL-Watch List	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	None. The project site lacks the habitat the species requires.
<i>Athene cunicularia</i>	burrowing owl	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None. The project site lacks the habitat the species requires.
<i>Buteo swainsoni</i>	Swainson's hawk	Birds	None	Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	None. The project site lacks the habitat the species requires.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
							blackberry, nettles, or wild grape.	
<i>Elanus leucurus</i>	white-tailed kite	Birds	None	None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	None. The project site lacks the habitat the species requires.
<i>Eremophila alpestris actia</i>	California horned lark	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	None. The project site lacks the habitat the species requires.
<i>Falco mexicanus</i>	prairie falcon	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	None. The project site lacks the habitat the species requires.
<i>Falco peregrinus anatum</i>	American peregrine falcon	Birds	Delisted	Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Nest consists of a scrape or a depression or ledge in an open site.	None. The project site lacks the habitat the species requires.
<i>Gymnogyps californianus</i>	California condor	Birds	Endangered	Endangered	CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_CR-Critically Endangered	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude.	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	None. The project site lacks the habitat the species requires.
<i>Icteria virens</i>	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Lanius ludovicianus</i>	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	None. The project site lacks the habitat the species requires.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	Birds	Threatened	None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	None. The project site lacks the habitat the species requires.
<i>Riparia riparia</i>	bank swallow	Birds	None	Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None. The project site lacks the habitat the species requires.
<i>Setophaga petechia</i>	yellow warbler	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	None. The project site lacks the habitat the species requires.
<i>Vireo bellii pusillus</i>	least Bell's vireo	Birds	Endangered	Endangered	NABCI_YWL-Yellow Watch List	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None. The project site lacks the habitat the species requires.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	Crustacean	Endangered	None	IUCN_EN-Endangered	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub.	Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Catostomus santaanae</i>	Santa Ana sucker	Fish	Threatened	None	AFS_TH- Threatened IUCN_EN- Endangered	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	None. The project site lacks the habitat the species requires.
<i>Gasterosteus aculeatus williamsoni</i>	unarmored threespine stickleback	Fish	Endangered	Endangered	AFS_EN- Endangered CDFW_FP-Fully Protected	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	Cool (<24 C), clear water with abundant vegetation.	None. The project site lacks the habitat the species requires.
<i>Gila orcuttii</i>	arroyo chub	Fish	None	None	AFS_VU- Vulnerable CDFW_SSC- Species of Special Concern IUCN_VU- Vulnerable USFS_S-Sensitive	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	None. The project site lacks the habitat the species requires.
<i>Bombus crotchii</i>	Crotch bumble bee	Insects	None	None	IUCN_EN- Endangered	Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	None. The project site lacks the habitat the species requires.
<i>Danaus plexippus plexippus pop. 1</i>	monarch - California overwintering population	Insects	Candidate	None	IUCN_EN- Endangered USFS_S-Sensitive	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None. The project site lacks the habitat the species requires.
<i>Trimerotropis occidentiloides</i>	Santa Monica grasshopper	Insects	None	None	IUCN_EN- Endangered	Known only from the Santa Monica Mountains.	Found on bare hillsides and along dirt trails in chaparral.	None. The project site lacks the habitat the species requires.
<i>Antrozous pallidus</i>	pallid bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
					Concern USFS_S-Sensitive	with rocky areas for roosting.		
<i>Euderma maculatum</i>	spotted bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests.	Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	None. The project site lacks the habitat the species requires.
<i>Eumops perotis californicus</i>	western mastiff bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	None. The project site lacks the habitat the species requires.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	Mammals	None	None		Intermediate canopy stages of shrub habitats and open shrub / herbaceous and tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	None. The project site lacks the habitat the species requires.
<i>Macrotus californicus</i>	California leaf-nosed bat	Mammals	BNone	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats.	Needs rocky, rugged terrain with mines or caves for roosting.	None. The project site lacks the habitat the species requires.
<i>Myotis ciliolabrum</i>	western small-footed myotis	Mammals	None	None	BLM_S-Sensitive IUCN_LC-Least Concern	Wide range of habitats mostly arid wooded and brushy uplands near water. Seeks cover in caves, buildings, mines, and crevices.	Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	None. The project site lacks the habitat the species requires.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	None. The project site lacks dense canopies, rock outcrops, rocky cliffs, and slopes. The species has not been observed in the immediate area.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Taxidea taxus</i>	American badger	Mammals	None	None	CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	None. The project site lacks the habitat the species requires.
<i>Gonidea angulata</i>	western ridged mussel	Mollusks	None	None	IUCN_VU- Vulnerable	Primarily creeks and rivers and less often lakes. Originally in most of state, now extirpated from Central and Southern California.		None. The project site lacks the habitat the species requires.
<i>Helminthoglypta fontiphila</i>	Soledad shoulderband	Mollusks	None	None		Air-breathing terrestrial snail. Known from type locality, Little Rock Creek Cyn on north side of San Gabriels; west to Santa Clarita in Soledad Cyn; east to the vicinity of Big Rock Creek; and north to Elizabeth Lake Cyn in the Sierra Pelona Mtns.	Frequently found in riparian habitat (springs, seeps, along streams). May be found in rock piles, flood-borne debris, or under dead yuccas where other cover is not available.	None. The project site lacks the habitat the species requires.
<i>Helminthoglypta traskii pacoimensis</i>	Pacoima shoulderband	Mollusks	None	None		Air-breathing terrestrial snail. Known from type locality, Pacoima Canyon on the west side of the San Gabriel Mountains. Additional specimens from Elizabeth Lake Canyon in the Sierra Pelona Mountains may merit review	Found mostly under bark and fragments of rotten logs.	None. The project site lacks the habitat the species requires.
<i>Anniella spp.</i>	California legless lizard	Reptiles	None	None	CDFW_SSC- Species of Special Concern	Contra Costa County south to San Diego, within a variety of open habitats. This	Variety of habitats; generally in moist, loose soil. They prefer soils with a	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
						element represents California records of <i>Anniella</i> not yet assigned to new species within the <i>Anniella pulchra</i> complex.	high moisture content.	
<i>Anniella stebbinsi</i>	Southern California legless lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	None. The project site lacks the habitat the species requires. The soils are not moist here.
<i>Arizona elegans occidentalis</i>	California glossy snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	None. The project site lacks the habitat the species requires. The soils are not moist here.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	None. The project site lacks the habitat the species requires.
<i>Emys marmorata</i>	western pond turtle	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	None. The project site lacks the habitat the species requires.

Scientific Name	Common Name	Taxonomic Group	FESA	CESA	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
<i>Phrynosoma blainvillii</i>	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None. The project site lacks the habitat the species requires.
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Brushy or shrubby vegetation in coastal Southern California.	Require small mammal burrows for refuge and overwintering sites.	None. The project site lacks the habitat the species requires.
<i>Thamnophis hammondi</i>	two-striped gartersnake	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	None. The project site lacks the habitat the species requires.

Appendix C

Protected Tree Report

PROTECTED TREE REPORT

SUBJECT

**Industrial/Warehouse Building - 4100 Guardian Street
Simi Valley**

PREPARED FOR:

Dunn Simi, LP
1200 Wilshire Blvd., Suite 208
Los Angeles, CA 90017

PREPARED BY:

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Date: February 29, 2024

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1. ASSIGNMENT

The objective of this report is to assess the condition of the site's mature, protected trees, to discuss the potential encroachments of them, and to discuss the effect of the encroachments on the health of the trees.

2. BACKGROUND

The project is a proposed new industrial/warehouse building and parking lot to replace an existing office building and parking lot. There is one heritage oak tree – a valley oak – that existed prior to the original development of this property. All the other trees, including all the other oak trees, were planted as part of the landscape planting for the existing office building and parking lot. Nearly all the trees could feasibly be transplanted in the parking lot although most are large trees that would not be practical to transplant due to cost. Trees surrounding the existing parking lot would be difficult to access due to their locations on the steep slopes.

3. METHOD OF STUDY

In August of 2023 and February of 2024, the subject trees were inspected using the ISA Level 2 or Basic Assessment, a ground-level, visual inspection assessing structure and general health by means of measuring tools and tools to observe the exterior of the trees. The trees were tagged last August with numbered, metal tags beginning with #101 and ending with #231. Additional trees were added in February of 2024. The tagged trees now run from #101 to #279. Some of the trees are not accessible and were not tagged.

4. DISCUSSION

The City of Simi Valley Municipal Code prohibits the removal of protected trees as stated in the following section of the municipal code:

Chapter 9-38.030 – Prohibition Removal

No "protected tree" shall be removed, cut down, relocated, or otherwise destroyed, except as provided for in Sections [9-38.070](#) (Tree Removal Permits) through [9-38.090](#) (Exceptions), below.

(§ 5, Ord. 1085, eff. January 6, 2006)

In the City of Simi Valley Guidelines for the Preparation of Tree Reports the following is stated:

3. The following information must be included in the tree report:

Tree map, prepared on the site plan, showing:

- a. The precise vertical and horizontal location (within 1 foot) of each mature tree within the project boundary as shown on the site plan.
- b. The generalized locations of all mature trees within 20 feet beyond the project boundary as shown on the site plan.
- c. A number for each tree. The corresponding number is to be painted on each tree. Verifications of locations, species, and numbers will be made by the reviewing planner.

There are 179 trees that qualify as mature trees. 35 of these trees (#188 - #190, #199 - #203, #206, #207, #220, #224 - #232, #235 - #238, #244, #245, #247 - #253, #261, and #265 are proposed to be preserved in place. There are 35 oak trees on the property; all of them are *Quercus agrifolia* (coast live oak) except for the heritage oak tree that is a *Quercus lobata* (valley oak). It appears that all 34 coast live oaks were planted as part of the original landscape planting. Including the heritage oak tree, 7 oaks will be saved, #188, #220, #229, #249, #251, #252, and #261.

Where there is a proposed soil nail wall on the perimeter of the project, I presumed that there will be 10 to 15 feet of the area that must be provided to perform the installation and that trees will have to be removed in this area.

Tree #229 is a healthy, heritage valley oak tree in good health. The actual encroachment into the dripline of this tree appears to be minor. The height of the wall will be 5 feet near this oak tree and the toe of the wall will be 25 feet from the trunk. The significant encroachment will be caused by the construction activity to install the wall not the actual location of the wall. The applicant will have to demonstrate that the installation can be completed without disturbing the area within the canopy. Otherwise, it may be necessary to adjust the parking lot to accommodate and make an adjustment of the wall alignment.

5. APPRAISED VALUE OF THE TREES

As required by the City of Simi Valley, I have appraised the value of the subject trees that will be removed by the project as discussed above. The values of the trees were appraised using the Guide for Plant Appraisal, 10th edition, second printing, 2019, from the Council of Tree and Landscape Appraisers and published by the International Society of Arboriculture, Atlanta, GA.

To calculate the value of the subject tree, I used the Reproduction Method: Trunk Formula Technique from the Guide for Plant Appraisal. The value is calculated based on the trunk diameters, the health, structure and form of the tree, the cost of the largest available replacement tree of the same species, and any factors that I have determined depreciate the value of the tree. Refer to the Table in the Appendix that has a list of the calculated tree values.

6. TREE PROTECTION

- A. The general contractor shall be familiar with the stated tree protection measures and protected tree ordinance as set forth in the municipal or county code. The following is a brief guideline of recommendations to protect the trees.
- B. The applicant's tree consultant shall be notified 48 hours prior to the commencement of any work within the dripline of any protected tree.
- C. Trees that are to be preserved on the site during demolition and construction shall be fenced at the location of their root zones or at the limit of work with a temporary chain link fence prior to commencement of demolition. Signs shall be posted in English and Spanish to notify people that the trees are protected.
- D. Trees shall be protected from being injured by demolition and construction including but not limited to wounding of branches and roots, compaction of soil within the protected zone, and damage to the foliage by engine exhaust.
- E. No activity, such as vehicle travel or parking, equipment and building materials

storage, deposit of debris and trash or any activity that will harm the protected trees shall be allowed within the protected root zones of any protected tree at any time.

Pruning

Tree pruning is not anticipated as there are no trees that require urgent, corrective pruning currently. Pruning for maintenance may be done after completion of the project using the ANSI A300 Part 1 - 2017 Pruning guidelines.

Grading Near Protected Trees

- A. All demolition work will be undertaken keeping in mind that tree roots should be preserved if they do not need to be removed for construction.
- B. Within the crown spread of the protected trees to be preserved in place, hand trenching shall be done at the limit of any proposed excavation to uncover roots, allowing them to be properly and cleanly pruned prior to the excavation work. This work shall be done under the observation of the consulting arborist.

Work Procedures Program

- A. Preparation Phase:

It is recommended that trees that will be encroached and preserved be watered to attain sufficient soil moisture content. This is crucial to maintain the health of the trees during demolition and construction. Fencing should be in place prior to the commencement of demolition.

- B. Protective Fencing:

- a. See "Tree Protection" above for the intent of the fencing plan. The trees that are to be preserved on the site shall be kept fenced during demolition and construction with a 5-foot high, temporary, chain-link fence for protection at all times when construction activities are taking place. The chain-link fence shall be in place prior to the commencement of demolition. A three-foot-wide pass-through opening in the fence shall be provided for maintenance access. The fence shall remain during all phases of construction. Damaged fencing shall be immediately replaced or repaired.
- b. In some cases, fencing may be placed at the limit of demolition or excavation to allow approved work to be done inside the root zones. No fencing shall be removed or moved without notifying the tree consultant and without approval from the tree consultant.

- C. Pruning:

Pruning, if any, shall be performed before demolition to avoid conflict between trees and demolition equipment. This action should reduce the potential for broken branches resulting from being struck by that equipment.

D. Demolition and Construction:

- a. The greatest potential for consequential damage to trees is from excavation for footings, utility trenching, driveway base preparation, and demolition. It is not possible to develop this site without some conflict between the trees and the proposed improvements. The conflict relates to both the aerial crown and the root structure of the trees. The goal is to eliminate or at least minimize damage. This can be accomplished as follows:
- b. After pruning the roots at the edge of the limit of work, it may be necessary to utilize equipment to remove the soil outside of the roots that were cut. This should be done under the observation of the consulting arborist. Prune roots to the required depth using standard, sterile, mechanical root pruning equipment accompanied by hand work. In the case of trenching, cut the roots on each side of the proposed trench to the required depth.
- c. These methods will minimize root damage from excavation and grading equipment pulling on roots in a lateral direction from their path of travel. Pruned roots shall be hand sawn, using sterilized equipment, with a clean cut, at a 90-degree angle facing downward and shall not be sealed.
- d. Place all excavation spoils outside of the dripline of the trees.

E. Other protective measures:

- a. Protect trees by not wounding them. Nailing of anything such as grade stakes must be avoided.
- b. The potential for breaking branches by mechanical equipment should be anticipated and, if encountered, the arborist should be notified with a request for an evaluation and recommendation on how to proceed.
- c. No chemicals such as herbicides shall be used upstream and within one hundred feet of any tree protected zone.
- d. Dust deposited on the foliage of trees must be hosed off so that the leaves are not smothered by dust particles.

NOTICE of DISCLAIMER

The report represents the independent opinion of the signatory consultant (John Oblinger). The tree(s) discussed herein was/were generally reviewed for physical, biological function and aesthetic conditions. This examination was conducted in accordance with presently accepted industry procedures, which are a ground-plane macro-visual observation only. No extensive micro-biological, soil-root excavations, upper crown examination nor internal tree investigations were conducted and therefore, the reporting herein reflects the overall visual appearance of the tree(s) on the date reviewed and no warranty is implied as to the potential failure, health, or demise of any part of or the whole tree described in the report. Records may not remain accurate after our inspection due to unknown alteration or deterioration of the reviewed site.

Respectfully submitted,

John Oblinger

ISA Certified Arborist WE-6820A
ISA Tree Risk Assessor Qualified

FORM	TREE NUMBER	101	102	103	104	105	106	107	108	109	110
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>					X		X	X	X	X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>	X					X				
	<i>Quercus agrifolia</i>		X	X							
	<i>Schinus molle</i>				X						
		DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	11"	15"	16"	6" 6" 5" 5"	23"	10"	19"	18"	20"
RATING	TREE HEIGHT (APPROX)	35'	25'	40'	25'	45'	40'	40'	35'	40'	30'
	CROWN SPREAD	25'	25'	35'	20'	30'	25'	25'	20'	25'	25'
	HEALTH	B	B	B	B	B	B	B	B	C	C
	AESTHETICS/COMFORMITY	B	A	A	B	B	C	B	B	C	C

FORM	TREE NUMBER	111	112	113	114	115	116	117	118	119	120
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>	X					X	X	X	X	X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>		X	X	X	X					
	<i>Quercus agrifolia</i>										
	<i>Schinus molle</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	20"	14"	11"	9"	10"	19"	13"	16"	17"	15"
	TREE HEIGHT (APPROX)	35'	45'	40'	30'	45'	50'	25'	50'	50'	40'
RATING	CROWN SPREAD	25'	20'	20'	20'	20'	30'	20'	25'	50'	30'
	HEALTH	C-	B	B	B	B	B	C	C	B	B
	AESTHETICS/COMFORMITY	C-	B	B	B	B	B	C	C	C	C

SUMMARY OF FIELD OBSERVATIONS
4100 Guardian Street

FORM	TREE NUMBER	161	162	163	164	165	166	167	168	169	170
	<i>Callistemon viminalis</i>	X									
	<i>Eucalyptus nicholii</i>										
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>		X	X		X					
	<i>Platanus racemosa</i>				X		X	X	X	X	X
	<i>Quercus agrifolia</i>										
	<i>Schinus molle</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	10"	15"	13"	11"	16"	10"	11"	12"	12"	9"
RATING	TREE HEIGHT (APPROX)	20'	50'	50'	40'	55'	45'	45'	45'	40'	35'
	CROWN SPREAD	20'	20'	20'	20'	20'	25'	20'	25'	20'	18'
	HEALTH	B	B	B	C	B	B	B	B	B	B
	AESTHETICS/COMFORMITY	B	B	B	C	B	B	C	B	B	C

FORM	TREE NUMBER	171	172	173	174	175	176	177	178	179	180
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>		X		X	X	X		X	X	X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>	X		X				X			
	<i>Quercus agrifolia</i>										
	<i>Schinus molle</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	11"	22"	11"	19"	28"	19"	9"	15"	16"	13" 12"
RATING	TREE HEIGHT (APPROX)	35'	35'	35'	35'	30'	35'	40'	40'	40'	40'
	CROWN SPREAD	20'	20'	25'	20'	25'	25'	25'	25'	25'	25'
	HEALTH	C	C	B	B	B	B	B	B	B	B
	AESTHETICS/COMFORMITY	C	C	B	B	B	B	C	B	B	B

SUMMARY OF FIELD OBSERVATIONS
4100 Guardian Street

FORM	TREE NUMBER	181	182	183	184	185	186	187	188	189	190
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>	X	X	X			X			X	X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>				X	X					
	<i>Quercus agrifolia</i>							X	X		
	<i>Schinus molle</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	19"	19"	21"	9"	11"	10"	10"	9"	14"	14"
RATING	TREE HEIGHT (APPROX)	40'	40'	40'	30'	30'	30'	25'	25'	35'	40'
	CROWN SPREAD	25'	20'	25'	20'	25'	15'	25'	20'	25'	30'
	HEALTH	B	B	B	B	B	D	B	B	C	B
	AESTHETICS/COMFORMITY	B	B	B	B	A	D	A	A	C	B

FORM	TREE NUMBER	191	192	193	194	195	196	197	198	199	200
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>				X				X	X	X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>	X	X	X		X	X	X			
	<i>Quercus agrifolia</i>										
	<i>Schinus molle</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	9"	18"	12"	15"	9"	13"	10"	15"	11"	12"
RATING	TREE HEIGHT (APPROX)	30'	30'	40'	35'	25'	30'	40'	40'	30'	35'
	CROWN SPREAD	25'	30'	30'	25'	20'	30'	25'	25'	20'	20'
	HEALTH	B	B	B	B	C	B	B	B	B	B
	AESTHETICS/COMFORMITY	B	B	B	C	C	B	B	B	B	B

SUMMARY OF FIELD OBSERVATIONS
4100 Guardian Street

FORM	TREE NUMBER	201	202	203	204	205	206	207	208	209	210
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>	X	X	X		X	X	X			
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>				X						
	<i>Platanus racemosa</i>								X		
	<i>Quercus agrifolia</i>									X	
	<i>Schinus molle</i>										X
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	14"	26"	28"	13"	30"	20"	15"	10"	8"	15"
RATING	TREE HEIGHT (APPROX)	25'	60'	45'	40'	45'	45'	35'	25'	15'	35'
	CROWN SPREAD	25'	40'	40'	15'	30'	25'	25'	20'	20'	25'
	HEALTH	B	NOTES: C-	NOTES: C-	NOTES: B	NOTES: B	NOTES: B	NOTES: B	NOTES: B	NOTES: B	NOTES: C
	AESTHETICS/COMFORMITY	B	NOTES: C-	NOTES: C-	NOTES: C	NOTES: B	NOTES: B	NOTES: B	NOTES: B	NOTES: B	NOTES: C

FORM	TREE NUMBER	211	212	213	214	215	216	217	218	219	220
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>										
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>										
	<i>Quercus agrifolia</i>			X	X	X	X	X		X	X
	<i>Schinus molle</i>	X	X						X		
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	13"	15"	12"	5" 3"	9"	13"	12"	8"	10"	9"
RATING	TREE HEIGHT (APPROX)	30'	30'	25'	20'	20'	30'	30'	20'	25'	20'
	CROWN SPREAD	30'	30'	30'	20'	20'	25'	25'	20'	25'	15'
	HEALTH	C	C	C	B	B	B	B	B	B	B
	AESTHETICS/COMFORMITY	C	C	C	C	B	B	B	B	B	B

FORM	TREE NUMBER	221	222	223	224	225	226	227	228	229	230
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>				X	X	X	X	X		X
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>		X	X							
	<i>Quercus agrifolia</i>	X									
	<i>Schinus molle</i>									X	
	<i>Quercia lobata</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	6"	14"	16"	12"	13"	15"	18"	20"	36"	15"
	TREE HEIGHT (APPROX)	15'	35'	30'	20'	40'	40'	40'	40'	45'	35'
RATING	CROWN SPREAD				20'	30'	25'	30'	30'	60'	20'
	HEALTH	B	C	C	B	B	B	B	B	C	B
	AESTHETICS/COMFORMITY	B	C	C	B	B	B	B	B	B	C

