

City of SACRAMENTO

COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Northgate Industrial Park Project (P22-017) The proposed project would include construction of 2 industrial warehouse buildings the construction of 2 industrial warehouse buildings. Building A, measuring 156,013 square feet, is existing and will be converted from a warehouse retail store to an industrial warehouse building. Building B, measuring 109,673 square feet, is proposed to be constructed at the existing parking lot of the subject site. The project entitlements consist of a request for: 1) PUD Schematic Plan Amendment to designate the site for light industrial uses consistent with the M-1(S) zone. 2) PUD Guidelines Amendment renaming the Incredible Universe PUD to Northgate Industrial Park PUD, and amending signage, landscape, and other guidelines consistent with the proposed project. 3) Tentative Parcel Map for two parcels measuring 11.285 acres and 6.262 acres. 4) Site Plan and Design Review for the construction of 2 industrial warehouse buildings. Building A, measuring 156,013 square feet, is existing and will be converted from a warehouse retail store to an industrial warehouse building. Building B, measuring 109,673 square feet, is proposed to be constructed at the existing parking lot of the subject site located in the Light Industrial zone (M-1(S)) within the Incredible Universe Planned Unit Development.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code.

A copy of this document and all supportive is available on the City's EIR Webpage at:

<http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: Scott Johnson

Date: August 12, 2022



NORTHGATE INDUSTRIAL PARK PROJECT (P22-017)

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number: Northgate Industrial Park Project (P22-017)

Project Location: 4100 Northgate Boulevard, Sacramento, CA 95834

Project Applicant: LTFS Investors, LLC
1880 Century Park East, Suite 017
Los Angeles, CA 90067

Project Planner: Jose Quintanilla, Associate Planner

Environmental Planner: Scott Johnson, Senior Planner
Community Development Department
300 Richards Boulevard, Third Floor
Sacramento, CA 95811

Date Initial Study Completed: August 10, 2022

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2035 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)) Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed. See also the Master EIR for the 2035 General Plan. The mitigation monitoring plan for the 2035 General Plan, which provides references to applicable general plan policies that reduce the environmental effects of development that may occur consistent with the general plan, is included in the adopting resolution for the Master EIR. See City Council Resolution No. 2015-0060, beginning on page 60. The resolution is available at:

<https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Environmental-Impact-Reports/2035-GP-Update/Resolution-2015-0060.pdf?la=en>.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento's web site at:

<http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx>

All technical environmental studies utilized in preparation of this Initial Study are available for review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, California.

The City will circulate a Notice of Availability/Notice of Intent (NOA/NOI) that confirms the City's intention to adopt the Mitigated Negative Declaration, and provides dates for public comment. The NOA/NOI will be available on the City's web site set forth above.

The City is soliciting views of interested parties and agencies on the content of the environmental information presented in this document. Written comments should be sent at the earliest possible date, but no later than the 30 day review period ending September 15, 2022.

Please send written responses to:

Scott Johnson
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-5842
srjohnson@cityofsacramento.org

SECTION II - PROJECT DESCRIPTION

INTRODUCTION

The project applicant (LTFS Investors, LLC) proposes to develop the Northgate Industrial Park in the North Natomas community in the city of Sacramento. The proposed project would include the renovation of an existing former retail building and the construction of a new structure to create approximately 265,686 square feet of industrial warehouse use.

PROJECT LOCATION

The approximately 17.55-acre project site is located at 4100 Northgate Boulevard in the city of Sacramento. The project site is bounded on the east by Steelhead Creek (also known as the Natomas East Main Drainage Canal), Interstate 80 (I-80) to the south, and Northgate Boulevard to the west and northwest (see **Figures 1** through **3**).

The City of Sacramento 2035 General Plan land use designation for the project site is Employment Center Low Rise. The project site is zoned M-1(S) PUD (Light Industrial Zone - Planned Unit Development) (see **Figures 4** and **5**).