FORM	TREE NUMBER	231	232	233	234	235	236	237	238	239	240
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>	X	X	X		X	X	X	X		
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>										X
	<i>Quercus agrifolia</i>										
	<i>Schinus molle</i>				X					X	
	<i>Quercus lobata</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	15"	11"	22"	10"	11"	28"	12"	25"	27" 17"	10"
	TREE HEIGHT (APPROX)	40'	45'	50'	30'	25'	50'	25'	50'	40'	30'
RATING											
	CROWN SPREAD	25'	30'	30'	20'	10'	50'	10'	40'	50'	20'
	HEALTH	C	C	C	C	D	C	C	C	D	C
	AESTHETICS/COMFORMITY	C	C	C	C	D	C	C	C	C	C

[illegible]

FORM	TREE NUMBER	251	252	253	254	255	256	257	258	259	260
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>			X	X						
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>										
	<i>Quercus agrifolia</i>	X	X			X	X	X	X	X	X
	<i>Schinus molle</i>										
	<i>Quercus lobata</i>										
	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	7"	15" 7"	14"	16"	10"	11"	12"	11"	5" 4" 3" 2"	12"
	TREE HEIGHT (APPROX)	20'	35'	50'	50'	30'	35'	35'	25'	18'	30'
RATING											
	CROWN SPREAD	15'	25'	40'	40'	30'	25'	30'	30'	20'	20'
	HEALTH	C	B	B	B	B	B	B	C-	C	C
	AESTHETICS/COMFORMITY	C	B	B	B	A	B	B	C-	C	C

SUMMARY OF FIELD OBSERVATIONS
4100 Guardian Street

August 4, 2023
February 28, 2024

FORM	TREE NUMBER	261	262	263	264	265	266	267	268	269	270
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>										
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>										
	<i>Quercus agrifolia</i>	X	X	X	X						
	<i>Schinus molle</i>					X	X	X	X	X	X
	<i>Quercia lobata</i>										
RATING	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	15"	9"	12"	5" 3"	12" 10"	16"	9" 7"	12"	15"	9" 12"
	TREE HEIGHT (APPROX)	30'	25'	30'	20'	25'	35'	30'	25'	30'	25'
	CROWN SPREAD	30'	20'	30'	15'	25'	35'	25'	30'	30'	30'
RATING	HEALTH	C	C	B	C	C	B	B	B	B	B
	AESTHETICS/COMFORMITY	C	C	B	C	C	B	B	B	B	B

FORM	TREE NUMBER	271	272	273	274	275	276	277	278	279	
	<i>Callistemon viminalis</i>										
	<i>Eucalyptus nicholii</i>								X	X	
	<i>Liquidambar styraciflua</i>										
	<i>Pinus canariensis</i>										
	<i>Platanus racemosa</i>										
	<i>Quercus agrifolia</i>		X	X	X	X	X	X			
	<i>Schinus molle</i>	X									
	<i>Quercus lobata</i>										
RATING	DIAMETER OF TRUNKS AT 4.5' ABOVE EXISTING GRADE (DBH)	15" 14" 11"	5" 5" 4"	10"	7"	7"	8"	8"	15"	19"	
	TREE HEIGHT (APPROX)	30'	15'	25'	18'	20'	25'	25'	40'	45'	
	CROWN SPREAD	40'	15'	20'	15'	20'	20'	20'	30'	30'	
RATING	HEALTH	B	B	B	B	C	C	C	C	C	
	AESTHETICS/COMFORMITY	B	B	B	B	C	C	C	C	C	

Appraised Tree Values
4100 Guardian Street

February 29, 2024

	SPECIES								Health	Form	VALUE	
	CV	EN	LS	PC	PR	QA	QL	SM				
101					1				B	B	\$	1,750
102						1			B	A	\$	3,400
103						1			B	A	\$	3,860
104								1	B	B	\$	3,700
105		1							B	B	\$	7,650
106					1				B	C	\$	1,400
107		1							B	B	\$	17,600
108		1							B	B	\$	4,680
109		1							C	C	\$	4,340
110		1							C	C	\$	1,840
111		1							C-	C-	\$	3,620
112					1				B	B	\$	1,840
113					1				B	B	\$	1,750
114					1				B	B	\$	1,180
115					1				B	B	\$	1,460
116		1							B	B	\$	5,210
117		1							C	C	\$	1,840
118		1							C	C	\$	2,780
119		1							B	B	\$	4,180
120		1							B	B	\$	3,260
121		1							B	A	\$	2,550
122					1				B	B	\$	1,460
123					1				B	B	\$	1,750
124		1							C	C	\$	3,260
125		1							B	B	\$	2,080
126		1							B	B	\$	2,840
127		1							C	C	\$	1,840
128		1							C	C	\$	1,310
129		1							C	C	\$	1,840
130					1				B	B	\$	2,080
131				1					B	B	\$	3,370
132				1					B	B	\$	4,680
133				1					B	B	\$	3,700
134				1					B	B	\$	3,700
135					1				B	A	\$	6,640
136				1					B	B	\$	4,180
137				1					B	B	\$	4,680
138			1						B	A	\$	2,090
139			1						B	A	\$	2,090
140			1						B	A	\$	2,090
141				1					B	C	\$	2,600
142				1					B	C	\$	2,830

	SPECIES								Health	Form	VALUE	
	CV	EN	LS	PC	PR	QA	QL	SM				
143					1				B	A	\$	6,030
144				1					B	C	\$	2,600
145				1					B	C	\$	2,600
146				1					B	C	\$	2,990
147				1					B	C	\$	2,600
148					1				B	B	\$	2,450
149				1					B	B	\$	1,180
150	1								B	C	\$	4,000
151	1								B	C	\$	2,250
152					1				B	B	\$	2,840
153					1				B	B	\$	2,080
154					1				B	A	\$	1,230
155				1					B	C	\$	1,910
156				1					B	C	\$	3,400
157					1				B	B	\$	3,700
158					1				B	B	\$	1,750
159					1				B	B	\$	2,080
160	1								B	B	\$	3,640
161	1								B	B	\$	3,025
162				1					B	B	\$	3,260
163				1					B	B	\$	2,450
164					1				C	C	\$	1,315
165				1					B	B	\$	3,700
166					1				B	B	\$	1,460
167					1				B	B	\$	1,750
168					1				B	B	\$	2,080
169					1				B	B	\$	2,080
170					1				B	C	\$	1,080
171					1				C	C	\$	1,315
172		1							C	C	\$	5,250
173					1				B	B	\$	1,770
174		1							B	B	\$	5,210
175		1							B	B	\$	11,330
176		1							B	B	\$	5,220
177					1				B	C	\$	1,080
178		1							B	B	\$	3,260
179		1							B	B	\$	3,700
180		1							B	B	\$	4,530
181		1							B	B	\$	5,220
182		1							B	B	\$	5,220
183		1							B	B	\$	6,375
184					1				B	B	\$	1,180

	SPECIES								Health	Form	VALUE	
	CV	EN	LS	PC	PR	QA	QL	SM				
185					1				B	A	\$	1,820
186		1							D	D	\$	550
187						1			B	A	\$	1,515
188						1			B	A	\$	1,230
189		1							C	C	\$	2,130
190		1							B	B	\$	2,840
191					1				B	B	\$	1,180
192					1				B	B	\$	4,680
193					1				B	B	\$	2,080
194		1							B	C	\$	2,990
195					1				C	C	\$	885
196					1				B	B	\$	2,450
197					1				B	B	\$	1,460
198		1							B	B	\$	3,260
199		1							B	B	\$	1,770
200		1							B	B	\$	2,080
201		1							B	B	\$	2,840
202		1							C-	C-	\$	6,110
203		1							C-	C-	\$	7,080
204				1					B	C	\$	2,250
205		1							B	B	\$	13,000
206		1							B	B	\$	5,780
207		1							B	B	\$	3,260
208					1				B	B	\$	1,460
209						1			B	B	\$	920
210								1	C	C	\$	2,450
211								1	C	C	\$	1,840
212								1	C	C	\$	3,260
213						1			C	C	\$	1,560
214						1			B	C	\$	500
215						1			B	B	\$	1,180
216						1			B	B	\$	1,750
217						1			B	B	\$	1,460
218								1	B	B	\$	920
219						1			B	B	\$	1,460
220						1			B	B	\$	1,180
221						1			C	B	\$	475
222					1				B	C	\$	2,600
223					1				C	C	\$	2,780
224		1							C	B	\$	2,100
225		1							B	B	\$	2,450
226		1							B	B	\$	2,450

Appraised Tree Values
4100 Guardian Street

February 29, 2024

	SPECIES								Health	Form	VALUE	
	CV	EN	LS	PC	PR	QA	QL	SM				
227		1							B	B	\$	4,700
228		1							B	B	\$	5,800
229							1		B	B	\$	20,000
230		1							B	B	\$	2,850
231		1							C	B	\$	3,300
232		1							C	C	\$	1,100
233		1							C	C	\$	4,400
234								1	C	C	\$	1,100
235		1							D	D	\$	660
236		1							C	C	\$	9,900
237		1							C	C	\$	1,800
238		1							C	C	\$	7,900
239								1	D	C	\$	5,500
240					1				C	C	\$	1,100
241								1	C	D	\$	545
242					1				C	C	\$	900
243								1	B	B	\$	2,450
244								1	B	B	\$	1,500
245								1	B	C	\$	1,800
246					1				C	C	\$	900
247								1	B	B	\$	2,400
248						1			B	C	\$	610
249						1			B	C	\$	1,100
250								1	B	B	\$	1,100
251						1			C	C	\$	525
252						1			B	B	\$	4,000
253		1							B	B	\$	2,800
254		1							B	B	\$	3,700
255						1			B	A	\$	1,500
256						1			B	B	\$	1,750
257						1			B	B	\$	2,100
258						1			C-	C-	\$	875
259						1			C	C	\$	600
260						1			C	C	\$	1,600
261						1			C	C	\$	2,500
262						1			C	C	\$	900
263						1			B	B	\$	2,100
264						1			C	C	\$	375
265								1	C	C	\$	2,650
266								1	B	B	\$	3,700
267								1	B	B	\$	1,900
268								1	B	B	\$	2,100

	SPECIES								Health	Form	VALUE	
	CV	EN	LS	PC	PR	QA	QL	SM				
269								1	B	B	\$	3,300
270								1	B	B	\$	3,300
271								1	B	B	\$	7,800
272						1			B	B	\$	925
273						1			B	B	\$	1,500
274						1			B	B	\$	700
275						1			C	C	\$	525
276						1			C	C	\$	700
277						1			C	C	\$	700
278		1							C	C	\$	2,850
279		1							C	C	\$	4,600
	4	58	3	19	41	33	1	20				
TOTAL VALUE											\$	525,215

GLOSSARY

INTRODUCTION

Familiarity with the following definitions is necessary to the basic understanding of the tree ordinance, this tree report, and of the procedures used to evaluate the trees and the site conditions. There are numerous diseases and insects that frequently attack trees. A long discourse in plant pathology or entomology is not a prerequisite to develop a basic understanding of the effects of disease and insects upon living plant tissue but a basic knowledge of disease and insects should include an understanding of the following definitions:

SPECIES/DIMENSIONS

1. **Tree Number** - each protected tree in the field has been assigned a number that corresponds to a tree location on the Tree Location Map.
2. **Species** - is the type of tree that is being evaluated.
3. **Trunk Diameter** - as measured at 4½' above mean natural grade or, traditionally, DBH (diameter at breast height). This may be altered if the measurement cannot be made at 4½' feet or if makes sense to measure above or below that point.
4. **Tree Height** - is the approximate height of each assessed tree.
5. **Crown Spread** - is the approximate, average diameter of the crown or canopy.
6. **Lean Direction** - is the direction the tree is inclined from the natural vertical position.

PHYSICAL CONDITION

1. **Vigor** - is the capacity of a tree for growth and survival. Below are the ratings:

Low - Little new tip growth; poor leaf color; abnormal bark; much dead wood; significantly thinning foliage.

Normal - New tip growth; good leaf color; some insect damage and twig dieback; no significant dieback;

High - New tip growth; good leaf color; dense foliage; usually found in younger trees;

A vigorous tree will more easily ward off disease and/or insect attacks, and should recover from impacts more quickly than a less vigorous tree.

2. **Trunk Cavity/Damage** - A cavity is a hollow area in the trunk, usually due to fire or wood decay. Damage is a damaged area on the trunk, usually due to an external (abiotic) force on the tree.
3. **Water Pocket** - pockets formed at branch crotches that can hold water and possibly weaken the tree's structure (possible hazard).
4. **Trunk Sap Ooze** - the exudation of liquid, usually from wounds; trunk sap ooze.
5. **Codominance** – equal in size and importance, usually associated with either trunks/stems or scaffold limbs/branches in the crown. Often can and should be corrected by pruning.
6. **Included Bark** - bark that is embedded between a branch and its parent stem or between codominant stems causing a weak attachment.
7. **Buried Root Collar** - the root collar is the transition area between the bark and the trunk. Burying the root collar may lead to fungal infection.
8. **Fungal Disease** - diseases that attack live tissue/external signs (i.e. mushrooms, conks) of internal wood decay.

GLOSSARY

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9. **Insect Damage** - is some form of damage to the parts of the tree caused by insects or mites (e.g. scale, caterpillars, weevils, borers, mites, etc.).
10. **Mainstem Dieback** - death of healthy mainstems from the growing tip back.
11. **Twig/Branch Dieback** - death of twigs from the growing tip back.
12. **Thin Foliage** - defoliation and twig dieback throughout the canopy.
13. **Weak Attachments** - poorly formed branch connection at a crotch.
14. **Branch Cavities** - hollow areas in the limbs in the crown, usually due to the decay of wood.
15. **Over-extended Branch** - a large branch usually growing horizontally that may have excessive end weight and that exerts tremendous stress on its attachment. Can be corrected with reduction pruning.
16. **Epicormic Growth** - growth from adventitious buds along trunk and/or main limbs, rather than on twigs usually due to stress or poor pruning.
17. **Terrain** - refers to the general topography of the land where the tree is found.

RATING

1. **Heritage** - can vary in definition by agency but generally indicates a tree of significant size and age.
2. The **Health** of the trees was visually determined from a macroscopic inspection of signs and symptoms of disease. The following describes our rating system:
 - A - Outstanding** - A healthy and vigorous tree characteristic of its species and free of any significant visible signs of disease or insect damage;
 - B - Above Average** - A healthy and vigorous tree. However, there are minor visible signs of disease and insect damage;
 - C - Average** - Although healthy in overall appearance, there is a normal amount of disease and/or insect damage;
 - D - Below Average/Poor*** - This tree is characterized by exhibiting a greater degree of disease and/or insect damage or loss of structural integrity than normal and appears to be in a state of decline. This tree also exhibits extensive signs of dieback;
 - F - Dead*** - This tree exhibits no signs of life at the time of field evaluation.

*A tree rating of "D" and lower is in a low stage of vigor and naturally a meaningful level of recovery is doubtful. Removal should be considered if it is within the proposed project development.
3. The **Aesthetic/Conformity** quality of the trees was visually determined from an overall inspection of appearance. The following describes our system:
 - A. Outstanding** - The tree is visually symmetrical, having the ideal form and appearance for the species;
 - B. Above Average** - The tree, though may not be perfectly symmetrical, has a nearly ideal form for the species with very little dieback of foliage or twigs and branches;
 - C. Average** - The tree has some asymmetry for the species with some defects that can be corrected and/or has some dieback of foliage and twigs and branches;
 - D. Poor** - The tree has few positive characteristics that probably cannot be corrected and may detract from the beauty of the landscape.

GLOSSARY

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REMARKS (Some other terms that may be used)

1. **Bark Beetle Frass** – are wood fragments (dust) mixed in the insect's excrement produced by boring.
2. **Basal Growth** – is leaf growth generated from the base of the trunk.
3. **Cable/Brace** – provides support to relieve stress on a weak part of the tree (e.g. where two trunks form a "V" crotch.
4. **Cankers** – are rough swellings with depressed centers resulting in death of tissue that later cracks open and exposes the wood underneath in twigs, branches, and/or trunks. May be a sign of fungal damage.
5. **Chlorotic Leaves** – leaf veins remain normally green but the tissue between veins becomes yellow. Usually caused by nutrient deficiencies.
6. **Compartmentalization** – Physiological process in trees that creates the chemical and physical boundaries that act to limit the spread of disease and the decay organisms. Often seen where branches have been pruned properly.
7. **Crown** – parts of the tree above the trunk, including leaves, branches, and scaffold branches.
8. **Crown-clean pruning** – removal of dead, dying, diseased, rubbing, and structurally unsound branches, etc.
9. **Crown reduction pruning** – Removal of large branches and/or cutting back to large laterals to reduce the height or spread of the crown; sometimes referred to as “drop crotch” pruning or “natural pruning.”
10. **Exfoliating Bark** – the flaking off of bark from trunk, branches and/or twigs.
11. **Exposed Buttress Roots** – when soil is absent at the base of the tree exposing large roots at trunk flare.
12. **Fire Damage** – each tree may be rated on the amount of burn it has received.
13. **Heart Rot** – decay in the center of the tree (heartwood).
14. **Lion-tailing** – an improper pruning technique where internal foliage and branches are removed, leaving twigs and foliage concentrated at the branch ends.
15. **Mistletoe** – is a leafy evergreen, perennial parasite with dark green leathery leaves.
16. **Multiple stems/branches** – single location where several branches are attached often creating weak attachments.
17. **Powdery Mildew** – a white powdery fungus on leaves often found when new growth becomes wet for long periods of time; leaves may be distorted, stunted and drop prematurely.
18. **Reduction cuts** – cutting a branch back to a live lateral branch which will take over as the new end of that branch.
19. **Removal cuts** – a thinning cut back to the trunk or the parent stem (branch) that preserves the branch collar.
20. **Scaffold limb** – A primary structural branch of the crown.
21. **Stub cuts** – an improper pruning technique that leaves a stub that may lead to structural defects.
22. **Topping** – the improper pruning of large limbs, usually growing vertically, to reduce the height of a tree.
23. **Witches Broom** – is an abnormal growth cluster of twigs that may be caused by pruning, insects, mites, fungus, etc.

Appendix D

Cultural Resources Assessment
CONFIDENTIAL

Cultural Resources Assessment

4100 Guardian Street Project, City of Simi Valley, California

CONFIDENTIAL

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November 2023

Appendix E

Greenhouse Gas Emissions Assessment

Greenhouse Gas Emissions Assessment
4100 Guardian Street Warehouse Project
City of Simi Valley, California

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APPENDIX

Appendix A: Greenhouse Gas Emissions Data

LIST OF ABBREVIATED TERMS

AB	Assembly Bill
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CARB	California Air Resource Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CALGreen Code	California Green Building Standards Code
CPUC	California Public Utilities Commission
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CFC	Chlorofluorocarbon
CPP	Clean Power Plan
CCSP	Climate Change Scoping Plan
cy	cubic yard
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
FR	Federal Register
GHG	greenhouse gas
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
LEED	Leadership in Energy and Environmental Design
LCFS	Low Carbon Fuel Standard
CH ₄	Methane
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
MTCO ₂ e	million tons of carbon dioxide equivalent
NHTSA	National Highway Traffic Safety Administration
NF ₃	nitrogen trifluoride
N ₂ O	nitrous oxide
RSPA	Renaissance Specific Plan Area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Government
Sf	square foot
SF ₆	sulfur hexafluoride
TAC	toxic air contaminants
VCAPCD	Ventura County Air Pollution Control District

1 INTRODUCTION

This report documents the results of a Greenhouse Gas (GHG) Emissions Assessment completed for the 4100 Guardian Street Warehouse Project (Project). The purpose of this GHG Emissions Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location

The Project is located at 4100 Guardian Street in the City of Simi Valley, California (City), approximately 1.11 miles south of California State Route 118 (SR-118) (Ronald Reagan Freeway). The 10.3-acre Project site is located at the southeast corner of Tapo Canyon Road and Guardian Street intersection and consists of one parcel (Assessor's Parcel Number 626-005-2065). The Project site is currently occupied by an office building and surface parking lot.

Existing uses surrounding the Project Include:

- North: Tapo Canyon Business Park;
- East: Light industrial (under construction as of July 9, 2023) and vacant land;
- South: American Jewish University; and
- West: Vacant land.

Refer to **Exhibit 1: Regional Location Map** and **Exhibit 2: Project Vicinity Map**, for the Project site location.

1.2 Project Description

The Project site currently consists of a single office park building, totaling 133,490 square feet (SF) in addition to surface parking and landscaping. The proposed Project would demolish the existing structure and construct a 179,490 SF warehouse building with associated parking and loading docks. The building includes 6,000 SF of office space in addition to 173,490 SF of warehouse space for a total of 179,490 SF; refer to **Exhibit 3: Conceptual Site Plan**. The existing parking aisles/spaces will be reconfigured to accommodate new on-site truck and vehicular traffic flow as part of the Project. Access to the Project site would be provided via the existing full-movement driveway on Guardian Street. A total of 54 parking stalls would be provided on-site.

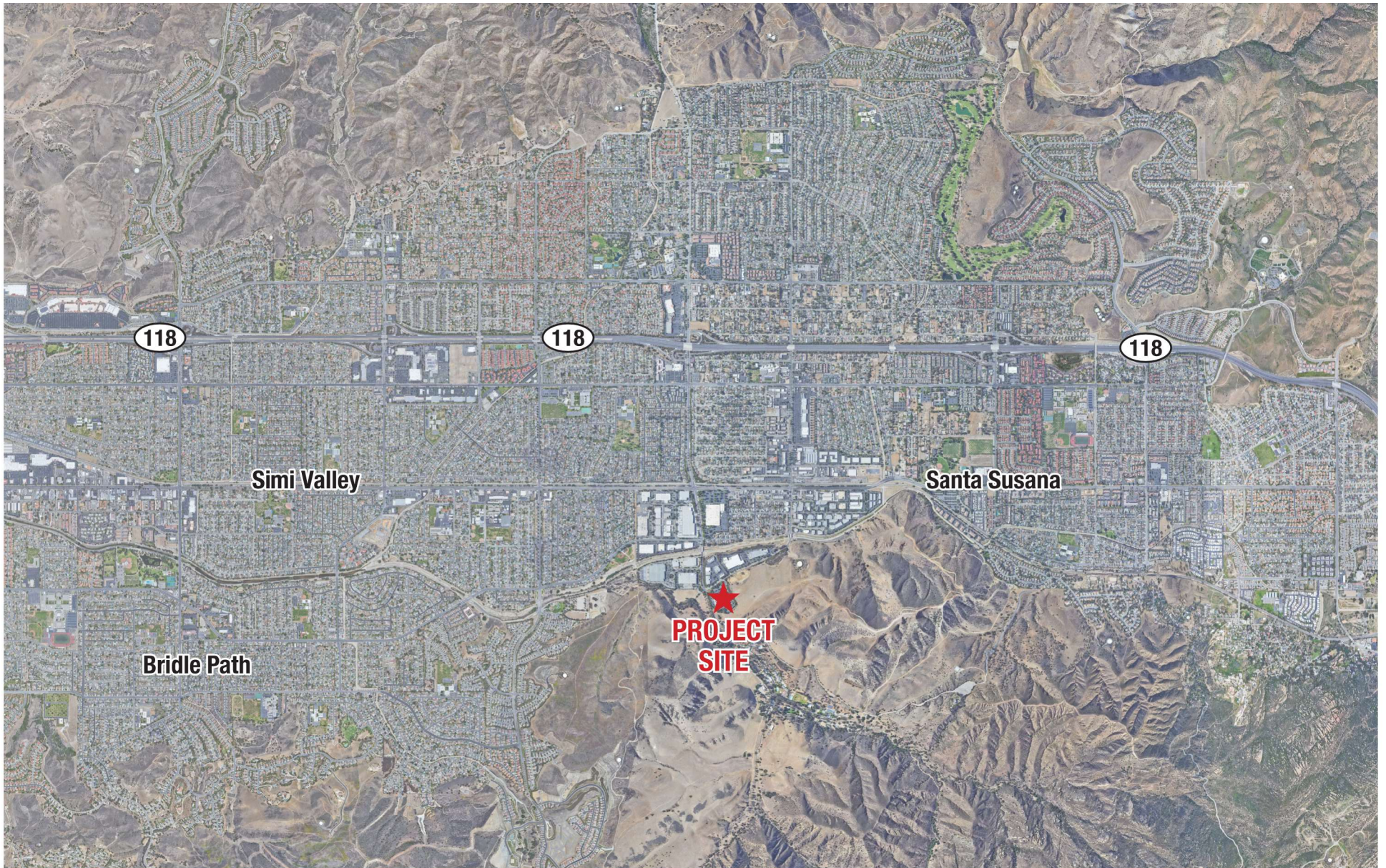
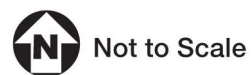


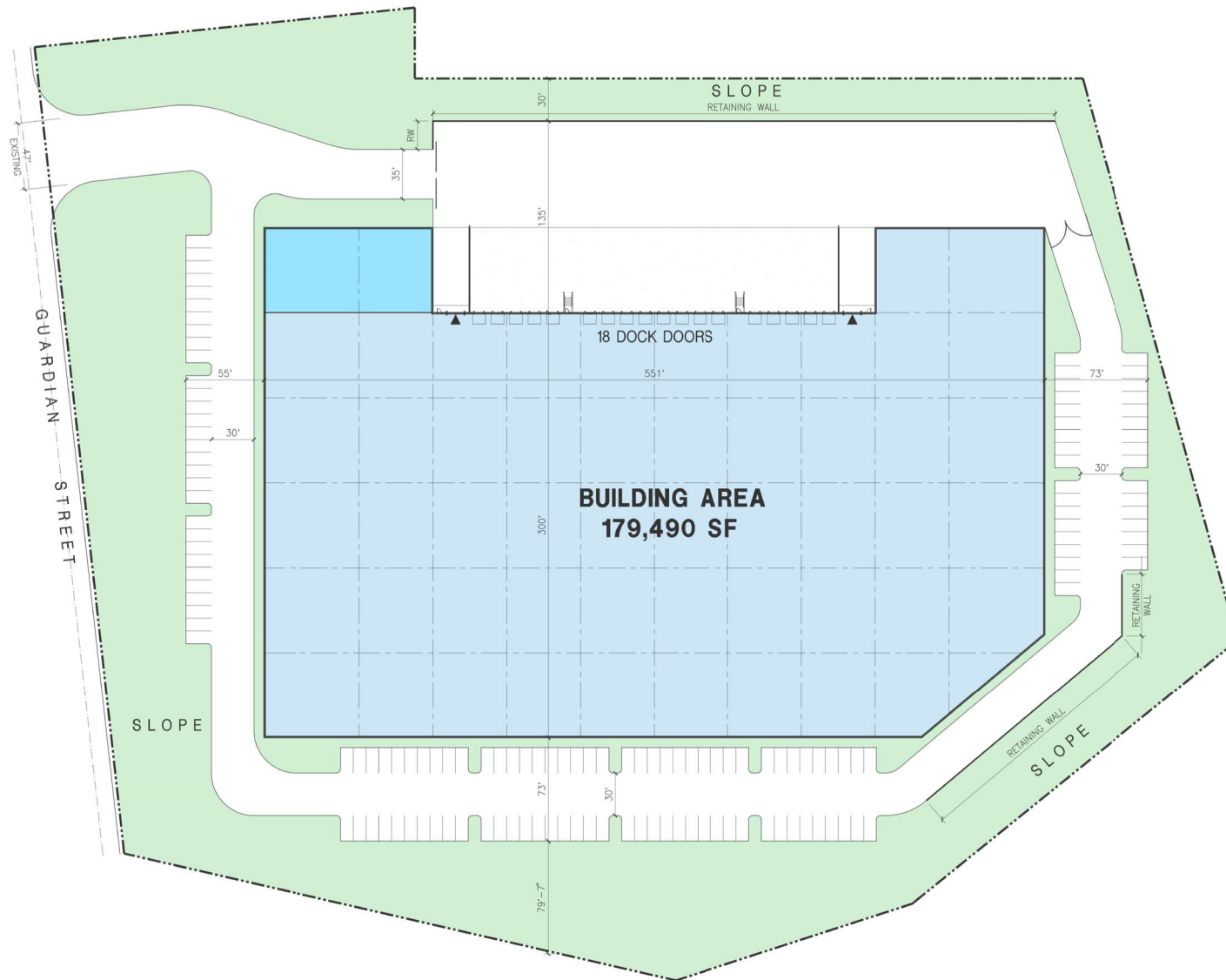
EXHIBIT 1: Regional Location Map
4100 Guardian Street Warehouse Project
City of Simi Valley





EXHIBIT 2: Project Vicinity Map
4100 Guardian Street Warehouse Project
City of Simi Valley





Legend

- POTENTIAL OFFICE WITH 2ND FLOOR
- WAREHOUSE
- DRIVE THRU DOOR

EXHIBIT 3: Conceptual Site Plan
4100 Guardian Street Warehouse Project
City of Simi Valley



Not to Scale

2 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere¹. **Table 1: Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

¹ Intergovernmental Panel on Climate Change, Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013. http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf.

Table 1: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N ₂ O)	N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298.
Methane (CH ₄)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF ₃)	NF ₃ was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.

Source: Compiled from U.S. EPA, *Overview of Greenhouse Gases*, April 11, 2018 (<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>); U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017*, 2019; Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007; National Research Council, *Advancing the Science of Climate Change*, 2010; U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, April 2010.

3 REGULATORY SETTING

3.1 Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA

proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

On September 27, 2019, the U.S. EPA and the NHTSA published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.” (84 Fed. Reg. 51,310 (Sept. 27, 2019).) The Part One Rule revokes California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the U.S. EPA and NHTSA finalized rulemaking for SAFE Part Two which sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021–2026. The current U.S. EPA administration has repealed SAFE Rule Part One, effective January 28, 2022, and is reconsidering Part Two.

As of April 1, 2022, the CAFE standards require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026. The new CAFE standards for model year 2024–2026 will reduce fuel use by more than 200 billion gallons through 2050, as compared to continuing under the old standards.²

Presidential Executive Orders 13990 and 14008

On January 20, 2021, President Biden issued Executive Order 13990, “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis”. Executive Order 13990 directs Federal agencies to immediately review and take action to address the promulgation of Federal regulations and other actions that conflict with these important national objectives and to immediately commence work to confront the climate crisis. Executive Order 13990 directs the Council on Environmental Quality (CEQ) to review CEQ’s 2020 regulations implementing the procedural requirements of the National

² National Highway Traffic Safety Administration, *USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024–2026*, available at: <https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026>

Environmental Policy Act (NEPA) and identify necessary changes or actions to meet the objectives of Executive Order 13990.

On January 27, 2021, President Biden signed Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," to declare the Administration's policy to move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifested and will continue to intensify according to current trajectories. In line with these Executive Order directives, CEQ is reviewing the 2020 NEPA regulations and plans to publish a notice of proposed rulemaking (NPRM) to identify necessary revisions in order to comply with the law; meet the environmental, climate change, and environmental justice objectives of Executive Orders 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA's statutory requirements. This phase 1 rulemaking will propose a narrow set of changes to the 2020 NEPA regulations to address these goals.

3.2 State of California

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂ equivalents (CO₂e) in the world and produced 459 million gross metric tons of CO₂e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

2017 CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and

regulations (referred to as “business-as-usual”).³ The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State’s Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.⁴ Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California’s GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California’s long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California’s transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California’s freight transport system is essential to supporting the State’s economic development in coming decades while reducing pollution.
- CARB’s Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCo₂e) to 545 MMTCo₂e. The reduction in forecasted 2020 emissions

³ CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB’s definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

⁴ The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State’s Climate Adaptation Strategy.

means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan⁵. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support other Federal actions.

2022 CARB Scoping Plan

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious

⁵ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.

targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State’s Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.⁶ CARB specifically states that Appendix D does not address other land uses (e.g., industrial).⁷ However, CARB plans to explore new approaches for other land use types in the future.⁸

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission “last-mile” delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

⁶ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.

⁷ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 4, November 2022.

⁸ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions. In 2018, the EPA proposed the SAFE Vehicles Rule, which would roll back fuel economy standards and revoke California's waiver. However, in December 2021, the NHTSA repealed the SAFE Vehicle Rule Part One.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078, SB 107, and SBX1-2 (Renewable Electricity Standards)

SB 1078 (2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 (2006) changed the due date to 2010 instead of 2017. Executive Order S-14-08 was enacted on November 17, 2008, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2 (2011) codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double

the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1346 (Air Pollution: Small Off-Road Engines)

Signed into law in October 2021, AB 1346 requires CARB, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

AB 1279 (The California Climate Crisis Act)

AB 1279 establishes the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO² removal solutions and carbon capture, utilization, and storage technologies.

SB 1020 (100 Percent Clean Electric Grid)

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100 percent clean electricity retail sales. It creates a target of 90 percent clean electricity retail sales by 2035 and 95 percent clean electricity retail sales by 2040.

SB 905 (Carbon Sequestration Program)

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

AB 1757 (Nature-Based Solutions)

Signed on September 16, 2022, AB 1757 requires State agencies to develop a range of targets for natural carbon sequestration and nature-based climate solutions that reduce GHG emissions to meet the 2030, 2038, and 2045 goals which would be integrated into a scoping plan addressing natural and working lands.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity

sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO₂e (MMTCO₂e). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum

levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The California Energy Commission (CEC) adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption across California. For example, the 2022 Title 24 standards will require efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2023 (2022 CALGreen). The 2022 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

3.3 Regional

Ventura County Air Pollution Control District Thresholds

Given that Ventura County is adjacent to the South Coast Air Quality Management District (SCAQMD) jurisdiction and is part of the Southern California Association of Governments (SCAG) region, the Ventura County Air Pollution Control District (VCAPCD) recommends the use of GHG emission thresholds of significance for land use development projects at levels consistent with those set by the SCAQMD.

The SCAQMD formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting #15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32

GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a 3,000 MTCO₂e threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). The Working Group indicated that the 10,000 MTCO₂e per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Southern California Association of Governments

On September 3, 2020, Southern California Association of Governments' (SCAG's) Regional Council adopted *Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS])*. The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

3.4 Local

Simi Valley Climate Action Plan

On June 4, 2012, the City of Simi Valley adopted the Simi Valley Climate Action Plan (CAP) as part of the City's General Plan update to reduce and encourage reductions in GHG emissions from all sectors in the City. The CAP includes a baseline GHG emissions inventory, a methodology for tracking and reporting emissions in the future, and recommendations for GHG reduction strategies as a foundation for these efforts. The CAP implements the General Plan through a focus on the various goals and policies of the General Plan relative to greenhouse gas emissions. The CAP was designed to ensure that the impact of future development on air quality and energy resources is minimized and that land use decisions made by the City and internal operations within the City are consistent with adopted state legislation. The City's goal is to reduce GHG emissions by 15 percent by 2020 as compared to a 2006 baseline. No specific GHG emission thresholds of significance are included in the CAP or GHG Inventory Policy.

Simi Valley Energy Reach Code

Simi Valley has adopted an Energy Reach Code, which adopts energy efficiency performance standards that reach higher than is required by Title 24 minimums. As part of the first green building ordinance in Ventura County, Simi Valley received California Energy Commission (CEC) approval for the reach code in 2010. The main focus is on efficiency measures that are simple to achieve and enforce, and have the greatest influence on community sustainability. The Reach Code increases energy efficiency requirements

for residential and nonresidential structures beyond Title 24, set at 10 and 15 percent respectively for new construction and substantial remodels.

City of Simi Valley General Plan

The City of Simi Valley General Plan (SVGP) is a roadmap that encompasses the hopes, aspirations, values and dreams of the community. The SVGP does not mention specific standalone climate change goals and policies for the City. Instead, the SVGP has goals and policies to improve air quality through transportation infrastructure. Since there are limited Project-relevant policies specific to GHGs, related policies are mentioned in this section. Where inconsistencies exist, if any, they are addressed in the respective impact analysis below. SVGP policies that directly address reducing and avoiding natural resources impacts include the following:

Goal NR-7: Reliable Energy Resources. Reliable, affordable, and environmentally sensitive energy resources are available for residents and businesses.

Policy NR-7.2: **Public Education.** Continue to promote energy conservation measures and options to all residents, businesses, consultants, contractors, etc., through newsletters, brochures, and the City's website.

Policy NR-7.4: **Solar-Ready Buildings.** Require that, where feasible, all new buildings be constructed to allow for easy, cost-effective installation of solar energy systems in the future addressing such elements as: optimal roof orientation, clear access, adequacy of structural support, and installation of electrical conduit and plumbing.

Goal NR-8: Reduced Energy Consumption. Energy consumption is minimized through sustainable building practices and other reduction strategies.

Policy NR-8.1: **Green Building Retrofit.** Promote the retrofitting of existing structures with green building technologies/practices and encourage municipal structures under renovation to be built to a green energy standard such as LEED.

Policy NR-8.3: **Urban Heat Island Effects.** Seek to reduce the "heat island" effect of developed areas by promoting such features as white roofs, light colored hardscape/paving materials, and shade trees, and by reducing the extent of unshaded areas in parking lots.

Goal NR-9: Air Quality. Air Quality in the City and the Simi Valley environs is improved.

Policy NR-9.4: **Contractors.** Require that government contractors minimize greenhouse gas emissions in building construction, operations, etc. For example, contractors can use low or zero-emission vehicles and equipment.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 CEQA Thresholds and Significance Criteria

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.⁹

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.¹⁰

Ventura County Air Pollution Control District Thresholds

As discussed above, the VCAPCD has not yet adopted a quantitative threshold for GHG emissions and recommends the use of GHG emission thresholds of significance for land use development projects at levels consistent with those set by the SCAQMD. Therefore, the SCAQMD threshold of 3,000 MTCO₂e/yr is conservatively utilized to evaluate the Project's long-term GHG emissions impacts in this Greenhouse Gas Emissions Assessment. In addition, the Project is assessed for consistency with the goals and policies of the SCAG RTP/SCS, CARB Scoping Plan, and the City's CAP to determine GHG impacts.

4.2 Methodology

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt)

⁹ California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*, December 2009.

¹⁰ 14 California Code of Regulations, Section 15064.4a

of CO₂/year to nearly 49 GtCO₂/year.¹¹ As such, the geographic extent of climate change and GHG emissions' cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2022 (CalEEMod) and are compared to the SCAQMD's 3,000 MTCO₂e/yr threshold. Details of the modeling assumptions and emission factors are provided in **Appendix A: Greenhouse Gas Emissions Data**. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The Project's operational-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

¹¹ Intergovernmental Panel on Climate Change, *Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2014.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

Threshold 5.1 Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of GHGs from construction. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the Project is depicted in **Table 2: Construction-Related Greenhouse Gas Emissions**.

Table 2: Construction-Related Greenhouse Gas Emissions	
Category	MTCO₂e
2024 Construction	318
2025 Construction	505
Total Construction Emissions	823
30-Year Amortized Construction	28
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.	

As shown, the Project would result in the generation of approximately 823 MTCO₂e over the course of construction. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions.¹² The amortized Project construction emissions would be 28 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

Total GHG emissions associated with the Project are summarized in Table 3: Project Greenhouse Gas Emissions. As indicated in Table 3, the Project would generate approximately 2,538 MTCO₂e annually from both construction and operations, while the annual emissions from the existing office use at the Project site are approximately 2,747 MTCO₂e/yr. Thus, the Project would result in a net decrease in GHG emissions of approximately 209 MTCO₂e. Table 3 shows that Project GHG emissions would not exceed the 3,000 MTCO₂e threshold. Therefore, impacts would be less than significant in this regard.

¹² The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Table 3: Project Greenhouse Gas Emissions		
Emissions Source	MTCO ₂ e per Year ¹	
	Existing GHG Emissions	Project GHG Emissions
Mobile	1,875	1,266
Area	2	3
Energy	760	436
Water	71	126
Waste	39	53
Refrigerants	<1	<1
Off-Road Equipment	N/A	607
Generators	N/A	20
Amortized Construction Emissions	N/A	28
Total Annual GHG Emissions	2,747	2,538
Total Net GHG Emissions (Project – Existing)	-209	
Threshold	3,000	
Exceeds Threshold?	No	
Notes:		
1. Total values are from CalEEMod and may not add up 100% due to rounding.		
Source: CalEEMod version 2022. Refer to Appendix A for model outputs.		

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

5.2 Greenhouse Gas Reduction Plan Compliance

Threshold 5.2 Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?

Regional Transportation Plan/Sustainable Communities Strategy Consistency

On September 3, 2020, the Southern California Association of Governments (SCAG) Regional Council adopted Connect SoCal (2020-2045 *Regional Transportation Plan/ Sustainable Communities Strategy* [RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation Projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing Project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the State. The Project's consistency with the RTP/SCS goals is analyzed in detail in **Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency**.

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency			
SCAG Goals		Compliance	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a Project-specific policy and is therefore not applicable.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	N/A:	Although this Project is not a transportation improvement project, the Project is located 1.2-mile south of SR-118 with access via Tapo Canyon Road.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and is therefore not applicable.

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency			
SCAG Goals		Compliance	
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	N/A:	As the proposed Project is not a transportation improvement Project, Goal 4 is not applicable. However, the Project includes a use that would support goods movement.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	Consistent:	The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. The proposed Project is required to comply with the provisions of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen). Further, the Project is located in proximity to existing truck routes and freeways. Location of the Project within a developed area would reduce trip lengths, which would reduce GHG and air quality emissions.
GOAL 6:	Support healthy and equitable communities.	Consistent:	As discussed in the Project's Air Quality Assessment, the Project does not exceed applicable emissions thresholds. Based on the Friant Ranch decision, projects that do not exceed localized thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A:	This is not a Project-specific policy and is therefore not applicable.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A:	As the proposed Project is not a transportation improvement Project, Goal 8 is not applicable.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	N/A:	As the proposed Project is not a housing development Project, Goal 9 is not applicable.
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	The Project is not located on agricultural lands.
Source: Southern California Association of Governments, <i>Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy)</i> , 2020.			

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4**, the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

Consistency with the 2022 CARB Scoping Plan

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission (ZE) transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place. Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include:

- Implementing SB 100 (achieve 100 percent clean electricity by 2045);
- Achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and
- Implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicle (ZEV) buses and trucks.

Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As shown in **Table 3**, approximately 67 percent of the Project's GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan measures described above. It should be noted that the City has no control over vehicle emissions (approximately 50 percent of the Project's total emissions). However, these emissions would decline in the future due to Statewide measures discussed above, as well as cleaner technology and fleet turnover.

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan.

Simi Valley Climate Action Plan

The City of Simi Valley adopted the Simi Valley CAP on June 4, 2012 as part of the City's General Plan update to reduce and encourage reductions in GHG emissions from all sectors in the City. The City has adopted a goal to reduce its community GHG emissions to 15 percent below its 2006 GHG emissions levels by 2020 as part of the City's Greenhouse Gas Reduction Plan within the CAP. The City compares and collects GHG emissions data for its municipal operations and tracks county-wide GHG emissions. An indicator of the success of these efforts is a measured reduction in GHG emissions using protocols discussed in the CAP.

Table 5: Project Consistency with Simi Valley Climate Action Plan summarizes the applicable strategies and project-level measures identified within the CAP that could apply to a commercial development. The measures are categorized by R1, R2, and R3. R1 measures are included to show how the anticipated reduction strategies implemented at the state level will result in a reduction of GHG emissions at the City level. R2 and R3 measures are implemented at the City level to reduce GHG emissions from the community as a whole. R2 measures can be quantified to show the value of the reduction from those measures. R3 measures are those measures that cannot be quantified at this time but are supportive of the R2 measures. Applicable R2 measures are listed in **Table 5**. It is expected that the Project would comply with these strategies and measures to reduce GHG emissions. As such impacts, related to consistency with the Simi Valley CAP would be less than significant.