The project site includes the former Fry's Electronics retail store building, which is no longer in use, and paved parking areas to the west and south, which include planters with mature trees, landscaped parking medians, and a landscaped perimeter. Tandy Drive provides access to the project site from Northgate Boulevard via a three-way signalized intersection. A Dutch Bros drive-through coffee kiosk, a 7-Eleven gas station and convenience store, a Cilantro's Mexican restaurant, and a Wendy's restaurant are located immediately north of the project site and are also accessed via Tandy Drive. The project area includes a mix of industrial, commercial, and office uses.

PROJECT DESCRIPTION

Buildings A and B

The project proposes to repurpose the existing approximately 156,013-square-foot former Fry's Electronics retail store building for use as an industrial warehouse building (Building A) and develop an additional approximately 109,673-square-foot industrial warehouse building (Building B) to the west of the existing structure in the parking area of the former retail site (see **Figure 6**). The project would therefore develop approximately 265,686 square feet of industrial warehouse use.

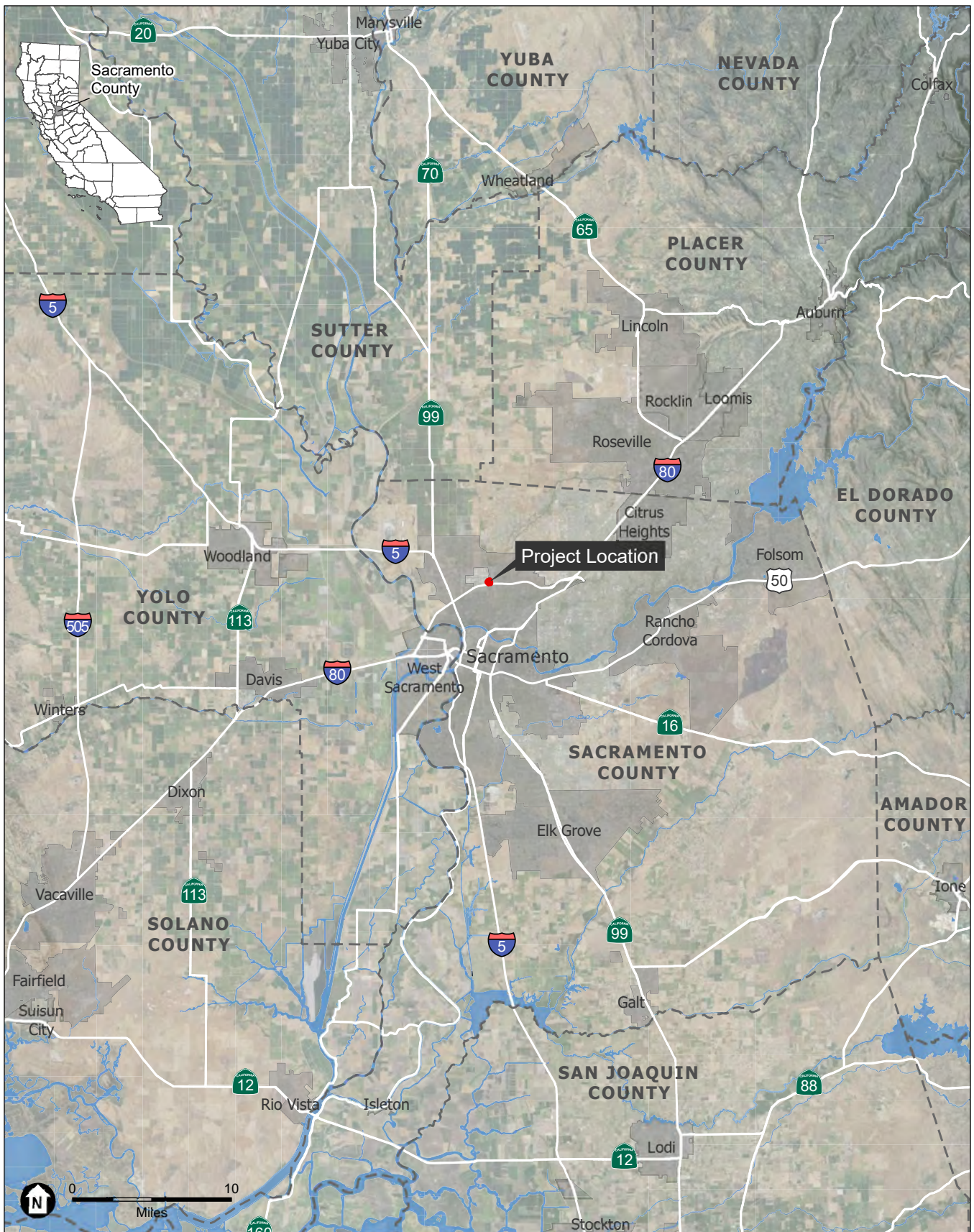
Building A would be a 156,013-square-foot single-story industrial warehouse building with a height of approximately 34 feet. The Building A parcel has a total site area of approximately 491,413 square feet (11.28 acres). Building A would include 18 loading bays and 5 grade-level roll up doors.