Table 5: Project Consistency with Simi Valley Climate Action Plan		
Strategy	Measure	Compliance
R2 Energy Reduction Measures		
R2-E5: Commercial Energy Efficiency Program	This measure involves the adoption of a voluntary incentive program that facilitates energy efficient design for all new non-residential buildings.	Consistent. The Project would be required to comply with the Title 24 standards for Building Energy Efficiency that are in effect at the time of development.
R2-E6: Commercial/Industrial Renewable Energy Program	General Plan Infrastructure Policy IU-6.5 (Photovoltaic Panels for Private Projects) requires incentives for providing solar energy panels on private development.	Consistent. This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs.
R2-E7: Commercial/Industrial Retrofit Program	This measure would initiate a City program that facilitates the incorporation of energy reduction measures for non-residential buildings undergoing major renovations.	Consistent. The Project would not conflict with implementation of this measure. The Project would comply with the latest energy efficiency standards.
R2-E8: Water Use Reduction Initiative	Emissions associated with electricity consumption for water treatment and transportation are included with the energy reduction measures.	Consistent. The Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use.
R2 Solid Waste Measures		
R2-W1: City Diversion Program	This measure would implement a Citywide waste diversion goal of diverting 75% (current goal is 50%) of all waste from landfills by 2020. The following is a	Consistent. The Project would comply with current City mandatory construction and demolition waste

Table 5: Project Consistency with Simi Valley Climate Action Plan

Strategy	Measure	Compliance
	potential list of waste reduction measures that can be implemented for municipal operations and within the community on an individual development project level which will further strengthen existing waste reduction/diversion programs.	recycling percentages. The Project would comply with solid waste diversion programs and include recycling storage areas as part of the Project.
R2-W2: Construction Diversion Program	Existing City Ordinance 1167 requires a minimum diversion of 75% of construction and demolition waste. This measure provides a 10% increase in diversion beyond General Plan Infrastructure Policy IU-5.7 (Recycling and Reuse of Construction Wastes) by increasing the diversion rate to 85%.	Consistent. The Project would comply with current City mandatory construction and demolition waste recycling percentages. The Project would comply with solid waste diversion programs and include recycling storage areas as part of the Project.
Landscape Emissions Measures		
R3-L1: Expand City Tree Planting	Municipal, commercial and retail development should be encouraged to plant low emission trees, and exceed shading requirements by a minimum of 10%. In support of Natural Resource Policy NR-2.1 (Tree Preservation), and Land Use Policy LU-11.2 (Greenbelts), all future development shall be encouraged to preserve native trees and vegetation to the furthest extent possible.	Consistent. Landscaping would be installed in all areas not devoted to buildings, parking, traffic and specific user requirements, in accordance with the City's landscape guidelines. The Project would exceed the minimum of 10 percent requirements for landscaping.
R2 Transportation Measures		
R2-T1: Anti-Idling Enforcement	This measure involves the adoption and enforcement of an Anti-Idling Ordinance for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within the City.	Consistent. The Project would comply with current State laws that restrict diesel trucks from idling five minutes or less. Construction vehicles are also subject to this regulation.
R2-T2: Employment Based Trip and VMT Reduction	Implementation of this measure would enhance the current trip reduction ordinance which promotes commuter-choice programs, employer transportation management, guaranteed ride home programs, and commuter assistance and outreach type programs intended to reduce commuter vehicle miles traveled.	Consistent. The Project would reduce the number of average daily trips made by employees. The existing use is an office building that generates more employee trips than the proposed Project.
R2-T8: Expand Renewable Fuel/Low-Emission Vehicle Use	New developments within the City will be required to provide the necessary facilities and infrastructure in all land use types to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.
Source: Simi Valley Climate Action Plan, 2012.		

5.3 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As shown in **Table 4** and **Table 5**, the Project would not conflict with the RTP/SCS, CARB Scoping Plan, or Simi Valley CAP. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6 REFERENCES

1. California Air Pollution Control Officers Association, *CEQA and Climate Change White Paper*, 2008.
2. California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, November 2022.
3. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.
4. California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*, December 2009.
5. City of Simi Valley, *Climate Action Plan*, 2012.
6. City of Simi Valley, *General Plan*, 2012.
7. City of Simi Valley, *Municipal Code*, 2020.
8. HPA Architecture, *4100 Guardian Street Conceptual Site Plan*, March 20, 2023.
9. Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007.
10. Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2013.
11. National Research Council, *Advancing the Science of Climate Change*, 2010.
12. State of California, *Code of Regulations Section 15065.5a*, 2018.
13. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy*, 2020.
14. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
15. U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017*, 2019.
16. U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, 2010.
17. U.S. EPA, *Overview of Greenhouse Gases*, 2018.

Appendix A

Greenhouse Gas Emissions Data

Demolition Estimates

Building Area (Square Feet):	133,490 ft ²
Building Volume (Cubic Feet):	1,334,900 ft ³
Waste Volume (Cubic Feet):	333,725 ft ³
Waste Volume (Cubic Yards):	12,360 yd ³
Building Waste (Tons):	6,180 tons

Pavement Area	5.14 Acre
	74,339.11 Sqft
Pavement Thickness	0.5 feet
Pavement Volume	37,169.56 cubic feet
Pavement Density	145 lbs/cubic foot
	5,389,585.48 pounds
	2,695 tons

Demo:

Total demo of building:	133,490	SF	Based on the Project Description
Total demo of pavement:	5.14	Acre	Estimated using Google Earth
Total Demolition Material	8,875	tons	

Soil Import: 2,500 Based on the Project Description

Emergency Backup Generator Emissions

					UNMITIGATED			
	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	1	750	0.74	50	1	750	37,500

	Emissions Rates (g/hp-hr)										
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.140	1.020	1.120	2.600	2.850	521.640	0.150	0.150	0.150	0.005	0.021

Source: User Guide for CalEEMod Version 2022.1, Appendix G, Table G-40.

	Emissions (pounds/day)										
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.23	1.69	1.85	4.30	4.71	862.51	0.25	0.25	0.25	0.01	0.00
Total	0.23	1.69	1.85	4.30	4.71	862.51	0.25	0.25	0.25	0.01	0.00

	Emissions (tons/year)										
	HC	ROG	TOG	CO	NO _x	CO ₂	PM ₁₀	PM _{2.5}	PM	SO _x	CH ₄
Standard Warehouse	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00
Total	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00	0.00

GHG Emissions (metric tons)	CO ₂	CH ₄	CO ₂ e
Project	19.56	0.00	19.56

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Ventura
Calendar Year: 2025
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumption	Total_Activity	Total_Population	Horsepower_Hours	
Ventura	2025	Industrial - Forklifts	Aggregate	100	Diesel	0.000518	0.000627	0.000746	0.007855	0.005773	1.348302	0.000404	0.000372	1.27722E-05		0	43813.32138	45353.79	110.9944433	764318.3755

g/hph											
	HC	ROG	TOG	CO	Nox	CO2	PM10	PM2_5	Sox	NH3	Fuel_gphr
2026	0.2245054	0.2716516	0.3232878	3.4032622	2.5008802	584.12919	0.1752262	0.1612081	0.005533343	0	18981379.94

Project Forklifts 4

HP 89
Hours per Day 8
Days per Year 365
1 pound = 453.5924 grams

Emissions Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	MT/yr	PM10 tons/yr
Project Forklifts	1.71	15.70	21.37	0.03	1.10	1.01	3,668	607.21	0.201

Based on aggregated emission rates obtained from CARB OFFROAD Version 1.0.3.
Number of forklifts per SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

4100 Guardian Existing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	4100 Guardian Existing
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	1.80
Location	4100 Guardian St, Simi Valley, CA 93063, USA
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	133	1000sqft	3.06	133,490	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.24	11.5	8.26	70.4	0.16	0.19	13.4	13.6	0.18	3.41	3.59	112	20,081	20,193	12.3	0.76	66.3	20,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.12	10.4	9.08	62.9	0.15	0.18	13.4	13.6	0.18	3.41	3.58	112	19,529	19,642	12.3	0.81	2.04	20,193
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.60	9.01	6.98	49.7	0.12	0.16	10.1	10.3	0.15	2.56	2.72	112	15,962	16,074	12.2	0.63	21.8	16,589
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	1.64	1.27	9.07	0.02	0.03	1.84	1.87	0.03	0.47	0.50	18.6	2,643	2,661	2.01	0.11	3.60	2,747

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

Mobile	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Area	1.03	3.98	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	9.24	11.5	8.26	70.4	0.16	0.19	13.4	13.6	0.18	3.41	3.59	112	20,081	20,193	12.3	0.76	66.3	20,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Area	—	3.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	8.12	10.4	9.08	62.9	0.15	0.18	13.4	13.6	0.18	3.41	3.58	112	19,529	19,642	12.3	0.81	2.04	20,193
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.98	5.46	6.00	46.1	0.11	0.08	10.1	10.2	0.08	2.56	2.64	—	11,141	11,141	0.49	0.49	21.4	11,322
Area	0.51	3.50	0.02	2.86	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
Energy	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	4,573	4,573	0.31	0.03	—	4,590
Water	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Waste	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	6.60	9.01	6.98	49.7	0.12	0.16	10.1	10.3	0.15	2.56	2.72	112	15,962	16,074	12.2	0.63	21.8	16,589
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874
Area	0.09	0.64	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96

Energy	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	757	757	0.05	< 0.005	—	760
Water	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4
Waste	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	1.20	1.64	1.27	9.07	0.02	0.03	1.84	1.87	0.03	0.47	0.50	18.6	2,643	2,661	2.01	0.11	3.60	2,747

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Total	8.10	7.42	7.26	63.8	0.15	0.11	13.4	13.5	0.10	3.41	3.51	—	15,248	15,248	0.62	0.62	66.0	15,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Total	8.01	7.31	8.13	62.1	0.14	0.11	13.4	13.5	0.10	3.41	3.51	—	14,721	14,721	0.67	0.67	1.71	14,938
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874

Total	1.09	1.00	1.10	8.41	0.02	0.02	1.84	1.86	0.01	0.47	0.48	—	1,845	1,845	0.08	0.08	3.55	1,874
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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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,437	3,437	0.21	0.03	—	3,451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571
Total	—	—	—	—	—	—	—	—	—	—	—	—	569	569	0.04	< 0.005	—	571

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Total	0.10	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,136	1,136	0.10	< 0.005	—	1,139
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.02	< 0.005	—	189
Total	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.02	< 0.005	—	189

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect ural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	1.03	0.95	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Total	1.03	3.98	0.05	5.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.9	23.9	< 0.005	< 0.005	—	24.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	2.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	3.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	0.09	0.09	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96
Total	0.09	0.64	< 0.005	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.95	1.95	< 0.005	< 0.005	—	1.96

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Total	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Total	—	—	—	—	—	—	—	—	—	—	—	45.5	235	281	4.68	0.11	—	431
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4
Total	—	—	—	—	—	—	—	—	—	—	—	7.53	39.0	46.5	0.77	0.02	—	71.4

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

General Office Building	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Total	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Total	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.69	0.00	—	234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8
Total	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.8

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
General Office Building	1,447	295	93.4	397,517	18,997	3,873	1,227	5,218,660

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	200,235	66,745	—

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)
General Office Building	2,358,491	532	0.0330	0.0040	3,544,299

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	23,725,678	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	124	—

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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General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
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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
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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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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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6

Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373

Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235
Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9

Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—
Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0

Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip Generation, ITE land use 710

4100 Guardian Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	4100 Guardian
Construction Start Date	9/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	1.80
Location	4100 Guardian St, Simi Valley, CA 93063, USA
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3519
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Unrefrigerated Warehouse-No Rail	173	1000sqft	3.98	173,490	0.00	—	—	—
General Office Building	6.00	1000sqft	3.43	6,000	143,296	—	—	—
Parking Lot	2.89	Acre	2.89	0.00	0.00	—	—	—

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	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.8	34.6	29.0	0.08	1.15	10.7	11.9	1.06	1.88	2.94	—	10,758	10,758	0.31	1.17	16.8	11,132
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.8	36.1	34.0	0.08	1.60	10.7	11.9	1.47	3.99	5.47	—	10,750	10,750	0.31	1.17	0.44	11,108
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.51	9.12	13.5	0.02	0.35	1.46	1.79	0.33	0.45	0.76	—	3,009	3,009	0.12	0.12	1.85	3,050
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	1.67	2.46	< 0.005	0.06	0.27	0.33	0.06	0.08	0.14	—	498	498	0.02	0.02	0.31	505

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.84	34.6	25.0	0.08	1.15	10.7	11.9	1.06	1.88	2.94	—	10,758	10,758	0.31	1.17	16.8	11,132
2025	14.8	19.4	29.0	0.04	0.79	1.43	2.22	0.73	0.34	1.08	—	6,016	6,016	0.23	0.21	7.41	6,093
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.72	36.1	34.0	0.08	1.60	10.7	11.9	1.47	3.99	5.47	—	10,750	10,750	0.31	1.17	0.44	11,108
2025	14.8	19.6	28.5	0.04	0.79	1.43	2.22	0.73	0.34	1.08	—	5,963	5,963	0.23	0.21	0.19	6,033
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.82	8.37	7.18	0.02	0.33	1.46	1.79	0.31	0.45	0.76	—	1,894	1,894	0.07	0.09	0.58	1,923
2025	3.51	9.12	13.5	0.02	0.35	0.81	1.17	0.33	0.20	0.52	—	3,009	3,009	0.12	0.12	1.85	3,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.15	1.53	1.31	< 0.005	0.06	0.27	0.33	0.06	0.08	0.14	—	314	314	0.01	0.02	0.10	318
2025	0.64	1.67	2.46	< 0.005	0.06	0.15	0.21	0.06	0.04	0.10	—	498	498	0.02	0.02	0.31	505

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.81	7.31	24.2	0.08	0.17	4.77	4.95	0.17	1.23	1.40	170	10,602	10,772	17.6	0.92	30.3	11,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.55	7.60	15.8	0.08	0.16	4.76	4.92	0.16	1.23	1.39	170	10,411	10,581	17.6	0.92	0.80	11,297

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.16	7.64	19.5	0.08	0.17	4.77	4.93	0.16	1.23	1.39	170	10,476	10,646	17.6	0.92	13.1	11,374
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.12	1.39	3.57	0.01	0.03	0.87	0.90	0.03	0.22	0.25	28.1	1,734	1,763	2.91	0.15	2.17	1,883

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	6.30	15.6	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,525	7,525	0.19	0.71	30.3	7,771
Area	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	6.81	7.31	24.2	0.08	0.17	4.77	4.95	0.17	1.23	1.40	170	10,602	10,772	17.6	0.92	30.3	11,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.41	6.65	15.0	0.07	0.09	4.76	4.85	0.08	1.23	1.31	—	7,366	7,366	0.19	0.71	0.78	7,584
Area	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

Total	5.55	7.60	15.8	0.08	0.16	4.76	4.92	0.16	1.23	1.39	170	10,411	10,581	17.6	0.92	0.80	11,297
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39	6.66	14.9	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,415	7,415	0.19	0.72	13.1	7,646
Area	4.72	0.03	3.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Energy	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	2,622	2,622	0.19	0.01	—	2,631
Water	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Waste	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	6.16	7.64	19.5	0.08	0.17	4.77	4.93	0.16	1.23	1.39	170	10,476	10,646	17.6	0.92	13.1	11,374
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.25	1.22	2.72	0.01	0.02	0.87	0.89	0.02	0.22	0.24	—	1,228	1,228	0.03	0.12	2.16	1,266
Area	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
Energy	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	434	434	0.03	< 0.005	—	436
Water	—	—	—	—	—	—	—	—	—	—	13.1	70.0	83.1	1.34	0.03	—	126
Waste	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	1.12	1.39	3.57	0.01	0.03	0.87	0.90	0.03	0.22	0.25	28.1	1,734	1,763	2.91	0.15	2.17	1,883

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

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

Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	8.71	8.71	—	1.32	1.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	8.71	8.71	—	1.32	1.32	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.50	1.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	206	206	0.01	< 0.005	—	207
Demolition	—	—	—	—	—	0.53	0.53	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.3
Demolition	—	—	—	—	—	0.10	0.10	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	1.01	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.88	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	9.67	2.24	0.05	0.09	1.83	1.91	0.09	0.51	0.60	—	7,128	7,128	0.16	1.14	15.9	7,487
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.92	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	196	196	0.01	0.01	0.02	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	10.0	2.28	0.05	0.09	1.83	1.92	0.09	0.51	0.60	—	7,129	7,129	0.16	1.14	0.41	7,473
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.61	0.14	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	430	430	0.01	0.07	0.41	451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.11	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.1	71.1	< 0.005	0.01	0.07	74.6

3.3. Site Preparation (2024) - Unmitigated

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

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

Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.07	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	228	228	0.01	0.01	0.03	231

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.30	6.30	< 0.005	< 0.005	0.01	6.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading/Infrastructure (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	5.17	4.55	0.01	0.22	—	0.22	0.20	—	0.20	—	994	994	0.04	0.01	—	998
Dust From Material Movement	—	—	—	—	—	0.54	0.54	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.94	0.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	165	165	0.01	< 0.005	—	165
Dust From Material Movement	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.12	1.22	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	261	261	0.01	0.01	0.03	264
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.57	0.13	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	402	402	0.01	0.06	0.02	422
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.6	39.6	< 0.005	< 0.005	0.08	40.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.6	60.6	< 0.005	0.01	0.06	63.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.55	6.55	< 0.005	< 0.005	0.01	6.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.0	10.0	< 0.005	< 0.005	0.01	10.5

3.7. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	6.24	7.79	0.01	0.26	—	0.26	0.24	—	0.24	—	1,432	1,432	0.06	0.01	—	1,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	1.14	1.42	< 0.005	0.05	—	0.05	0.04	—	0.04	—	237	237	0.01	< 0.005	—	238
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.33	4.70	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	1,000	1,000	0.05	0.04	4.03	1,016
Vendor	0.03	1.13	0.35	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	907	907	0.02	0.14	2.56	951
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.40	4.27	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	955	955	0.05	0.04	0.10	968
Vendor	0.02	1.18	0.36	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	907	907	0.02	0.14	0.07	948
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.24	2.55	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	575	575	0.03	0.02	1.04	583
Vendor	0.02	0.70	0.21	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	542	542	0.01	0.08	0.66	567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.46	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	95.2	95.2	< 0.005	< 0.005	0.17	96.5
Vendor	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.7	89.7	< 0.005	0.01	0.11	93.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.76	2.35	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Paving	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.32	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.0	59.0	< 0.005	< 0.005	—	59.2
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.94	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	0.01	0.01	0.81	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.08	0.86	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	192	192	0.01	0.01	0.02	194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.5	45.5	< 0.005	< 0.005	0.08	46.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.53	7.53	< 0.005	< 0.005	0.01	7.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

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

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

Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	13.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	13.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.1	24.1	< 0.005	< 0.005	—	24.2
Architectural Coatings	2.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.00	4.00	< 0.005	< 0.005	—	4.01
Architectural Coatings	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.94	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	200	200	0.01	0.01	0.81	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.08	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	191	191	0.01	0.01	0.02	194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.8	34.8	< 0.005	< 0.005	0.06	35.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	0.01	5.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	5.21	1.49	0.04	0.07	1.52	1.59	0.07	0.41	0.48	—	4,280	4,280	0.06	0.62	16.5	4,481
General Office Building	1.23	1.10	14.1	0.03	0.02	3.25	3.27	0.02	0.82	0.84	—	3,245	3,245	0.12	0.09	13.8	3,289
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	0.00
Total	1.39	6.30	15.6	0.07	0.09	4.77	4.86	0.08	1.23	1.32	—	7,525	7,525	0.19	0.71	30.3	7,771
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	5.39	1.48	0.04	0.07	1.51	1.58	0.07	0.41	0.47	—	4,251	4,251	0.06	0.61	0.43	4,436
General Office Building	1.24	1.26	13.5	0.03	0.02	3.25	3.27	0.02	0.82	0.84	—	3,115	3,115	0.13	0.10	0.36	3,149
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	0.00
Total	1.41	6.65	15.0	0.07	0.09	4.76	4.85	0.08	1.23	1.31	—	7,366	7,366	0.19	0.71	0.78	7,584
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.99	0.27	0.01	0.01	0.28	0.29	0.01	0.07	0.09	—	709	709	0.01	0.10	1.18	740

General Office Building	0.22	0.22	2.45	0.01	< 0.005	0.59	0.60	< 0.005	0.15	0.15	—	519	519	0.02	0.02	0.98	525
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	0.00
Total	0.25	1.22	2.72	0.01	0.02	0.87	0.89	0.02	0.22	0.24	—	1,228	1,228	0.03	0.12	2.16	1,266

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184
General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Total	—	—	—	—	—	—	—	—	—	—	—	1,495	1,495	0.09	0.01	—	1,500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,179	1,179	0.07	0.01	—	1,184

General Office Building	—	—	—	—	—	—	—	—	—	—	—	155	155	0.01	< 0.005	—	155
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Total	—	—	—	—	—	—	—	—	—	—	—	1,495	1,495	0.09	0.01	—	1,500
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	195	195	0.01	< 0.005	—	196
General Office Building	—	—	—	—	—	—	—	—	—	—	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	247	247	0.02	< 0.005	—	248

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2

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	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.90	0.76	0.01	0.07	—	0.07	0.07	—	0.07	—	1,077	1,077	0.10	< 0.005	—	1,080
General Office Building	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	51.1	51.1	< 0.005	< 0.005	—	51.2
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	0.05	0.95	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,128	1,128	0.10	< 0.005	—	1,131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.02	< 0.005	—	179
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.45	8.45	< 0.005	< 0.005	—	8.48
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	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	187	187	0.02	< 0.005	—	187

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.28	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Total	5.37	0.07	7.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63

Total	0.86	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.62	2.62	< 0.005	< 0.005	—	2.63
-------	------	------	------	---------	---------	---	---------	---------	---	---------	---	------	------	---------	---------	---	------

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	24.9	27.0	0.21	0.01	—	33.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	76.9	398	475	7.91	0.19	—	729
General Office Building	—	—	—	—	—	—	—	—	—	—	2.04	24.9	27.0	0.21	0.01	—	33.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	78.9	423	502	8.12	0.20	—	763
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	12.7	65.9	78.6	1.31	0.03	—	121
General Office Building	—	—	—	—	—	—	—	—	—	—	0.34	4.12	4.46	0.03	< 0.005	—	5.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	13.1	70.0	83.1	1.34	0.03	—	126

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
General Office Building	—	—	—	—	—	—	—	—	—	—	3.01	0.00	3.01	0.30	0.00	—	10.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.08	0.00	—	318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	14.6	0.00	14.6	1.45	0.00	—	50.9
General Office Building	—	—	—	—	—	—	—	—	—	—	0.50	0.00	0.50	0.05	0.00	—	1.74
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	9/1/2024	10/1/2024	5.00	22.0	—
Site Preparation	Site Preparation	10/2/2024	10/15/2024	5.00	10.0	—
Grading/Infrastructure	Grading	10/16/2024	12/31/2024	5.00	55.0	—

Building Construction	Building Construction	1/1/2025	10/31/2025	5.00	218	—
Paving	Paving	1/1/2025	4/30/2025	5.00	86.0	—
Architectural Coating	Architectural Coating	8/1/2025	10/31/2025	5.00	66.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading/Infrastructure	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading/Infrastructure	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading/Infrastructure	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading/Infrastructure	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading/Infrastructure	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	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	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	101	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading/Infrastructure	—	—	—	—
Grading/Infrastructure	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading/Infrastructure	Vendor	—	10.2	HHDT,MHDT
Grading/Infrastructure	Hauling	5.69	20.0	HHDT
Grading/Infrastructure	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	74.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	29.4	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	269,235	89,745	7,553

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	8,875	—
Site Preparation	—	—	15.0	0.00	—
Grading/Infrastructure	2,500	—	55.0	0.00	—

Paving	0.00	0.00	0.00	0.00	2.89
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5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
General Office Building	0.00	0%
Parking Lot	2.89	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	532	0.03	< 0.005
2025	0.00	532	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
Unrefrigerated Warehouse-No Rail	52.0	52.0	52.0	18,997	1,728	1,728	1,728	630,706
General Office Building	273	273	273	99,645	4,631	4,631	4,631	1,690,334
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	269,235	89,745	7,553