Building B would be a 109,673-square-foot single-story industrial warehouse building with a height of approximately 42 feet. The Building B parcel has a total site area of approximately 273,530 square feet (6.28 acres). Building B would include 20 loading bays and 8 grade-level roll up doors).

The buildings would be of primarily concrete and wood construction with a variety of architectural enhancements. The exterior walls would include a multicolored coating system, and areas around building entries would include tinted glazing in aluminum frames with overhead steel-framed painted canopies. The placement of these enhancements would be focused at locations most visible from the public roadways.

Access and Circulation

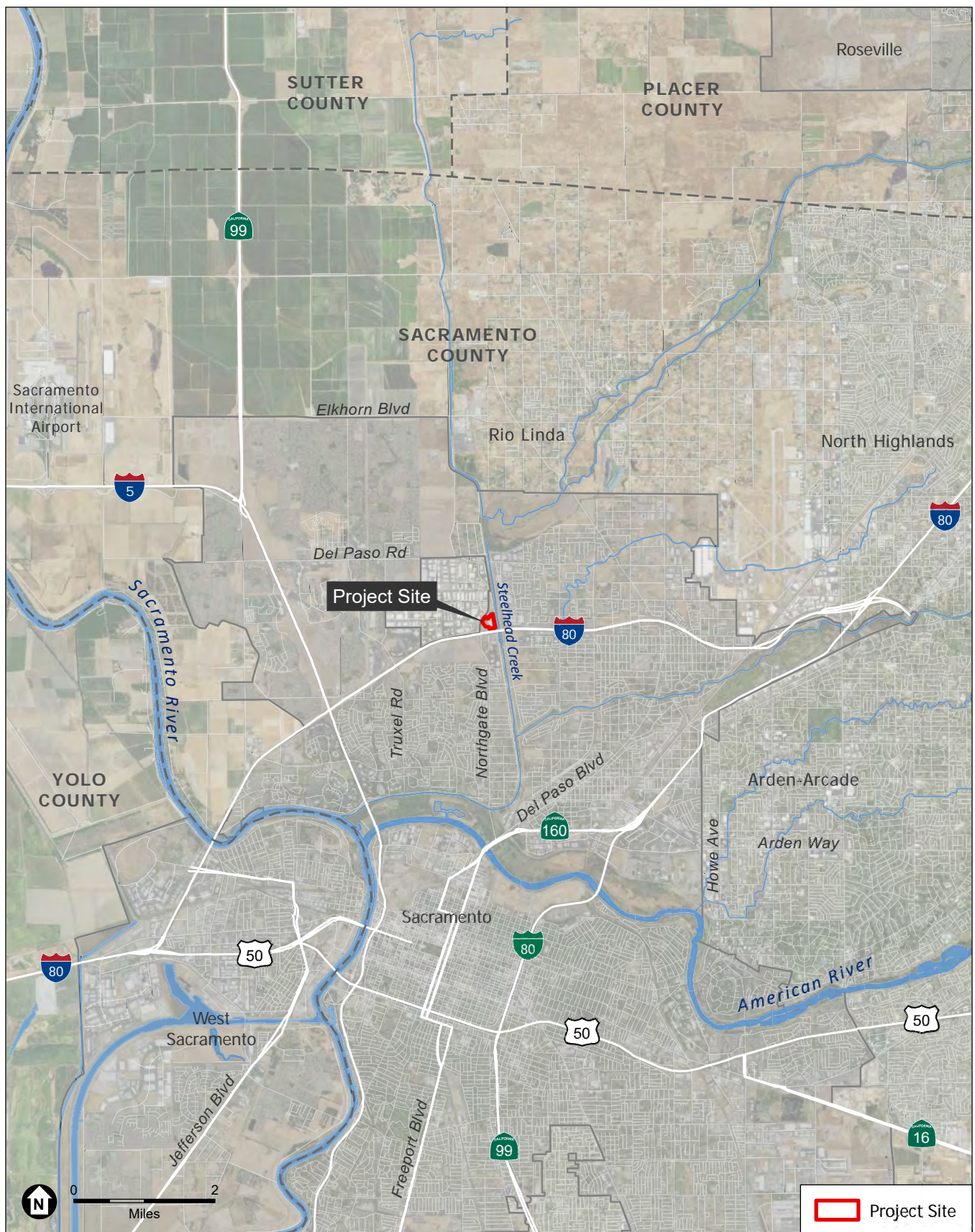
Vehicular access to the project site is provided via Northgate Boulevard and Tandy Drive. Tandy Drive provides direct bicycle and pedestrian access to the project site.