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)
Unrefrigerated Warehouse-No Rail	809,118	532	0.0330	0.0040	3,360,060
General Office Building	106,008	532	0.0330	0.0040	159,306
Parking Lot	110,278	532	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)
Unrefrigerated Warehouse-No Rail	40,119,563	0.00
General Office Building	1,066,402	1,852,466
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	163	—
General Office Building	5.58	—
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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
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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
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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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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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	5.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	21.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.4
AQ-PM	43.9
AQ-DPM	4.01
Drinking Water	72.3
Lead Risk Housing	11.8
Pesticides	0.76
Toxic Releases	23.5
Traffic	11.4
Effect Indicators	—
CleanUp Sites	85.8
Groundwater	54.5
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	96.3
Solid Waste	91.0
Sensitive Population	—
Asthma	44.0
Cardio-vascular	52.6
Low Birth Weights	12.4
Socioeconomic Factor Indicators	—
Education	21.7
Housing	8.50
Linguistic	10.4
Poverty	20.8
Unemployment	30.9

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.08443475
Employed	69.52393173
Median HI	91.09457205
Education	—
Bachelor's or higher	71.83369691
High school enrollment	100
Preschool enrollment	81.0727576
Transportation	—
Auto Access	85.40998332
Active commuting	15.98870781
Social	—
2-parent households	86.68035416
Voting	75.91428205
Neighborhood	—
Alcohol availability	97.0101373
Park access	59.05299628
Retail density	16.6944694
Supermarket access	20.2232773
Tree canopy	68.98498653
Housing	—
Homeownership	76.19658668
Housing habitability	91.32554857
Low-inc homeowner severe housing cost burden	83.19004235

Low-inc renter severe housing cost burden	75.86295393
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	84.28076479
Arthritis	84.5
Asthma ER Admissions	62.2
High Blood Pressure	65.9
Cancer (excluding skin)	42.8
Asthma	72.9
Coronary Heart Disease	88.8
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	92.6
Life Expectancy at Birth	41.4
Cognitively Disabled	56.3
Physically Disabled	52.4
Heart Attack ER Admissions	24.4
Mental Health Not Good	79.6
Chronic Kidney Disease	90.3
Obesity	79.9
Pedestrian Injuries	19.6
Physical Health Not Good	89.8
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	8.9
Current Smoker	79.5
No Leisure Time for Physical Activity	87.6
Climate Change Exposures	—

Wildfire Risk	66.4
SLR Inundation Area	0.0
Children	65.5
Elderly	84.2
English Speaking	83.2
Foreign-born	25.6
Outdoor Workers	74.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.1
Traffic Density	19.9
Traffic Access	23.0
Other Indices	—
Hardship	8.5
Other Decision Support	—
2016 Voting	86.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	89.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project Schedule provided by Applicant
Operations: Vehicle Data	Trucks accounted for under Unrefrigerated Warehouse Passenger Vehicles accounted for under General Office
Operations: Fleet Mix	Trucks accounted for under unrefrigerated Warehouse Passenger Vehicles accounted for under General Office
Land Use	High -Cube Fulfillment Center Warehouse
Construction: Dust From Material Movement	Import 2500 CY

Appendix F

Acoustical Assessment

Acoustical Assessment
4100 Guardian Street Warehouse Project
City of Simi Valley, California

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APPENDICES

Appendix A: Noise Data

LIST OF ABBREVIATED TERMS

APN	Assessor's Parcel Number
ADT	average daily traffic
dBA	A-weighted sound level
CEQA	California Environmental Quality Act
CNEL	community equivalent noise level
L_{dn}	day-night noise level
dB	decibel
DSP	Delivery Service Person
L_{eq}	equivalent noise level
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HVAC	heating ventilation and air conditioning
Hz	hertz
HOA	homeowner's association
in/sec	inches per second
L_{max}	maximum noise level
μPa	micropascals
L_{min}	minimum noise level
PPV	peak particle velocity
RMS	root mean square
SR	State Route
VdB	vibration velocity level

1 INTRODUCTION

This report documents the results of an Acoustical Assessment completed for the 4100 Guardian Street Warehouse Project (“Project” or “proposed Project”). The purpose of this Acoustical Assessment is to evaluate the potential construction and operational noise and vibration levels associated with the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location

The Project is located at 4100 Guardian Street in the City of Simi Valley, California (City), approximately 1.11 miles south of California State Route 118 (SR-118) (Ronald Reagan Freeway). The 10.3-acre Project site is located at the southeast corner of Tapo Canyon Road and Guardian Street intersection and consists of one parcel (Assessor’s Parcel Number 626-005-2065). The Project site is currently occupied by an office building and surface parking lot.

Existing uses surrounding the Project Include:

- North: Tapo Canyon Business Park;
- East: Light industrial (under construction as of July 9, 2023) and vacant land;
- South: American Jewish University; and
- West: Vacant land.

Refer to [Exhibit 1: Regional Location Map](#) and [Exhibit 2: Project Vicinity Map](#), for the Project site location.

1.2 Project Description

The Project site currently consists of a single office park building, totaling 133,490 square feet (SF) in addition to surface parking and landscaping. The proposed Project would demolish the existing structure and construct a 179,490 SF warehouse building with associated parking and loading docks. The building includes 6,000 SF of office space in addition to 173,490 SF of warehouse space for a total of 179,490 SF; refer to [Exhibit 3: Conceptual Site Plan](#). The existing parking aisles/spaces will be reconfigured to accommodate new on-site truck and vehicular traffic flow as part of the Project. Access to the Project site would be provided via the existing full-movement driveway on Guardian Street. A total of 54 parking stalls would be provided on-site.

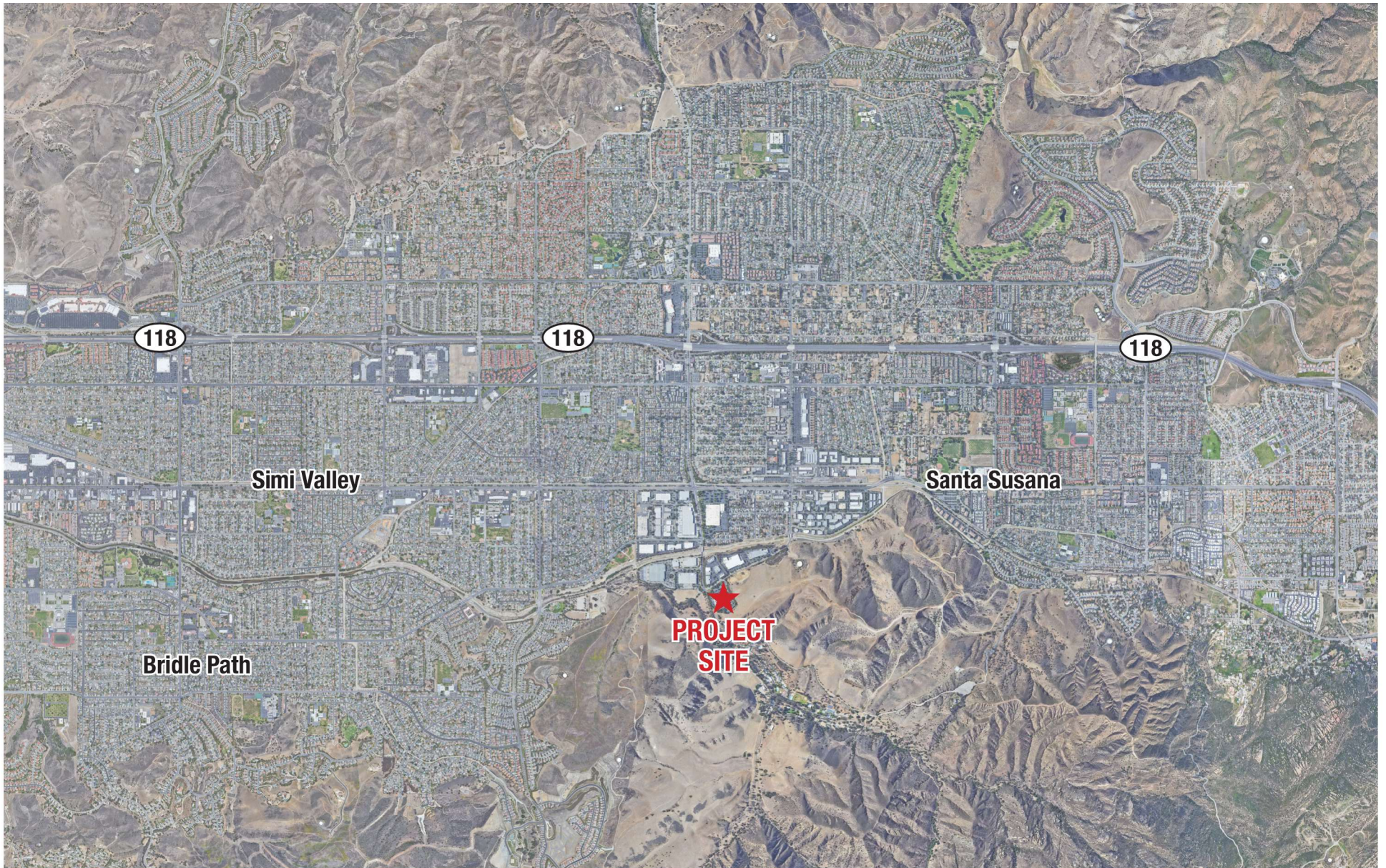
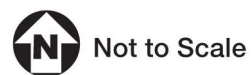


EXHIBIT 1: Regional Location Map
4100 Guardian Street Warehouse Project
City of Simi Valley





EXHIBIT 2: Project Vicinity Map
4100 Guardian Street Warehouse Project
City of Simi Valley



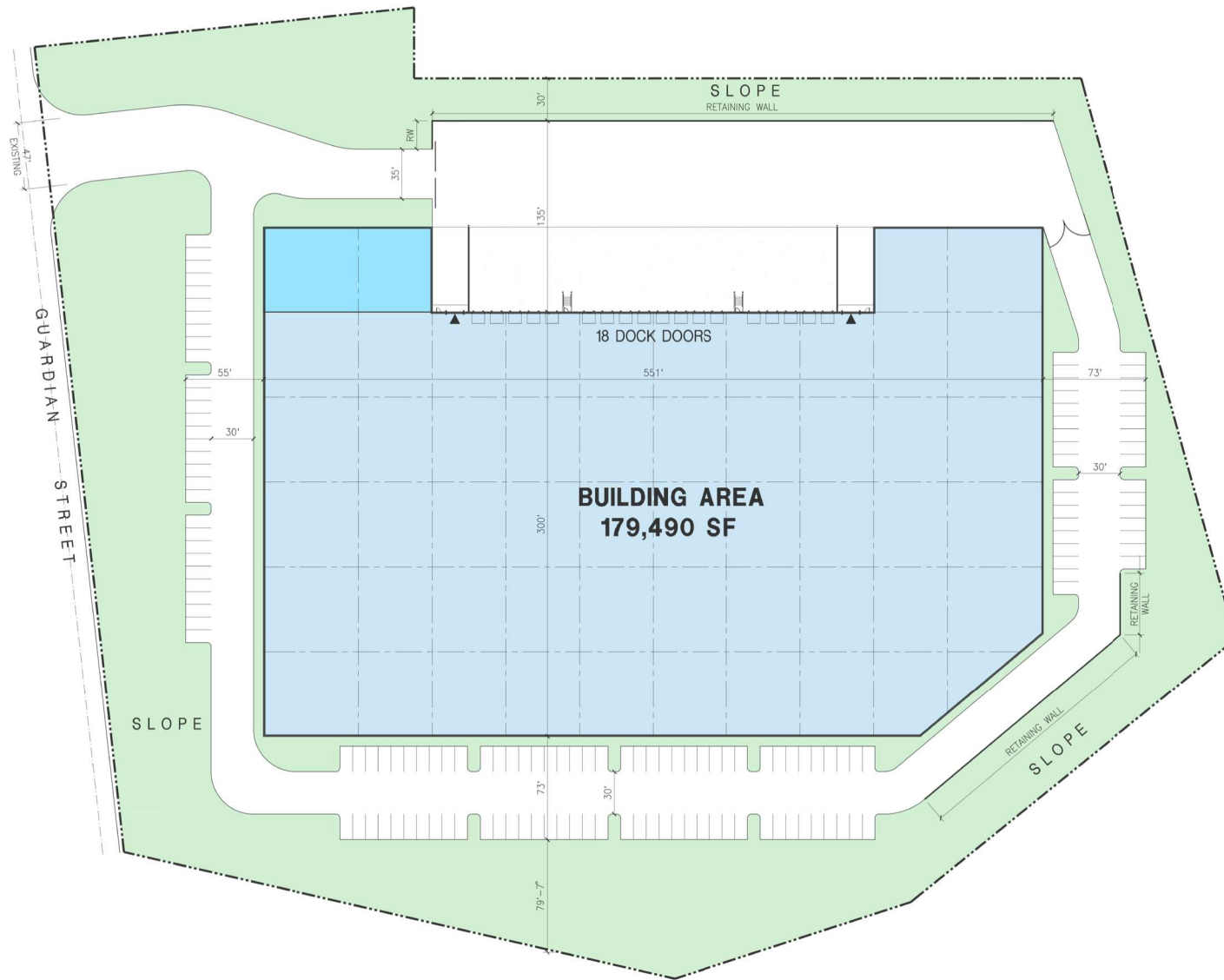


EXHIBIT 3: Conceptual Site Plan
4100 Guardian Street Warehouse Project
City of Simi Valley



Not to Scale

2 ACOUSTIC FUNDAMENTALS

2.1 Sound and Environmental Noise

Acoustics is the science of sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. In acoustics, the fundamental model consists of a noise source, a receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of a base of steady background noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals (μPa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness. [Table 1: Typical Noise Levels](#) provides typical noise levels.

Table 1: Typical Noise Levels		
Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	– 110 –	Rock Band
Jet fly-over at 1,000 feet	– 100 –	
Gas lawnmower at 3 feet	– 90 –	
Diesel truck at 50 feet at 50 miles per hour	– 80 –	Food blender at 3 feet Garbage disposal at 3 feet
Noisy urban area, daytime	– 70 –	Vacuum cleaner at 10 feet Normal Speech at 3 feet
Gas lawnmower, 100 feet	– 60 –	
Commercial area	– 50 –	Large business office Dishwasher in next room
Heavy traffic at 300 feet	– 40 –	Theater, large conference room (background)
Quiet urban daytime	– 30 –	Library
Quiet urban nighttime	– 20 –	Bedroom at night, concert hall (background)
Quiet suburban nighttime	– 10 –	Broadcast/recording studio
Quiet rural nighttime	– 0 –	Lowest threshold of human hearing
Lowest threshold of human hearing	– 0 –	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level (L_{eq}) represents the continuous sound pressure level over the measurement period, while the day-night noise level (L_{dn}) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 p.m. to 7:00 a.m. Most commonly, environmental sounds are described in terms of L_{eq} that has the same acoustical energy as the summation of all the time-varying events. Each is applicable to this analysis and defined in [Table 2: Definitions of Acoustical Terms](#).

Table 2: Definitions of Acoustical Terms	
Term	Definitions
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in μPa (or 20 micronewtons per square meter), where 1 pascals is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in dB as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 μPa). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in dB as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L_{eq})	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
Maximum Noise Level (L_{max}) Minimum Noise Level (L_{min})	The maximum and minimum dBA during the measurement period.
Exceeded Noise Levels (L_{01} , L_{10} , L_{50} , L_{90})	The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day-Night Noise Level (L_{dn})	A 24-hour average L_{eq} with a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity at nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
Community Noise Equivalent Level (CNEL)	A 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 a.m. to 10:00 a.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

A-Weighted Decibels

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound.¹ When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions.² Under the dB scale, three sources of equal loudness together would produce an increase of approximately 5 dBA.

Sound Propagation and Attenuation

Sound spreads (propagates uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics.³ No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm

¹ *Noise Sources and Their Effects*. Available at: <https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm>

² FHWA, *Noise Fundamentals*, 2017. Available at: https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed July 2023.

³ California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, Page 2-29, September 2013.

reduces noise levels by 5 to 10 dBA.⁴ The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.⁵

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA.⁶ Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted⁷:

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

Hearing Loss. While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where

⁴ James P. Cowan, *Handbook of Environmental Acoustics*, 1994.

⁵ United States Department of Housing and Urban Development, *Noise Guidebook*, 2009, <https://www.hudexchange.info/resource/313/hud-noise-guidebook/>, accessed August 2023.

⁶ Compiled from James P. Cowan, *Handbook of Environmental Acoustics*, 1994 and Cyril M. Harris, *Handbook of Noise Control*, 1979.

⁷ Compiled from California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013, and FHWA, *Noise Fundamentals*, 2017.

hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Annoyance. Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA L_{dn} is the threshold at which a substantial percentage of people begin to report annoyance.⁸

2.2 Groundborne Vibration

Sources of groundborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions or heavy equipment used during construction). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

⁸ Federal Interagency Committee on Noise, *Federal Agency Review of Selected Airport Noise Analysis Issues*, August 1992.

Table 3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations			
Peak Particle Velocity (in/sec)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006-0.019	64-74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	94	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings
0.4-0.6	98-104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage
Source: California Department of Transportation, <i>Transportation and Construction Vibration Guidance Manual</i> , 2013.			

3 REGULATORY SETTING

To limit population exposure to physically or psychologically damaging as well as intrusive noise levels, the Federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

3.1 State of California

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable”, “conditionally acceptable”, “normally unacceptable”, and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.

3.2 Local

City of Simi Valley General Plan

Adopted on May 26, 2022, the City of Simi Valley General Plan (SVGP) Safety and Noise Element identifies sources of noise, noise standards, and provides objectives and policies that ensure that noise from various sources does not create an unacceptable noise environment. The SVGP Safety and Noise element sets forth general community noise and land use compatibility guidelines, as shown in [Exhibit 4: City of Simi Valley Land Use Compatibility Guidelines](#).

Exhibit 4: City of Simi Valley Land Use Compatibility Guidelines

Land Use Category	Noise Exposure (dBA, CNEL)			
	55	60 75	65 80	70
Residential—Low-Density Single Family, Duplex, Mobile Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Residential—Multiple-Family	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Transient Lodging—Motels, Hotels	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Institutional—Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Performance Venues—Auditoriums, Concert Halls, Amphitheatres	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Outdoor Sports Activities—Sports Arena, Outdoor Spectator Sports	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Outdoor Recreation—Playgrounds, Neighborhood Parks	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Outdoor Recreation/Activities—Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Office Buildings—Business Commercial and Professional	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
Industrial—Manufacturing, Utilities, Agriculture	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable

SOURCE: 2002 General Plan Guidelines, State Office of Planning and Research

Normally Acceptable	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
Conditionally Acceptable	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but closed windows and fresh air supply or air conditioning will normally suffice.
Normally Unacceptable	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: City of Simi Valley, *General Plan Safety and Noise Element*, updated 2021.

The SVGP also specifies interior and exterior noise guidelines for land uses in the Safety and Noise Element as identified in [Table 4: Simi Valley Noise Guidelines for Land Use Planning](#). The City requires that new developments be designed to meet these guidelines.

Table 1: Simi Valley Noise Guidelines for Land Use Planning¹			
Land Use Categories		Energy Average L_{dn}	
Categories	Uses	Interior^a	Exterior^b
Residential	Single Family, Duplex, Multiple Family	45 ^c	63
	Mobile Home	45 ^d	63 ^d
Commercial Institutional	Hotel, Motel, Transient Lodging	45	--
	Hospital, Schools' classroom	45	--
	Church, Library	45	--
Notes: 1: Based on noise levels generated by adjacent mobile sources (i.e. automobiles, trucks, and trains) a. Includes bathrooms, toilets, closets, corridors b. Outdoor environment limited to the following: <ul style="list-style-type: none"> • Private yard of single family • Multi-family private patio which is served by a means of exit from inside • Mobile home park c. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC. d. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.			
Source: City of Simi Valley, <i>General Plan Safety and Noise Element</i> , updated 2021.			

The SVGP Noise Element also identifies noise policies designed to mitigate potential impacts on noise. The following SVGP goals, policies, and actions for addressing noise are applicable to the Project:

Goal N-1: Land Use Compatibility. Land use conflicts between various noise sources and other human activities are minimized.

Policy N-1.1: Noise Standards. Require noise attenuation for all development where the projected exterior and interior noise levels exceed those shown in Table N-1 (Interior and Exterior Noise Standards), to the extent feasible.

Policy N-1.4: Noise Attenuation Measures. Ensure that all new development provides adequate sound insulation or other protection from existing and anticipated noise sources.

Goal N-2: Sensitive Receptors. Motor vehicle traffic and railroad noise impacts on sensitive noise receptors are minimized.

Policy N-2.1: State Motor Vehicle Noise Standards. Encourage the enforcement of state motor vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Simi Valley Police Department.

Policy N-2.2: Roadway Noise Sensitivity Measures. Ensure the employment of noise attenuation measures in the design of roadway improvement projects consistent with funding capability. Support efforts by the California Department of Transportation and others to provide for acoustical protection of existing noise-sensitive land uses affected by these projects.

Goal N-3: Stationary Noise. Non-transportation-related noise impacts on sensitive receptors are minimized.

Policy N-3.1: Protection from Stationary Noise Sources. Continue to enforce interior and exterior noise standards to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as machinery, equipment, fans, and air conditioning equipment.

Policy N-3.3: Enforcement of Hours of Construction Activity. Continue to enforce restrictions on hours of construction activity so as to minimize the impacts of noise and vibration from the use of trucks, heavy drilling equipment, and other heavy machinery to adjacent uses, particularly in residential areas.

Simi Valley Municipal Code

Title 5, Chapter 16 – Noise

Title 5 (Public Welfare), Chapter 16 (Noise) of the Simi Valley Municipal Code (SVMC) is intended to control unnecessary, excessive, and annoying sounds from stationary, non-transportation noise sources. Noise ordinance requirements are not applicable to mobile noise sources such as heavy trucks traveling on public roadways. Federal and State laws preempt control of mobile noise sources on public roads. The noise chapter standards generally apply to industrial and commercial noise sources as well as parks and schools affecting residential areas. The SVMC prohibits the production of excessive noise and is applied to future development within the City to determine potential noise impacts. The City also has permitted hours for disturbances specifically from construction activity. The applicable noise regulations from the SVMC for the Project are provided below.