SOURCE: Esri, 2022; ESA, 2022

Northgate Industrial Park

Figure 1
Regional Location



SOURCE: Esri, 2022; ESA, 2022

Northgate Industrial Park

Figure 2
Project Vicinity



SOURCE: NAIP, 2020; Esri, 2022; ESA, 2022

Northgate Industrial Park

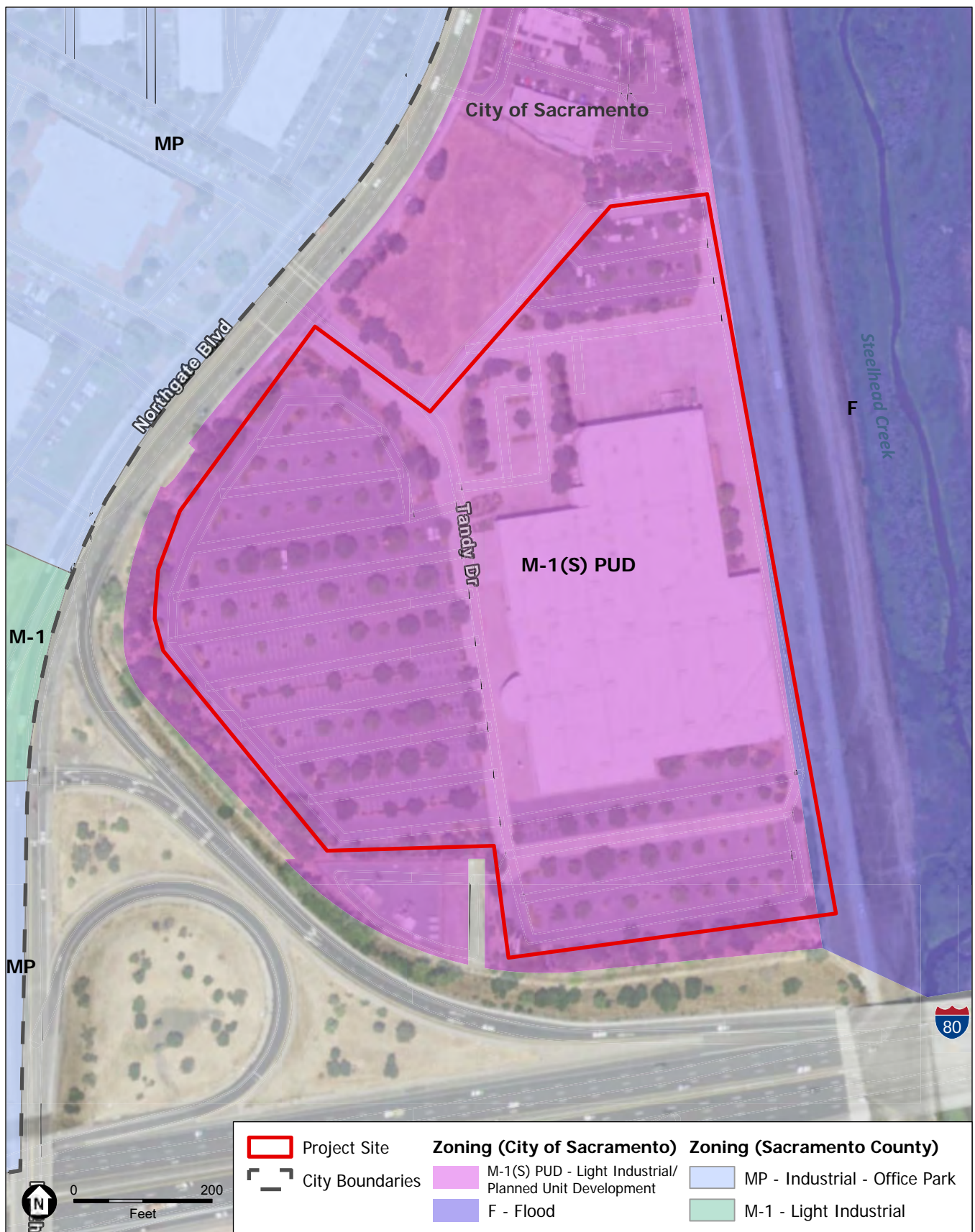
Figure 3
Project Site



SOURCE: NAIP, 2020; City of Sacramento, 2022; Esri, 2022; ESA, 2022

Northgate Industrial Park

Figure 4
General Plan Land Use Designations



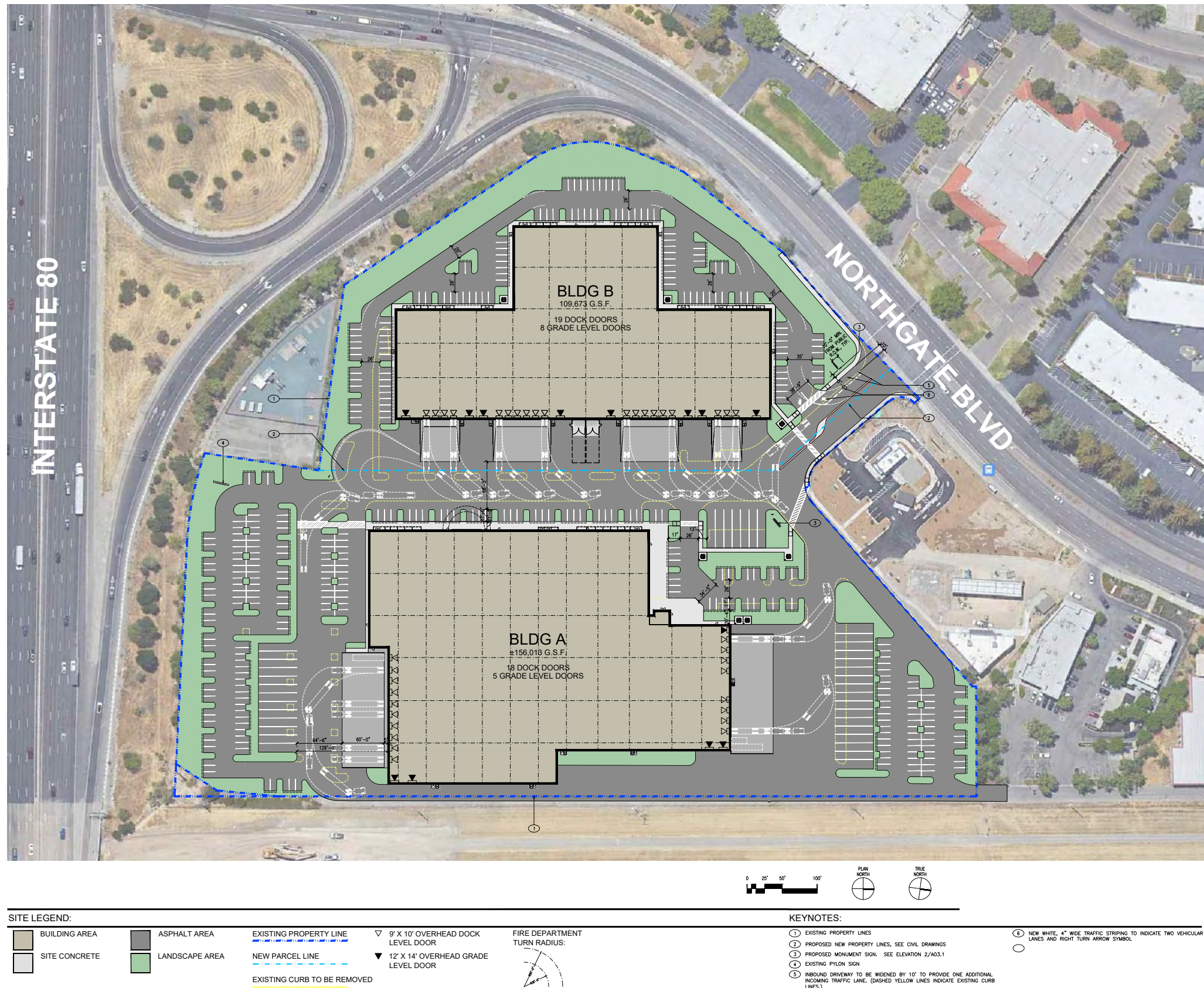
SOURCE: NAIP, 2020; City of Sacramento, 2022; Sacramento County, 2022; Esri, 2022; ESA, 2022

Northgate Industrial Park

Figure 5
Project Area Zoning

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SOURCE: RMW Architecture & Interiors, 2022

Northgate Industrial Park

Figure 6
Proposed Site Plan

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Parking

The project would include 389 vehicle parking stalls, including standard stalls, compact stalls, accessible parking stalls, and designated parking and facilities in accordance with California Green Building Standards Code ("CALGreen", Title 24, Part 11) requirements for electric vehicle (EV) compatible parking. The project would install EV charging stations at 40 parking stalls and at least 38 additional parking stalls would be EV ready. The project would also include 37 trailer parking stalls. The proposed project would also include 4 short-term and 46 long-term bicycle parking spaces for a total of 50 bicycle parking spaces.

Landscaping

Project landscaping would include numerous shade trees and other plantings in parking areas and near the proposed warehouse buildings (see **Figure 7**). Some existing trees and landscaping on the project site would remain and be protected during construction activities, while the majority of the existing trees in the large parking area on the west side of the project site would be removed. With the combination of trees to be removed, to remain, or to be planted, the project site would include approximately 120 trees. Low-water-use plants would be placed in numerous locations on the project site in planter boxes and infill areas, while moderate-water-use plants would be concentrated at accent points such as driveways and building entries.

Lighting and Signage

The proposed project would include exterior building lighting for security, illuminated signage, and parking lot lighting designed in accordance with the City of Sacramento Zoning Code. The project includes two monument signs; one for each of the buildings included in the proposed project.