Section 5-16.02 – Unlawful Acts: Public Nuisance

The following acts are hereby expressly declared to be nuisances, and any person maintaining or permitting such nuisances, or any of them, to be maintained or to exist in or on his premises, whether as owner, lessee, or otherwise, shall be deemed guilty of a misdemeanor for each day during which such nuisance shall be permitted to be continued:

- (d): *Engines, motors, and mechanical devices in and near residential districts.* The operation between the hours of 11:00 p.m. and 7:00 a.m. on Friday or Saturday and between the hours of 10:00 p.m. and 7:00 a.m. on Sunday through Thursday of any motor or engine or the use or operation of any automobile, motorcycle, machine, mechanical device, or other contrivance or facility, unless such motor, engine, automobile, motorcycle, machine, or mechanical device is enclosed within a sound-insulated structure so as to prevent noise and sounds from being plainly audible at a distance of fifty (50') feet from such structure or within ten (10') feet of any residence; provided, however, any such vehicle which is operated upon any public highway, street, or right-of-way shall be excluded from the provisions of this subsection.
- (h): *Pile drivers, hammers, and the like.* The operation between the hours of 7:00 p.m. and 7:00 a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, hoist, or other appliance, the use of which is attended by loud or unusual noise.

- (i) *Construction and repair of buildings.* The erection, excavation, demolition, alteration, construction, or repair of any structure or building, other than between the hours of 7:00 a.m. and 7:00 p.m., except when the urgent necessity, in the interests of the public health and safety, requires and the City Engineer consents thereto. When substantial loss or inconvenience would result to any party denied permission to do so, the City Engineer may grant permission for such work on any day or at such times within such hours and on such conditions as he or she shall fix in accordance with his or her findings.

4 EXISTING CONDITIONS

4.1 Existing Noise Sources

The City is impacted by various noise sources. Mobile sources of noise, especially cars, trucks, and trains are the most common and significant sources of noise. Other noise sources are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise.

Mobile Sources

The predominant mobile noise source in the Project area is from vehicle traffic along Guardian Street and Tapo Canyon Road. According to the National Transportation Noise Map,⁹ the Project site is located within the 45-50 dBA L_{eq} noise contour for Guardian Street.

Stationary Sources

The primary sources of stationary noise in the Project vicinity are those associated with operations of commercial uses to the north and the office building on-site. Typical stationary noise sources from these uses include mechanical equipment (use of heating, ventilation, and air conditioning [HVAC] units, etc.), parking lot activities (cars parking, open and closing doors, truck movements and loading activities, etc.), conversations, and radios/music playing, among others. The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

4.2 Noise Measurements

To quantify existing ambient noise levels in the Project area, Kimley-Horn conducted five short-term (10-minute) measurements on August 14, 2023; see measurement results in [Appendix A: Noise Data](#). The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were taken between 9:24 a.m. and 10:37 a.m. Measurements of L_{eq} are considered representative of the noise levels throughout the day. The average noise levels and sources of noise measured at each location are listed in [Table 5: Existing Noise Measurements](#) and shown on [Exhibit 4: Noise Measurement Locations Map](#).

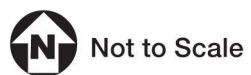
Site	Location	Date	Time	Duration	L_{eq} (dBA) ¹
ST-1	Near the southeast corner of Topo Canyon Road and Guardian Street.	8/14	9:24 a.m. – 9:34 a.m.	10 Minutes	60.2
ST-2	End of the residential cul-de-sac on Hi Drive, adjacent to the bike path.	8/14	9:58 a.m. – 10:08 a.m.	10 Minutes	51.4
ST-3	South corner of Lark Street and Hi Drive.	8/14	10:12 a.m. – 10:22 a.m.	10 Minutes	47.0
ST-4	Southwest corner of Ish Drive and Tapo Street.	8/14	10:27 a.m. – 10:37 a.m.	10 Minutes	57.0
ST-5	Near the hill south of the existing complex on the Project site.	8/14	9:38 a.m. – 9:48 a.m.	10 Minutes	45.3

Source: Noise measurements taken by Kimley-Horn and Associates, August 14, 2023. See [Appendix A](#) for noise measurement results.

⁹ United States Department of Transportation, *National Transportation Noise Map*, <https://maps.dot.gov/BTS/NationalTransportationNoiseMap/>, accessed August 2023.



EXHIBIT 5: Noise Measurement Locations Map
 4100 Guardian Street Warehouse Project
 City of Simi Valley



4.3 Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. Sensitive land uses nearest to the Project are shown in Table 6: Sensitive Receptors.

Table 6: Sensitive Receptors	
Receptor Description	Distance and Direction from the Project
Single-Family Residences	965 feet to the north
American Jewish University	200 feet to the south
Source: Google Earth, 2023.	

5 SIGNIFICANCE CRITERIA AND METHODOLOGY

5.1 CEQA Thresholds

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains analysis guidelines related to noise impacts. These guidelines have been used by the City to develop thresholds of significance for this analysis. A project would create a significant environmental impact if it would:

- Generate 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;
- Generate excessive groundborne vibration or groundborne noise levels; and
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels.

5.2 Methodology

Construction

Construction noise levels were based on typical noise levels generated by construction equipment published by the Federal Transit Administration (FTA) and FHWA. Construction noise is assessed in dBA L_{eq} . This unit is appropriate because L_{eq} can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period.

Reference noise levels are used to estimate operational noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Noise level estimates do not account for the presence of intervening structures or topography, which may reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual temporary construction noise. The City of Simi Valley does not establish quantitative construction noise standards. Therefore, this analysis uses the FTA's threshold of 80 dBA (8-hour L_{eq}) for residential uses, 85 dBA (8-hour L_{eq}) for commercial uses, and 90 dBA (8-hour L_{eq}) for industrial uses to evaluate construction noise impacts.

Operations

The analysis of the Existing and With Project noise environments is based on noise prediction modeling and empirical observations. Reference noise level data are used to estimate the Project operational noise impacts from stationary sources. Noise levels are collected from field noise measurements and other published sources from similar types of activities are used to estimate noise levels expected with the Project's stationary sources. The reference noise levels are used to represent a worst-case noise environment as noise levels from stationary sources can vary throughout the day. Operational noise is evaluated based on the standards within the City's Noise Ordinance (SVMC, Title V, Chapter 16, Section 5-16.02: Unlawful Acts: Public Nuisance) and the City's General Plan Noise Element. A qualitative analysis

was conducted of the Project's potential effect on traffic noise conditions at off-site land uses. The Project-generated daily trips were compared to existing conditions to determine potential traffic noise impacts.

Vibration

Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment, obtained from FTA published data for construction equipment. Potential groundborne vibration impacts related to building/structure damage and interference with sensitive existing operations were evaluated, considering the distance from construction activities to nearby land uses and typically applied criteria for structural damage and human annoyance.

For a structure built traditionally, without assistance from qualified engineers, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any vibration damage. FTA guidelines show that modern engineered buildings built with reinforced-concrete, steel or timber can withstand vibration levels up to 0.50 in/sec and not experience vibration damage. The Caltrans Construction Vibration Guidance Manual identifies the vibration threshold for human annoyance, vibrations levels of 0.4 in/sec PPV is when vibrations are considered severe by people subjected to continuous vibrations and levels of 0.2 in/sec is used for building damage.

6 POTENTIAL IMPACTS AND MITIGATION

6.1 Acoustical Impacts

Threshold 6.1 Would the Project generate 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?

Construction

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect sensitive receptors surrounding the construction site. Project construction would occur within an area bounded by residential and commercial business park uses to the north, commercial uses to the east, and industrial uses to the west. The nearest sensitive receptors are the residents at American Jewish University located approximately 200 feet to the south of the Project site.

Construction activities would include demolition, site preparation, grading, building construction, paving, and architectural coating. Such activities could require concrete saws, excavators, and dozers during demolition; dozers and tractors during site preparation; excavators, graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, and paving equipment during paving; and air compressors during architectural coating. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Typical operating cycles for heavy construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels.

Typical noise levels associated with individual construction equipment are listed in Table 7: Typical Construction Noise Levels. As indicated in Table 7, sensitive receptors can be exposed to high noise levels when located near active construction equipment. Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose.

SVMC §5-16.02(i) (Construction and repair of buildings) exempts noise sources associated with construction activities from the City's established noise standards as long as the activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels. The City's permitted hours of construction are required in recognition that construction activities undertaken during daytime hours are a typical part of living in an urban environment and do not cause a significant impact. However, this analysis uses the FTA's thresholds of 80 dBA (residential), 85 dBA (commercial), and 90 dBA (industrial) to evaluate construction noise at adjacent uses.¹⁰

¹⁰ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Table 7-2, Page 179, September 2018.

Table 7: Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 100 feet from Source ¹
Air Compressor	80	74
Backhoe	80	74
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Crane, Derrick ²	88	82
Crane, Mobile	83	77
Dozer	85	79
Generator	82	76
Grader	85	79
Impact Wrench	85	79
Jack Hammer	88	82
Loader	80	74
Paver	85	79
Pile-driver (Impact) ²	101	95
Pile-driver (Sonic) ²	95	89
Pneumatic Tool	85	79
Pump	77	71
Roller	85	79
Saw	76	70
Scraper	85	79
Shovel	82	76
Truck	84	78

Notes:

1. Calculated using the inverse square law formula for sound attenuation: $dB A_2 = dB A_1 + 20 \log(d_1/d_2)$
Where: $dB A_2$ = estimated noise level at receptor; $dB A_1$ = reference noise level; d_1 = reference distance; d_2 = receptor location distance
2. Equipment not anticipated for Project construction.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

The FHWA Roadway Construction Noise Model (RCNM) was used to calculate the worst-case construction noise levels at nearby sensitive receptors surrounding the Project site during construction. The modeled receptor locations represent the closest existing receiving land uses to Project construction activities. Noise levels at other sensitive receptors surrounding the Project site would be located further away and would experience lower construction noise levels than the closest receptors modeled. The noise levels calculated in Table 8: Project Construction Noise Levels, show the exterior construction noise without accounting for attenuation from existing physical barriers which have been estimated using RCNM. The nearest noise-sensitive receptors are the residents at the American Jewish University located approximately 200 feet south of the Project boundary and 546 feet from the center of construction activity. Following FTA methodology, all equipment is assumed to operate at the center of the Project site because equipment would operate throughout the site and not a fixed location for extended periods of time. These assumptions represent a worst-case noise scenario as construction activities would routinely be spread throughout the construction site further away from noise sensitive receptors.

Table 8: Project Construction Noise Levels						
Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA L _{eq})	Noise Threshold (dBA L _{eq}) ²	Exceeded?
	Land Use	Direction	Distance (feet) ¹			
Demolition	Residential	South	546	45.3	80	No
	Office Commercial	North	444	67.5	85	No
	Residential	North	1,376	57.7	80	No
	Industrial	West	658	64.1	90	No
Site Preparation	Residential	South	546	66.9	80	No
	Office Commercial	North	444	68.7	85	No
	Residential	North	1,376	58.8	80	No
	Industrial	West	658	65.2	90	No
Grading	Residential	South	546	66.5	80	No
	Office Commercial	North	444	68.3	85	No
	Residential	North	1,376	58.5	80	No
	Industrial	West	658	64.9	90	No
Building Construction	Residential	South	546	67.6	80	No
	Office Commercial	North	444	69.4	85	No
	Residential	North	1,376	59.6	80	No
	Industrial	West	658	66.0	90	No
Paving	Residential	South	546	65.8	80	No
	Office Commercial	North	444	67.6	85	No
	Residential	North	1,376	57.7	80	No
	Industrial	West	658	64.1	90	No
Architectural Coating	Residential	South	546	53.0	80	No
	Office Commercial	North	444	54.8	85	No
	Residential	North	1,376	44.9	80	No
	Industrial	West	658	51.3	90	No
Notes:						
1. Per the methodology described in the FTA <i>Transit Noise and Vibration Impact Assessment Manual</i> (September 2018), the measured distance is from the nearest receptor to the main construction activity area on the Project site. Not all equipment would operate at the closest distance to the receptors.						
2. Thresholds from Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , Table 7-3, 2018.						
Source: Federal Highway Administration, <i>Roadway Construction Noise Model</i> , 2006. Refer to Appendix A for noise modeling results.						

As depicted in [Table 8](#), construction noise levels would range between 44.9 dBA and 69.4 dBA at the nearest properties surrounding the Project site and would not exceed the FTA's construction noise thresholds for residential, commercial, and/or industrial uses. Additionally, compliance with SVMC § 5-16.02 would minimize potential impacts from construction noise, as construction would be limited to the hours between 7:00 a.m. and 7:00 p.m. Because Project construction noise levels would not exceed any

applicable standard with mitigation measures and would be required to comply with the City's allowable construction hours, construction noise impacts would be less than significant.

Operations

Implementation of the proposed Project would create new sources of noise in the Project vicinity. The major noise sources associated with the Project including the followings:

- Mechanical equipment (i.e., trash compactors, air conditioners, etc.);
- Slow moving trucks on the Project site, approaching and leaving the loading areas;
- Activities at the loading areas (i.e., maneuvering and idling trucks, equipment noise);
- Parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and
- Off-Site Traffic Noise.

Mechanical Equipment

The nearest sensitive receptors are the residents at American Jewish University located approximately 200 feet south of the Project site. Potential stationary noise sources related to long-term operation of the Project site would include mechanical equipment. Mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment) typically generates noise levels of approximately 52 dBA at 50 feet.¹¹ On-site mechanical equipment would be positioned on the rooftop of the proposed warehouse building. To ensure a conservative analysis, it is assumed that mechanical equipment would be located at the nearest building footprint, approximately 285 feet from the nearest sensitive receptors to the south. At this distance, mechanical equipment noise levels would attenuate to approximately 33.9 dBA,¹² which is below the City's noise standard of 63 dBA for residential uses. Therefore, the proposed Project would result in a less than significant impact related to mechanical equipment noise levels.

Truck and Loading Dock Noise

Truck Loading Activities

During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting braking activities; backing up toward the docks; dropping down the dock ramps; and maneuvering away from the docks. Loading or unloading activities would occur on the eastern façade of the warehouse building.

Typically, heavy truck operations generate a noise level of 70 dBA at a distance of 50 feet.¹³ The closest residences would be located approximately 575 feet from the truck loading area. Based on distance attenuation and the sound reduction from the intervening warehouse building, noise levels from truck loading operations would be approximately 38.8 dBA¹⁴ at the nearest residences to the south, which is below the City's noise standards of 63 dBA for residential uses. It should also be noted that the loading dock doors would be surrounded with protective aprons, gaskets, or similar improvements that, when a

¹¹ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.

¹² Noise calculation includes a minimum 3 dBA reduction from rooftop parapet walls.

¹³ Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.

¹⁴ Noise calculation includes a 10 dBA reduction from the warehouse building.

trailer is docked, would serve as a noise barrier between the interior warehouse activities and the exterior loading area. This would attenuate noise emanating from interior loading activities to negligible noise levels outside of the warehouse building, and as such, interior loading and associated activities would comply with SVMC §5-16.02 during all hours of the day.

Cargo Forklift Operations

It is also noted that cargo forklifts could be used at the outdoor loading dock area during daytime and nighttime hours for truck loading/unloading activities. Cargo forklifts generate noise levels of approximately 85 dBA at 3 feet.¹⁵ The closest residences would be located approximately 575 feet from where cargo forklifts would operate at the Project site. Based on distance attenuation and the sound reduction from the intervening warehouse building, noise levels from cargo forklift operations would be approximately 29.4 dBA¹⁶ and would not exceed the City's noise standard of 63 dBA for residential uses.

Truck Back-Up Alarms

Medium and heavy-duty trucks reversing into loading docks would produce noise from back-up alarms (also known as back-up beepers). Back-up beepers produce a typical volume of 97 dBA at one meter from the source.¹⁷ The closest residences would be located approximately 575 feet from the truck loading area. Based on distance attenuation and the sound reduction from the intervening warehouse building, the noise level from back-up beepers would be approximately 42.1 dBA, which is below the City's noise standards of 63 dBA for residential uses. Further, it is noted that back-up beeper noise is short in duration and would occur intermittently throughout the day/night. Therefore, back-up beeper noise would not exceed the City's applicable noise standards and would comply with the provisions of SVMC § 5-16.02.

Parking Noise

The proposed Project would provide a total of 142 parking stalls. Parking stalls would surround the proposed warehouse to the north, south, and west. Based on warehousing trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual,¹⁸ the Project would generate up to 35 passenger car equivalent (PCE) trips per hour. For the purpose of providing a conservative, quantitative estimate of the noise levels that would be generated from the vehicles entering and exiting the parking lot, the methodology recommended by FTA for the general assessment of stationary transit noise sources is used. Using the methodology, the Project's peak hourly noise level that would be generated by the on-site parking levels was estimated using the following FTA equation for a parking lot:

$$L_{eq(h)} = SEL_{ref} + 10 \log (NA/1,000) - 35.6$$

Where:

$L_{eq(h)}$ = hourly L_{eq} noise level at 50 feet

SEL_{ref} = reference noise level for stationary noise source represented in sound exposure level (SEL) at 50 feet

¹⁵ Noise Testing Workplace Noise Consultants, *Warehouse & Forklift Workplace Noise Levels*, <https://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/>, accessed July 2023.

¹⁶ Noise calculation includes a 10 dBA reduction from the warehouse building.

¹⁷ Environmental Health Perspectives, *Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018517/>, accessed July 2023.

¹⁸ Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition.

NA = number of automobiles per hour

35.6 is a constant in the formula, calculated as 10 times the logarithm of the number of seconds in an hour

Using FTA's reference noise level of 92 dBA SEL¹⁹ at 50 feet from the noise source, the Project's highest peak hour vehicle trips would generate noise levels of approximately 41.8 dBA L_{eq} at 50 feet from the parking lot. The closest sensitive receptor is located approximately 285 feet south of the proposed parking lot. Conservatively assuming that all vehicles would park at a location nearest to sensitive receptors rather than dispersed throughout all available parking and based on distance attenuation and the sound reduction from intervening buildings and walls/structures, parking lot noise at the nearest sensitive receptor would be 26.7 dBA, which is below the City's noise standard of 63 dBA for residential uses. Parking lot noise would be consistent with the existing noise in the vicinity and would be partially masked by background noise from traffic along area roadways. Therefore, noise impacts from parking lots would be less than significant.

Composite Operational Noise

According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), a noise level increase of 3 dBA is generally regarded as barely perceivable and a 5 dBA is readily noticeable. As such, for the purposes of this analysis, a 3 dBA increase in operational noise levels over existing ambient noise levels at a noise-sensitive use is conservatively used as the significance criterion to determine Project impacts.

An evaluation of the combined noise levels from the Project's various operational noise sources (i.e., composite noise level) was conducted to conservatively ascertain the potential maximum Project-related noise level increase that may occur at the nearest noise-sensitive receptors. [Table 9: On-Site Composite Noise Levels](#) details the on-site noise levels from the Project site at the nearest residential uses. It should be noted that these are conservative noise level estimates, as it was assumed all equipment and operational activity at the Project site would occur in a constant, simultaneous manner. In reality, these noise sources would occur intermittently throughout the day (except for the HVAC which may operate in a steady-state manner).

Receiving Land Use	Maximum On-Site Noise Levels by Source (dBA L _{eq})					Combined Noise Level at Receptor (dBA L _{eq}) ¹	Ambient Noise Level (dBA L _{eq})	Ambient + Combined Project Noise (dBA L _{eq}) ¹	Incremental Increase over Ambient (dBA L _{eq})
	Mechanical Equipment	Truck and Loading	Forklift	Backup Alarms	Parking				
American Jewish University Residents (South)	33.9	38.8	29.4	42.1	26.7	44.4	45.3	47.9	2.6
Notes: 1. Noise levels for all stationary Project sources (mechanical equipment, truck and loading, forklift, backup alarms, and parking) were logarithmically added together and conservatively assumed to operate in a simultaneous, constant manner.									

¹⁹ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

As shown in Table 9, the Project would generate a combined noise level of approximately 44.4 dBA at the nearest sensitive receptors to the south of the Project site. When added to the measured ambient noise levels, Project noise levels at the nearest sensitive receptors would be approximately 47.9 dBA and would result in a maximum 2.6 dBA increase compared to existing conditions. Thus, composite Project operational noise levels would be below the City's noise standard of 63 dBA for residential uses and would not exceed the barely perceptible noise increase criterion of 3 dBA. On-site operational noise levels from the Project would be less than significant.

Off-Site Traffic Noise

Implementation of the Project would generate increased traffic volumes along nearby roadway segments. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable.²⁰ Generally, traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA would be less than significant.

According to the Simi Valley General Plan EIR, traffic volumes along Tapo Canyon Road ranges from 2,700 to 30,000 average daily vehicles per day.²¹ Based on trip generation data from the ITE Trip Generation Manual, the Project would result in a net reduction of 1,122 daily trips (non-PCE) and thus would not generate a noticeable increase in traffic noise levels.²² Any potential traffic noise increases along Tapo Canyon Road and other nearby streets would not be noticeable due to the existing traffic noise in the area. Traffic noise effects would not create a noticeable change in traffic noise levels in the area and impacts be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Threshold 6.2 Would the Project generate excessive groundborne vibration or groundborne noise levels?

Construction Vibration

Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. Construction on the Project site would have the potential to result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.

²⁰ Federal Highway Administration, *Highway Traffic Noise Analysis and Abatement Policy and Guidance, Noise Fundamentals*, https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm, accessed July 2023.

²¹ City of Simi Valley, *General Plan EIR Volume I, Chapter 4: Transportation/Traffic*, June 2012. <https://www.simivalley.org/departments/environmental-services/planning-division/documents-applications-and-development-activity/general-plan>, accessed August 2023.

²² The existing office building generates 1,424 daily trips. The proposed warehouse use would generate 325 daily trips, resulting in a net reduction of 1,099 trips (non-PCE).

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

The nearest off-site structure (commercial building) is located approximately 80 feet to the north, and the nearest sensitive receptor is located approximately 200 feet south of the Project site. [Table 10: Typical Construction Equipment Vibration Levels](#), lists vibration levels at 25 feet and 80 feet for typical construction equipment. Ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in [Table 12](#), based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 to 0.210 in/sec PPV at 25 feet from the source of activity.

Table 10: Typical Construction Equipment Vibration Levels		
Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 80 Feet (in/sec)¹
Vibratory Roller	0.210	0.037
Large Bulldozer/Caisson Drilling	0.089	0.016
Loaded Trucks	0.076	0.013
Jackhammer	0.035	0.006
Small Bulldozer/Tractors	0.003	0.001
Notes:		
1. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , 2018; D = the distance from the equipment to the receiver.		
Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Manual</i> , 2018.		

As noted above, the nearest structure to the Project construction site is approximately 80 feet away. [Table 10](#) shows that at 80 feet, the vibration velocities from construction equipment would be a maximum of 0.037 in/sec PPV, which is below the FTA's 0.20 in/sec PPV threshold for building damage and below the 0.4 in/sec PPV annoyance threshold. It is also acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest structure. Therefore, vibration impacts associated with Project construction would be less than significant.

Operational Vibration

The Project would include truck movement activity at the Project site. These movements would generally be low-speed (i.e., less than 15 miles per hour) and would occur over new, smooth surfaces. For perspective, Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that "heavy trucks, and quite frequently buses, generate the highest earthborn vibrations of normal traffic." Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy

trucks and poor roadway conditions (while such trucks were moving at freeway speeds). This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)".²³ Since the Project's truck movements would be at low speed (not at freeway speeds) and would be over smooth surfaces (not under poor roadway conditions), Project-related vibration associated with truck activity would not result in excessive ground-borne vibrations; no vehicle-generated vibration impacts would occur. In addition, there are no sources of substantial ground-borne vibration associated with the Project, such as rail or subways. The Project would not create or cause any vibration impacts due to operations.

Threshold 6.3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

The nearest airport to the Project site is the Santa Paula Airport located approximately 20 miles to the west. Thus, the Project is not within two miles of a public airport or within an airport land use plan. Additionally, there are no private airstrips located within the Project vicinity. Therefore, the Project would not expose people residing or working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6.2 Cumulative Noise Impacts

As discussed above, all Project's construction and operational noise impacts would be less than significant. Construction noise impacts are by nature localized. Based on the fact that noise dissipates as it travels away from its source, noise impacts would be limited to the Project site and vicinity. The City permits construction activities between the hours of 7:00 a.m. and 7:00 p.m. There would be periodic, temporary, noise impacts that would cease upon completion of construction activities. The Project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. The Project site is adjacent to a currently active construction site (PD-S-1069 and TP-S-0694) which involves the construction of a 49,980 square foot single-story industrial building and the subdivision the parcel into 16 parcels. It is anticipated that construction activities would be complete prior to the commencement of construction at the Project site and therefore the overlap of construction activities would not occur. Currently, there are no proposed projects on the vacant land located to the west, south, and east of the Project site. Moreover, the distance of the proposed Project and other cumulative projects would be such that the temporary noise and vibration effects of the proposed Project would not be compounded or increased by similar noise or vibration effects from other cumulative projects. Therefore,

²³ California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol ("TeNS")*, September 2013.

the Project would not contribute to construction noise from other development proximate to the Project site that would be concurrent with the proposed Project.

According to the SVGP Land Use Element, the vacant parcel directly west of the Project site is designated as General Commercial and zoned as Commercial Planned Development, and the parcel directly south of the site is designated as Business Park and zoned as General Industrial. All surrounding parcels would allow similar uses to the Project such as warehouses or commercial offices. Therefore, operational noise would be similar to the ones generated by the proposed Project. However, potential projects on these parcels would be required to comply with applicable SVMC standards and adhere to SVGP policies, which would limit the potential impact of operational noise to below significant levels. As discussed above, operational noise caused by the proposed Project would be less than significant. Due to site distance and compliance to applicable standards, cumulative stationary noise impacts would not occur. No known past, present, or reasonably foreseeable projects would compound or increase the operational noise levels generated by the Project. Therefore, cumulative from related projects, in conjunction with Project specific noise impacts relative to temporary and permanent noise generation from the proposed Project would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

7 REFERENCES

1. Berger, Elliott H., Neitzel, Rick, and Kladden, Cynthia A., Noise Navigator Sound Level Database with Over 1700 Measurement Values, June 26, 2015.
2. California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.
3. California Department of Transportation, *Traffic Noise Analysis Protocol*, 2020.
4. California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2013.
5. City of Simi Valley, *General Plan Safety and Noise Element*, updated 2021.
6. City of Simi Valley, *General Plan EIR, Section 4.16 Transportation/Traffic*, April 2012.
7. City of Simi Valley Municipal Code, *Title 5, Chapter 16 – Noise*, February 24, 2000.
8. Cowan, James P., Handbook of Environmental Acoustics, 1994. Federal Highway Administration, *Roadway Construction Noise Model*, 2006.
9. Environmental Health Perspectives, *Vehicle Motion Alarms: Necessity, Noise Pollution, or Both?* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018517/>.
10. Federal Highway Administration, *Roadway Construction Noise Model User's Guide Final Report*, 2006.
11. Federal Highway Administration, *Noise Fundamentals*, 2017. Available at: https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/polguide/polguide02.cfm
12. Federal Interagency Committee on Noise, *Federal Agency Review of Selected Airport Noise Analysis Issues*, 1992.
13. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018.
14. HPA Architecture, *4100 Guardian Street Conceptual Site Plan*, March 20, 2023.
15. Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.
16. Noise Testing Workplace Noise Consultants, *Warehouse & Forklift Workplace Noise Levels*, <https://www.noisetesting.info/blog/warehouse-forklift-workplace-noise-levels/>
17. United States Environmental Protection Agency, *Protective Noise Levels (EPA 550/9-79-100)*, 1979.
18. United States Department of Housing and Urban Development, *Noise Guidebook*, 2009, <https://www.hudexchange.info/resource/313/hud-noise-guidebook/>, accessed August 2023.

Appendix A

NOISE DATA

Noise Measurement Field Data

Project:	4100 Guardian Street Warehouse	Job Number:	194570002
Site No.:	ST-5	Date:	8/14/2023
Analyst:	Ryan Callahan and Mason Lehman	Time:	9:38 AM
Location:	Near the southeast corner of Topo Canyon Road and Guardian Street		

Noise Sources:	Planes, birds chirping, crickets, train horn, wind
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Comments:	
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Results (dBA):

	Leq:	Lmin:	Lmax:	Peak:
	45.3	41.8	55.7	81.4

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	73
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.94 inHg
Humidity:	72%

Photo:



Measurement Report

Report Summary

Meter's File Name	ANA.043.s	Computer's File Name	ST-1.ldbin		
Meter	LxT SE 0005586	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-08-14 09:23:29	Duration	0:10:00.0		
End Time	2023-08-14 09:33:29	Run Time	0:10:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-08-14 09:21:22	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	60.2 dB		
LAE	88.0 dB	SEA	--- dB
EA	69.8 µPa²h		
LA _{peak}	93.0 dB	2023-08-14 09:26:01	
LAS _{max}	75.9 dB	2023-08-14 09:26:01	
LAS _{min}	37.3 dB	2023-08-14 09:27:38	
LA _{eq}	60.2 dB		
LC _{eq}	68.6 dB	LC _{eq} - LA _{eq}	8.4 dB
LA _{eq}	62.6 dB	LA _{eq} - LA _{eq}	2.4 dB

Exceedances

Count Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

L _{DN}	L _{Day}	L _{Night}	
60.2 dB	60.2 dB	0.0 dB	
L _{DEN}	L _{Day}	L _{Even}	L _{Night}
60.2 dB	60.2 dB	--- dB	--- dB

Any Data

A		C		Z	
Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	60.2 dB	68.6 dB		--- dB	
LS _(max)	75.9 dB	--- dB	None	--- dB	None
LS _(min)	37.3 dB	--- dB	None	--- dB	None
L _{Peak(max)}	93.0 dB	--- dB	None	--- dB	None

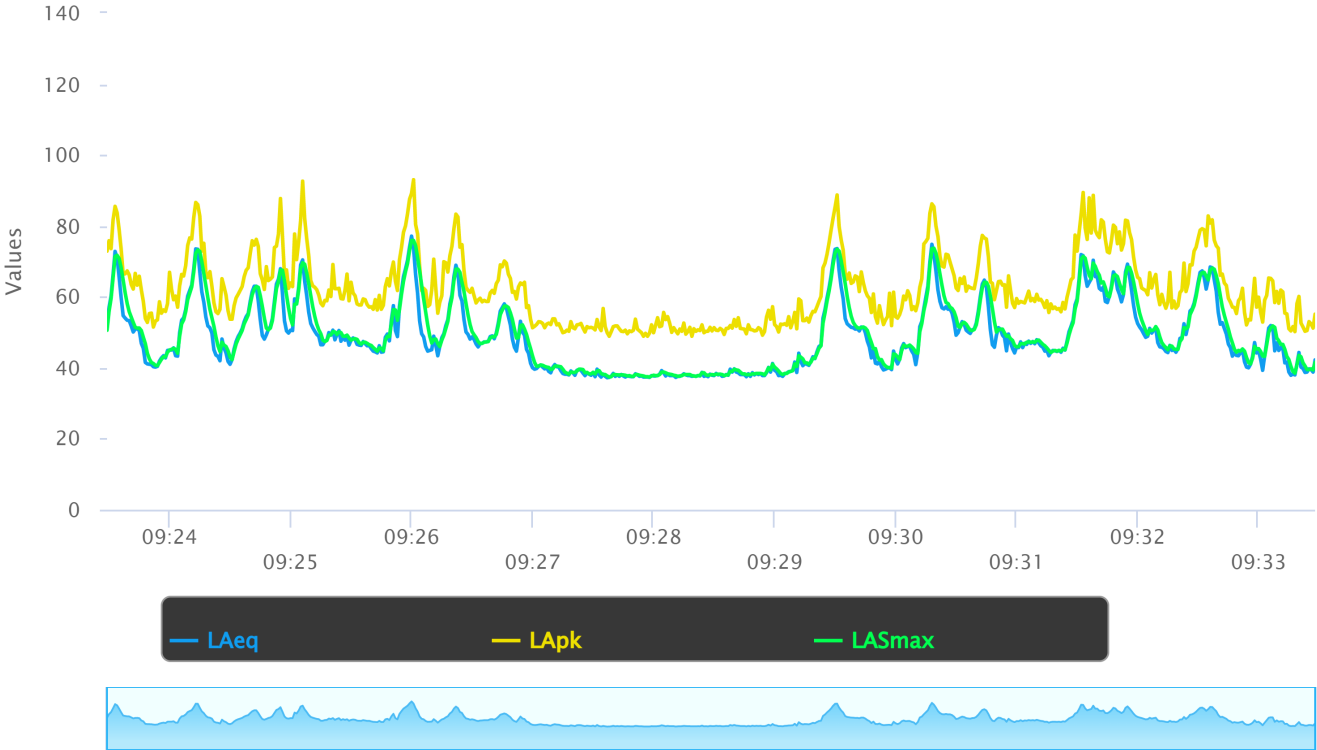
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	67.5 dB
LAS 10.0	64.3 dB
LAS 33.3	51.3 dB
LAS 50.0	47.3 dB
LAS 66.6	44.1 dB
LAS 90.0	38.0 dB

Time History



Noise Measurement Field Data

Project:	4100 Guardian Street Warehouse	Job Number:	194570002	
Site No.:	ST-2	Date:	8/14/2023	
Analyst:	Ryan Callahan and Mason Lehman	Time:	9:58 AM	
Location:	End of cul-de-sac on Hi Drive, adjacent to bike path			
Noise Sources:	Vehicle, pedestrian, and bike traffic, landscaping equipment, bird noises			
Comments:				
Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	51.4	43.6	58.7	77

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	75
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.94 inHg
Humidity:	66%

Photo:



Measurement Report

Report Summary

Meter's File Name	ANA.045.s	Computer's File Name	ST-2.ldbin
Meter	LxT SE 0005586	Firmware	2.404
User		Location	
Job Description			
Note			
Start Time	2023-08-14 09:57:54	Duration	0:10:00.0
End Time	2023-08-14 10:07:54	Run Time	0:10:00.0
Pre-Calibration	2023-08-14 09:21:22	Post-Calibration	None
		Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	51.4 dB		
LAE	79.2 dB	SEA	--- dB
EA	9.2 µPa²h		
LA _{peak}	77.0 dB	2023-08-14 09:58:04	
LAS _{max}	58.7 dB	2023-08-14 10:05:13	
LAS _{min}	43.6 dB	2023-08-14 10:07:47	
LA _{eq}	51.4 dB		
LC _{eq}	61.7 dB	LC _{eq} - LA _{eq}	10.3 dB
LA _{eq}	53.9 dB	LA _{eq} - LA _{eq}	2.5 dB

Exceedances

Count Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

L _{DN}	L _{Day}	L _{Night}	
51.4 dB	51.4 dB	0.0 dB	
L _{DEN}	L _{Day}	L _{Eve}	L _{Night}
51.4 dB	51.4 dB	--- dB	--- dB

Any Data

A		C		Z	
Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	51.4 dB	61.7 dB		--- dB	
LS _(max)	58.7 dB	--- dB	None	--- dB	None
LS _(min)	43.6 dB	--- dB	None	--- dB	None
L _{Peak(max)}	77.0 dB	--- dB	None	--- dB	None

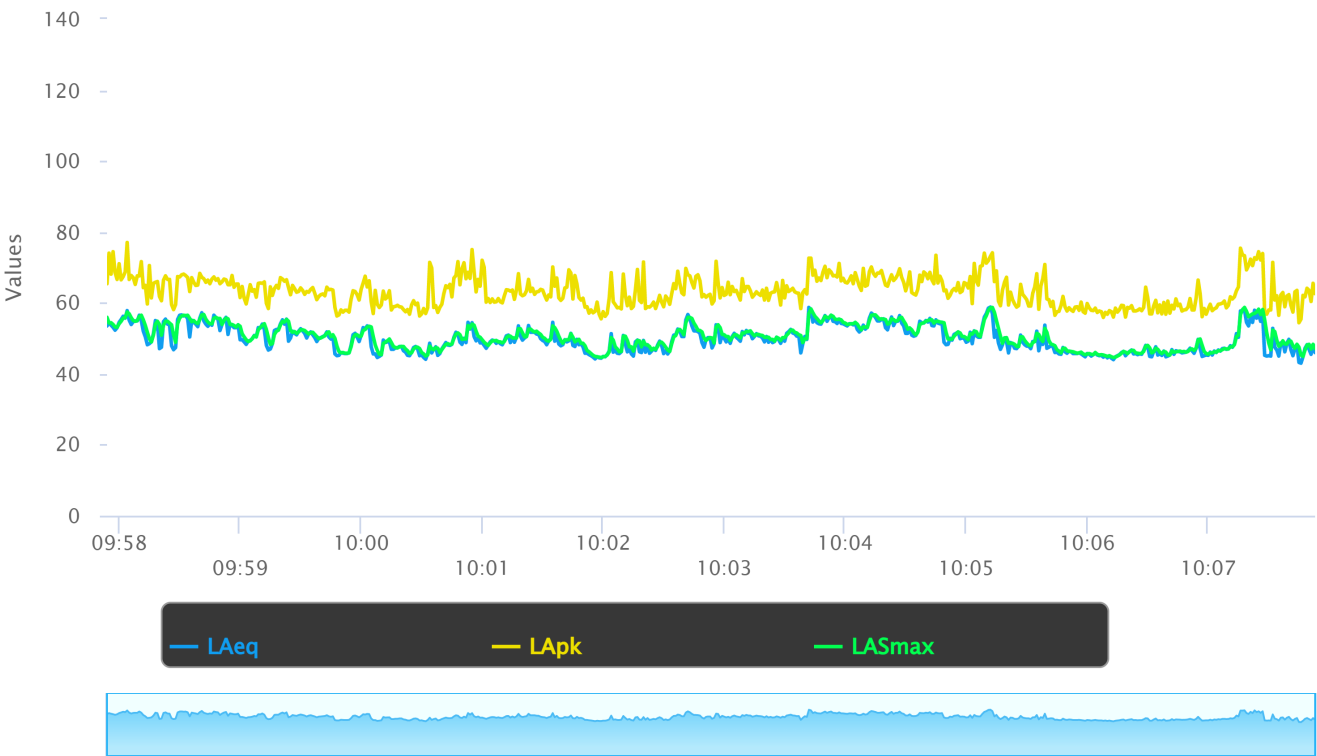
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	55.8 dB
LAS 10.0	54.9 dB
LAS 33.3	51.4 dB
LAS 50.0	49.7 dB
LAS 66.6	48.1 dB
LAS 90.0	45.7 dB

Time History



Noise Measurement Field Data

Project:	4100 Guardian Street Warehouse	Job Number:	194570002
Site No.:	ST-3	Date:	8/14/2023
Analyst:	Ryan Callahan and Mason Lehman	Time:	10:12 AM
Location:	South corner of Lark Street and Hi Drive		

Noise Sources:	Pedestrian, bike, vehicle traffic, birds, landscaping equipment, dog barking
-----------------------	--

Comments:	
------------------	--

Results (dBA):

	Leq:	Lmin:	Lmax:	Peak:
	47.0	43.1	54.4	73.4

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	76
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.94 inHg
Humidity:	66%

Photo:



Measurement Report

Report Summary

Meter's File Name	ANA.046.s	Computer's File Name	ST-3.ldbin
Meter	LxT SE 0005586	Firmware	2.404
User		Location	
Job Description			
Note			
Start Time	2023-08-14 10:11:51	Duration	0:10:00.0
End Time	2023-08-14 10:21:51	Run Time	0:10:00.0
Pre-Calibration	2023-08-14 09:21:22	Post-Calibration	None
		Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	47.0 dB		
LAE	74.8 dB	SEA	--- dB
EA	3.3 µPa²h		
LA _{peak}	73.4 dB	2023-08-14 10:14:42	
LA _{S_{max}}	54.4 dB	2023-08-14 10:14:33	
LA _{S_{min}}	43.1 dB	2023-08-14 10:12:10	
LA _{eq}	47.0 dB		
LC _{eq}	58.5 dB	LC _{eq} - LA _{eq}	11.5 dB
LA _{eq}	50.5 dB	LA _{eq} - LA _{eq}	3.5 dB

Exceedances

Count

Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN

LDay

LNight

47.0 dB

47.0 dB

0.0 dB

LDEN

LDay

LEve

LNight

47.0 dB

47.0 dB

--- dB

--- dB

Any Data

A

C

Z

	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	47.0 dB		58.5 dB		--- dB	
L _{S_(max)}	54.4 dB	2023-08-14 10:14:33	--- dB	None	--- dB	None
L _{S_(min)}	43.1 dB	2023-08-14 10:12:10	--- dB	None	--- dB	None
L _{Peak(max)}	73.4 dB	2023-08-14 10:14:42	--- dB	None	--- dB	None

Overloads

Count

Duration

OBA Count

OBA Duration

0

0:00:00.0

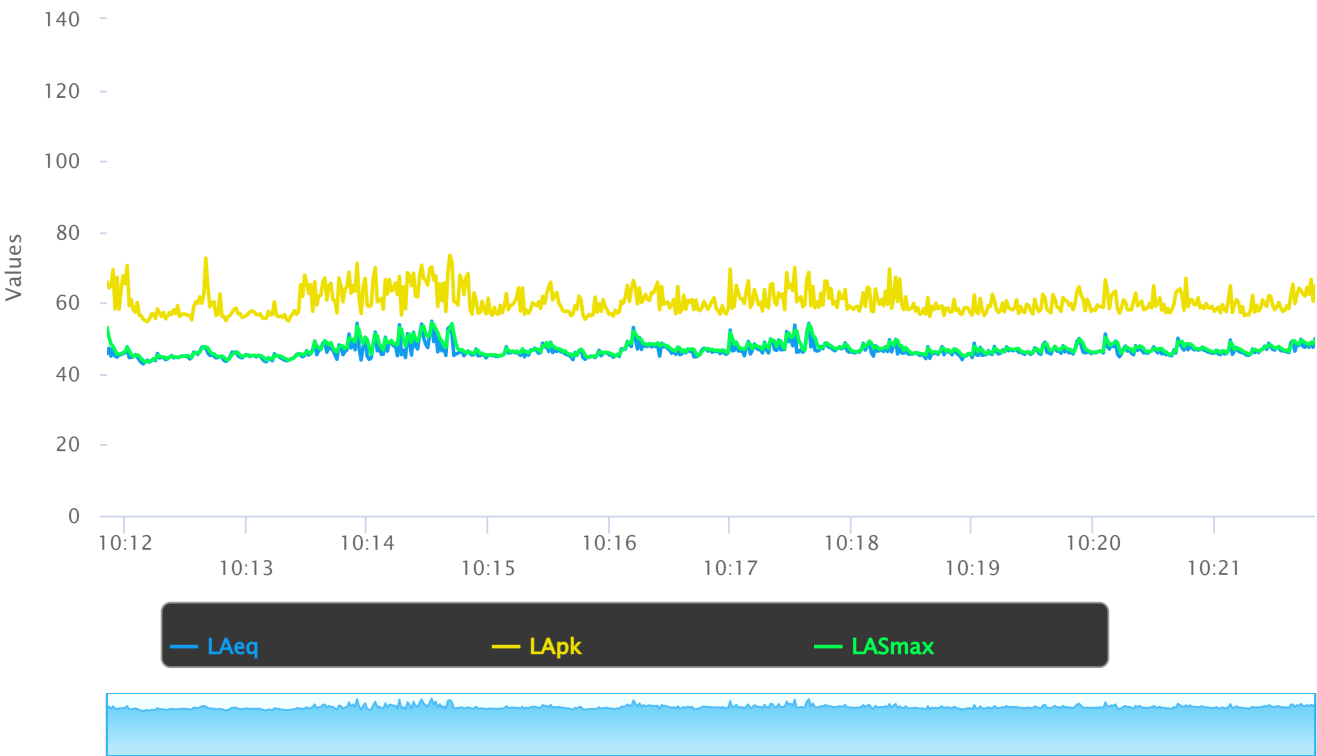
0

0:00:00.0

Statistics

LAS 5.0	49.7 dB
LAS 10.0	48.6 dB
LAS 33.3	47.0 dB
LAS 50.0	46.4 dB
LAS 66.6	45.9 dB
LAS 90.0	44.9 dB

Time History



Noise Measurement Field Data

Project:	4100 Guardian Street Warehouse	Job Number:	194570002	
Site No.:	ST-4	Date:	8/14/2023	
Analyst:	Ryan Callahan and Mason Lehman	Time:	10:27 AM	
Location:	Southwest corner of Ish Drive and Tapo Street			
Noise Sources:	Vehicle traffic, landscaping equipment, birds chirping			
Comments:				
Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	57.0	41.0	75.4	96.0

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	78
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.93 inHg
Humidity:	62%

Photo:



Measurement Report

Report Summary

Meter's File Name	ANA.047.s	Computer's File Name	ST-4.ldbin		
Meter	LxT SE 0005586	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-08-14 10:26:46	Duration	0:10:00.0		
End Time	2023-08-14 10:36:46	Run Time	0:10:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-08-14 09:21:22	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA _{eq}	57.0 dB		
LAE	84.8 dB	SEA	--- dB
EA	33.4 µPa²h		
LA _{peak}	96.0 dB	2023-08-14 10:33:09	
LAS _{max}	75.4 dB	2023-08-14 10:33:10	
LAS _{min}	41.0 dB	2023-08-14 10:35:07	
LA _{eq}	57.0 dB		
LC _{eq}	62.9 dB	LC _{eq} - LA _{eq}	5.9 dB
LA _{eq}	60.8 dB	LA _{eq} - LA _{eq}	3.8 dB

Exceedances

Count

Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN

LDay

LNight

57.0 dB

57.0 dB

0.0 dB

LDEN

LDay

LEve

LNight

57.0 dB

57.0 dB

--- dB

--- dB

Any Data

A

C

Z

	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	57.0 dB		62.9 dB		--- dB	
LS _(max)	75.4 dB	2023-08-14 10:33:10	--- dB	None	--- dB	None
LS _(min)	41.0 dB	2023-08-14 10:35:07	--- dB	None	--- dB	None
L _{Peak(max)}	96.0 dB	2023-08-14 10:33:09	--- dB	None	--- dB	None

Overloads

Count

Duration

OBA Count

OBA Duration

0

0:00:00.0

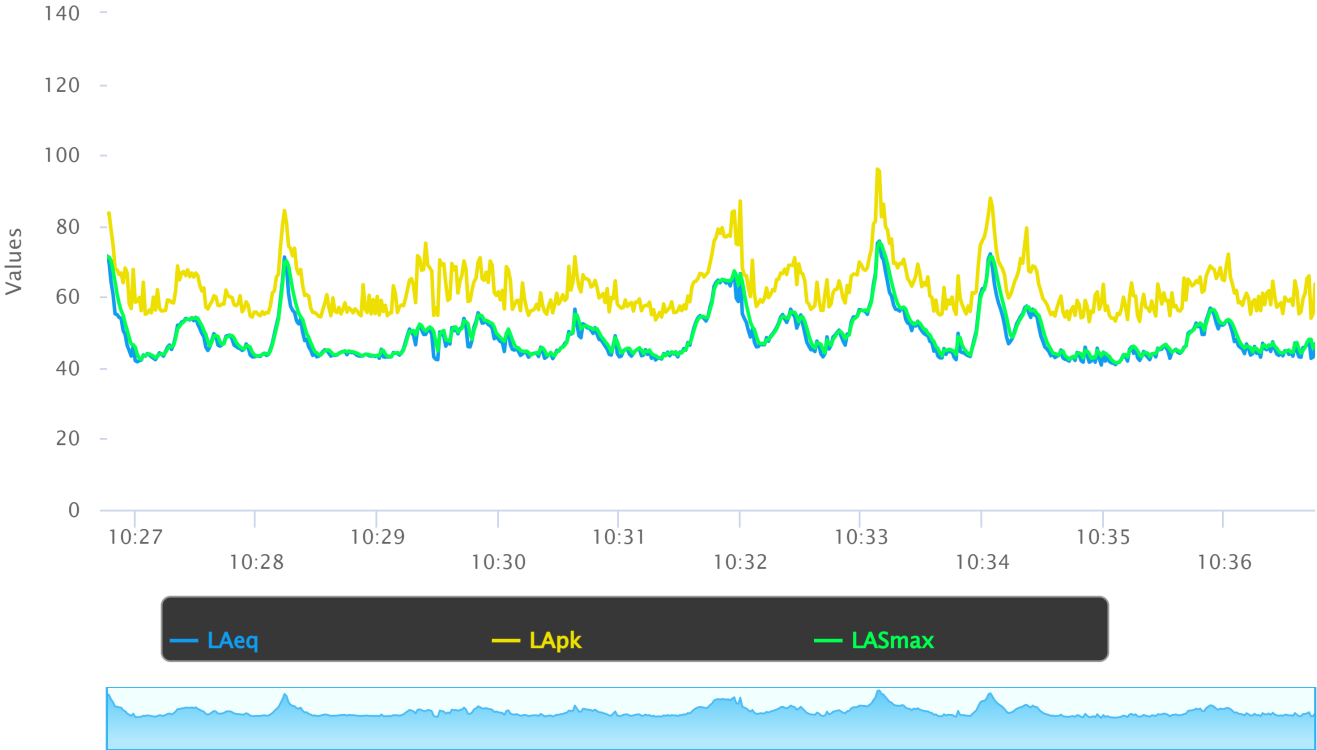
0

0:00:00.0

Statistics

LAS 5.0	63.8 dB
LAS 10.0	56.7 dB
LAS 33.3	50.2 dB
LAS 50.0	46.7 dB
LAS 66.6	44.6 dB
LAS 90.0	43.3 dB

Time History



Noise Measurement Field Data

Project:	4100 Guardian Street Warehouse	Job Number:	194570002
Site No.:	ST-5	Date:	8/14/2023
Analyst:	Ryan Callahan and Mason Lehman	Time:	9:38 AM
Location:	Near the hill south of the existing complex on the Project site		

Noise Sources:	Planes, birds chirping, crickets, train horn, wind
-----------------------	--

Comments:	
------------------	--

Results (dBA):

	Leq:	Lmin:	Lmax:	Peak:
	45.3	41.8	55.7	81.4

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	73
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.94 inHg
Humidity:	72%

Photo:



Measurement Report

Report Summary

Meter's File Name	ANA.044.s	Computer's File Name	ST-5.ldbin
Meter	LxT SE 0005586	Firmware	2.404
User		Location	
Job Description			
Note			
Start Time	2023-08-14 09:38:52	Duration	0:10:00.0
End Time	2023-08-14 09:48:52	Run Time	0:10:00.0
Pre-Calibration	2023-08-14 09:21:22	Post-Calibration	None
		Calibration Deviation	---

Results

Overall Metrics

L_{Aeq}	45.3 dB		
L_{AE}	73.1 dB	SEA	--- dB
EA	2.3 μPa^2h		
L_{Apeak}	81.4 dB	2023-08-14 09:38:58	
$L_{S_{max}}$	55.7 dB	2023-08-14 09:38:52	
$L_{S_{min}}$	41.8 dB	2023-08-14 09:48:43	
L_{Aeq}	45.3 dB		
L_{Ceq}	59.2 dB	$L_{Ceq} - L_{Aeq}$	13.9 dB
L_{Aeq}	47.8 dB	$L_{Aeq} - L_{Aeq}$	2.5 dB

Exceedances

Count

Duration

LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN

LDay

LNight

45.3 dB

45.3 dB

0.0 dB

LDEN

LDay

LEve

LNight

45.3 dB

45.3 dB

--- dB

--- dB

Any Data

A

C

Z

	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	45.3 dB		59.2 dB		--- dB	
$L_{S_{(max)}}$	55.7 dB	2023-08-14 09:38:52	--- dB	None	--- dB	None
$L_{S_{(min)}}$	41.8 dB	2023-08-14 09:48:43	--- dB	None	--- dB	None
$L_{Peak(max)}$	81.4 dB	2023-08-14 09:38:58	--- dB	None	--- dB	None

Overloads

Count

Duration

OBA Count

OBA Duration

0

0:00:00.0

0

0:00:00.0

Statistics

LAS 5.0	49.0 dB
LAS 10.0	47.2 dB
LAS 33.3	45.0 dB
LAS 50.0	44.3 dB
LAS 66.6	44.0 dB
LAS 90.0	43.4 dB

Time History



Project: 4100 Guardian St
Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	Daytime hours (7 am to 7 pm)	8
	Evening hours (7 pm to 10 pm)	0
	Nighttime hours (10 pm to 7 am)	0
Leq to L10 factor		3

		Receptor (Land Use)	Distance (feet)	Shielding	Direction						
1		Office Commercial	444	0	N						
2		Residential	1,376	0	N						
3		Residential	546	0	S						
7		Industrial	658	0	W						
						RECEPTOR 1		RECEPTOR 2		RECEPTOR 3	
Construction Phase	Equipment Type	No. of Equip.	Acoustical Usage Factor	Reference Noise Level at 50ft per Unit, Lmax	Noise Level at Receptor 1, Lmax	Noise Level at Receptor 1, Leq	Noise Level at Receptor 2, Lmax	Noise Level at Receptor 2, Leq	Noise Level at Receptor 3, Lmax	Noise Level at Receptor 3, Leq	Noise Level at Receptor 7, Lmax
Demolition	Concrete Saw	1	20%	90	70.6	63.6	60.8	53.8	68.8	61.8	67.2
	Excavator	3	40%	81	66.5	62.5	56.7	52.7	64.7	60.7	63.1
	Dozer	2	40%	82	65.7	61.8	55.9	51.9	63.9	60.0	62.3
	Combined LEQ					67.5		57.7		65.7	64.1
Site Prep	Dozer	3	40%	82	67.5	63.5	57.7	53.7	65.7	61.7	64.1
	Tractor	4	40%	84	71.1	67.1	61.2	57.2	69.3	65.3	67.6
	Combined LEQ					68.7		58.8		66.9	65.2
Grading	Excavator	1	40%	81	61.7	57.8	51.9	47.9	59.9	56.0	58.3
	Grader	1	40%	85	66.0	62.1	56.2	52.2	64.2	60.3	62.6
	Dozer	1	40%	82	62.7	58.8	52.9	48.9	60.9	57.0	59.3
	Tractor	3	40%	84	69.8	65.8	60.0	56.0	68.0	64.0	66.4
	Combined LEQ					68.3		58.5		66.5	64.9
Building Construction	Crane	1	16%	81	61.6	53.7	51.8	43.8	59.8	51.9	58.2
	Tractor	3	40%	84	69.8	65.8	60.0	56.0	68.0	64.0	66.4
	Generator	1	50%	81	61.6	58.6	51.8	48.8	59.8	56.8	58.2
	Tractor	3	40%	84	69.8	65.8	60.0	56.0	68.0	64.0	66.4
	Welder/Torch	1	40%	74	55.0	51.1	45.2	41.2	53.2	49.3	51.6
	Combined LEQ					69.4		59.6		67.6	66.0
Paving	Paver	2	50%	77	61.2	58.2	51.4	48.4	59.4	56.4	57.8
	Pavement Scarifier	2	20%	90	73.5	66.6	63.7	56.7	71.7	64.8	70.1
	Roller	2	20%	80	64.0	57.1	54.2	47.2	62.2	55.3	60.6
	Combined LEQ					67.6		57.7		65.8	64.1
Architectural Coating											
		Compressor (air)	1	40%	78	58.7	54.8	48.9	44.9	56.9	53.0
Combined LEQ						54.8		44.9		53.0	51.3

Source for Ref. Noise Levels: RCNM, 2005

Appendix G

Trip Generation Memorandum



February 28, 2024

Justin Link, PE, TE, QSD/P
City of Simi Valley
Public Works Department

RE: *Trip Generation Memorandum for the Proposed Warehousing Project at 4100 Guardian Street in the City of Simi Valley*

Dear Mr. Link:

Kimley-Horn and Associates, Inc. has prepared this memorandum to evaluate trip generation for the proposed warehousing project at 4100 Guardian Street in the City of Simi Valley. The proposed project trip generation will be compared to existing trip generation at the project site to determine the need for further analysis, based on the City of Simi Valley *Guidelines for the Preparation of Traffic Impact Reports* (October 2021).

PROJECT DESCRIPTION

The project site is located near the southeast corner of Guardian Street and Tapo Canyon Road in the City of Simi Valley. The site is currently occupied by a 133,490 square-foot (SF) multi-tenant office building. The applicant proposes to demolish the existing office building and construct an approximately 179,490 SF warehouse building. A copy of the project site plan is provided on Figure 1. The project is anticipated to open in 2024.

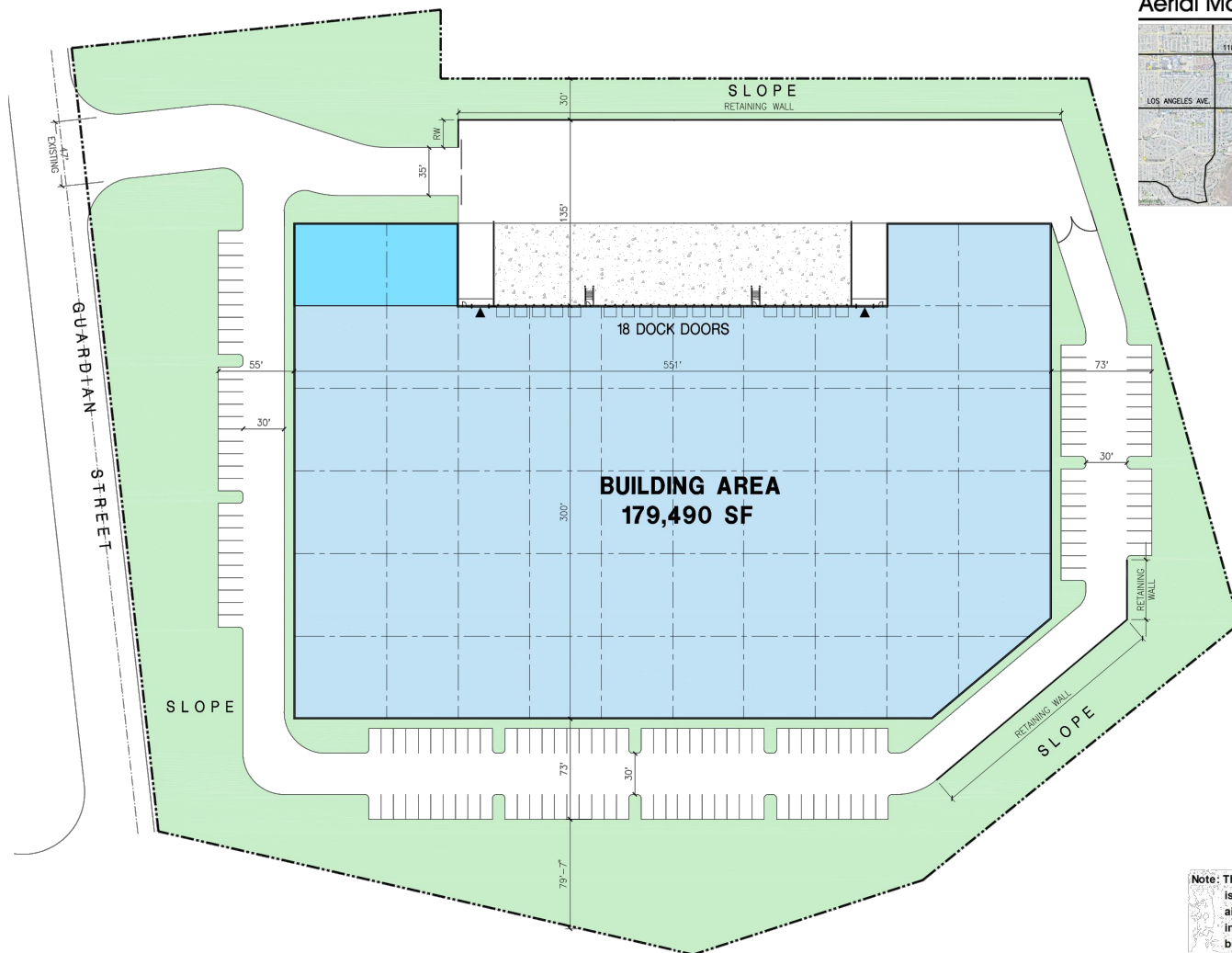
Direct vehicular access to the project site would be provided via one unsignalized driveway along Guardian Street.

EXISTING TRIP GENERATION

Vehicular trips for the existing office building were calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021). Trip rates are based on the following land use (LU) category:

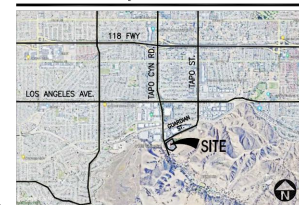
- LU 710 – General Office Building

The existing use generates approximately 1,447 passenger car (PC) trips on a daily basis with 203 PC trips (179 inbound, 24 outbound) in the morning peak hour and 193 PC trips (33 inbound, 160 outbound) in the evening peak hour.



PROPOSED WAREHOUSING DEVELOPMENT
4100 GUARDIAN STREET, SIMI VALLEY, CA 93063

Aerial Map



Legend



Tabulation

SITE AREA	
In s.f.	448,740 sf
In acres	10.3 ac
BUILDING AREA	
Office - 1st floor	3,000 sf
Office - 2nd floor	3,000 sf
Warehouse	173,490 sf
TOTAL	179,490 sf
BUILDING CLEAR HEIGHT	
	32 ft
FLOOR AREA RATIO	
Maximum Allowed	to be verified
Actual	0.400
SITE COVERAGE	
Maximum Allowed	to be verified
Actual	39.3%
AUTO PARKING REQUIRED	
Office: 1,000 s.f. (if exceed 10%)	n/a stalls
Whse: 1st 10K @ 1/1,500 s.f.	20 stalls
above 10K @ 1/1,500 s.f.	34 stalls
TOTAL	54 stalls
AUTO PARKING PROVIDED	
Standard (9' x 18')	142 stalls
ZONING ORDINANCE	
Zoning - Business Park (BP)	
MAXIMUM BUILDING HEIGHT ALLOWED	
Height - 48' (3 stories)	
LANDSCAPE REQUIREMENT	
Percentage - 15%	
LANDSCAPE PROVIDED	
In s.f.	143,296 sf
Percentage	31.9%
SETBACKS	
Building	Landscape
Front / Street side - 20' *	adjacent to R zone - 10'
Side - 0', 20' *	adjacent to R zone - 10'
Rear - 0', 20' *	adjacent to R zone - 10'
* additional 1' for each ft. or portion thereof by which the structures exceed 20' in height.	

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

PROPOSED TRIP GENERATION

The trips expected to be generated by the project were calculated using trip generation rates published in the ITE Trip Generation Manual, 11th Edition. Trip rates are based on the following land use (LU) category:

- LU 155 – High-Cube Fulfillment Center Warehouse (Non-Sort)

The project is estimated to generate 273 PC trips on a daily basis with 22 PC trips (18 inbound, 4 outbound) in the morning peak hour and 24 PC trips (9 inbound, 15 outbound) in the evening peak hour; and 52 truck trips on a daily basis with 5 truck trips (4 inbound, 1 outbound) in the morning peak hour and 5 truck trips (2 inbound, 3 outbound) in the evening peak hour. The overall truck trip percentage was obtained from the ITE Trip Generation Manual, 10th Edition Supplement. To provide a more representative analysis, the weekday overall truck trip percentage for LU 154 (High-Cube Transload and Short-Term Storage Warehouse) was utilized, as a daily weekday percentage is not published for LU 155.

Passenger car equivalent (PCE) factors were then applied to the truck types, based on number of axles (1.5 for 2-axle trucks, 2.0 PCE for 3-axle trucks, and 3.0 for 4+ axle trucks) to determine the total PCE volumes generated by the project. PCE factors by truck type were derived from the City of Fontana *Truck Trip Generation Study* (August 2003). The project is estimated to generate 404 daily PCE trips, with 32 PCE trips (27 inbound, 5 outbound) in the morning peak hour, and 35 PCE trips (13 inbound, 22 outbound) in the evening peak hour.

After subtracting the trip generation of the existing office building, the project is estimated to generate a net -1,044 daily trips, with -171 morning peak hour trips and -158 evening peak hour trips. A summary of the project trip generation is shown on Table 1.

TRAFFIC ANALYSIS REQUIREMENTS

Per the City of Simi Valley *Guidelines for the Preparation of Traffic Impact Reports* (October 2021) and discussion with City staff, a traffic impact report is required if the trip generation for a proposed project exceeds the existing site trip generation by at least 110 daily trips. Based on the trip generation provided in this memorandum, the proposed project is presumed to fall below the defined threshold, and a traffic impact report is not required.

TABLE 1
SUMMARY OF PROJECT TRIP GENERATION
4100 GUARDIAN STREET WAREHOUSING PROJECT

TRIP GENERATION RATES

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Fulfillment Center Warehouse	155	KSF	1.810	0.122	0.029	0.150	0.062	0.098	0.160
General Office Building	710	KSF	10.84	1.34	0.18	1.52	0.25	1.20	1.44

EXISTING TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
General Office Building	133,490	KSF	1,447	179	24	203	33	160	193

PROPOSED PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
High-Cube Fulfillment Center Warehouse		179.490	KSF	325	22	5	27	11	18	29
Passenger Vehicles	84.00%			273	18	4	22	9	15	24
Trucks	16.00%			52	4	1	5	2	3	5

PROPOSED PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{1,2}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	84.00%	273	1.0	273	18	4	22	9	15	24
2-Axle Trucks	2.71%	9	1.5	14	1	0	1	0	1	1
3-Axle Trucks	3.63%	12	2.0	24	2	0	2	1	1	2
4+ Axle Trucks	9.66%	31	3.0	93	6	1	7	3	5	8
Total Truck PCE Trips				131	9	1	10	4	7	11
Total Project PCE Trips				404	27	5	32	13	22	35
Net Trip Generation (Proposed Minus Existing)				-1,044	-152	-19	-171	-20	-138	-158

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement

² Source: Truck Trip Generation Study - City of Fontana, August 2003

VMT SCREENING

With the passage of Senate Bill (SB) 743 by the California Legislature in September 2013, VMT has become an important indicator for determining if a new development will result in a “significant transportation impact” as required by the California Environmental Quality Act (CEQA). Under SB 743, the state Office of Planning and Research (OPR) was charged with developing new guidelines for evaluating transportation impacts under CEQA in order to replace methods measuring automobile delay and Level of Service. In response to this mandate, the Office of Planning and Research proposed, and the California Natural Resources Agency adopted CEQA Guidelines Section 15064.3, which indicates that VMT exceeding an applicable threshold of significance is the most appropriate measure for evaluating a project’s transportation impacts. Section 15064.3 goes on to clarify that except for projects regarding roadway capacity, “...a project’s effect on automobile delay does not constitute a significant environmental impact.” The OPR further elaborates on VMT metrics within the *Technical Advisory on Evaluating Transportation Impacts in CEQA* document, published in December 2018. Subsequently, the City of Simi Valley, via the *Guidelines for the Preparation of Traffic Impact Reports* (October 2021) has established VMT screening thresholds of significance for projects within the City.

As indicated in the “VMT Analysis” section of City guidelines, projects will not require a VMT analysis if they are screened using the project’s trip generation. The guidelines establish that projects generating less than 110 net trips per day are considered to have less-than-significant impacts.

In accordance with the Technical Advisory and with City of Simi Valley Guidelines, it is appropriate that the proposed project be presumed to result in a less-than-significant VMT impact and support the goals of SB 743 due to its net trip generation. No further VMT assessment is anticipated.

FINDINGS AND CONCLUSIONS

Per the analysis provided in this memorandum, the project is expected to generate less than 110 net daily trips and is assumed to have a less-than-significant impact. Based on review of City guidelines and discussion with City staff, therefore, a traffic impact report nor assessment of VMT is required.