Utilities

The site would be served domestic water by Sacramento County Water Agency. Drainage from public mains extended and connected to the Sacramento County drainage system. The Sacramento Area Sewer District's (SASD) local sanitary sewer collection system would provide utility connections to the project. Stormwater generated by impervious surfaces associated with the proposed project would be directed to onsite drainage infrastructure that would connect to the SASD system. The project utilities plan is provided on **Figure 8**.

Electric service would be provided by Sacramento Municipal Utility District (SMUD). An existing SMUD substation lies to the south of the project site, with several SMUD easements of various sizes to be utilized throughout the project site. Gas service would be provided by PG&E and would be provided via a gas line that enters the project site from the west.

Site Preparation and Construction

Site preparation would include internal demolition of the existing former retail building, demolition of the existing parking area around the existing structure, and tree removal. Renovation of the former retail building as the proposed Building A, construction of the new Building B, and development of site improvements and landscaping would follow the site preparation. Development of the proposed project would not be anticipated to require substantial import or export of fill. Project construction is anticipated to begin in 2023 and last for approximately 15 months.

Project Approvals

The project includes the following entitlement approvals from the City of Sacramento:

- Approval of Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan;
- Amendment to the Incredible Universe PUD schematic plan to designate the site for light industrial uses.

- Amendment to the Incredible Universe PUD Guidelines to rename the PUD, allow for additional signage, and provide updates to make language consistent with current planning practices; and
- Approval of Site Plan and Design Review.
- Approval of a tentative parcel map for Building A and Building B parcels

PHASE 2
NEW BUILDING B
ONE STORY DISTRIBUTION
WAREHOUSE BUILDING

EXISTING BUILDING A
ONE STORY DISTRIBUTION
WAREHOUSE BUILDING

PRELIMINARY PLANT PALETTE

TREES

	Fraxinus uhdei	Evergreen Ash	Low	24" Box	25	Evergreen Shade Tree
	Quercus r. Agrifolia	Coast Live Oak	Low	24" Box	40	Evergreen Shade Tree
	Quercus ruber	Cork Oak	Low	24" Box	10	Evergreen Shade Tree
	Quercus rubra	Red Oak	Low	18" Gallon	45	Deciduous Shade Tree
	Existing Trees To Remain					
	Existing Trees To Be Removed					

LARGE PLANTER AND INFILL PLANTS

	Calamagrostis Karl Foerster	Feather Reed Grass	Low	1 Gallon	3' OC	4' X 3'
	Calandula Canadensis	California Lilac	Low	5 Gallon	6' OC	6' X 6'
	Grevillea canberra gem	Canberra Grevillea	Low	5 Gallon	6' OC	6' X 6'
	Heterostemma argentea	Topsy	Low	5 Gallon	8' OC	8' X 12'
	Loropetalum Ever Red	Fringe Flower	Low	5 Gallon	6' OC	6' X 6'
	Muhlenbergia capillaris	Pink Muhly Grass	Low	1 Gallon	4' OC	4' X 5'
	Rhamnus Euc. Case	Coffesberry	Low	5 Gallon	6' OC	6' X 6'

CEPT PLANTINGS

	Cebus Sunset	Sunset Rockrose	Low	5 Gallon	5' OC	2' X 6'
	Datura In-color	Fortnight Lily	Low	5 Gallon	4' OC	3' X 4'
	Juniper Buffalo	Buffalo Juniper	Low	1 Gallon	3' OC	2' X 5'
	Raphanistrum Pink Lady	Indian Hawthorne	Low	5 Gallon	5' OC	3' X 5'
	Rhamnus Mound San Bruno	Coffesberry	Low	5 Gallon	6' OC	3' X 6'
	Salvia Santa Barbara	Santa Barbara Sage	Low	5 Gallon	5' OC	3' X 5'
	Tetrisium chamassidys	Germaster	Low	1 Gallon	3' OC	2' X 3'
	Tulbaghia volacea	Society Garlic	Low	1 Gallon	2' OC	2' X 2'

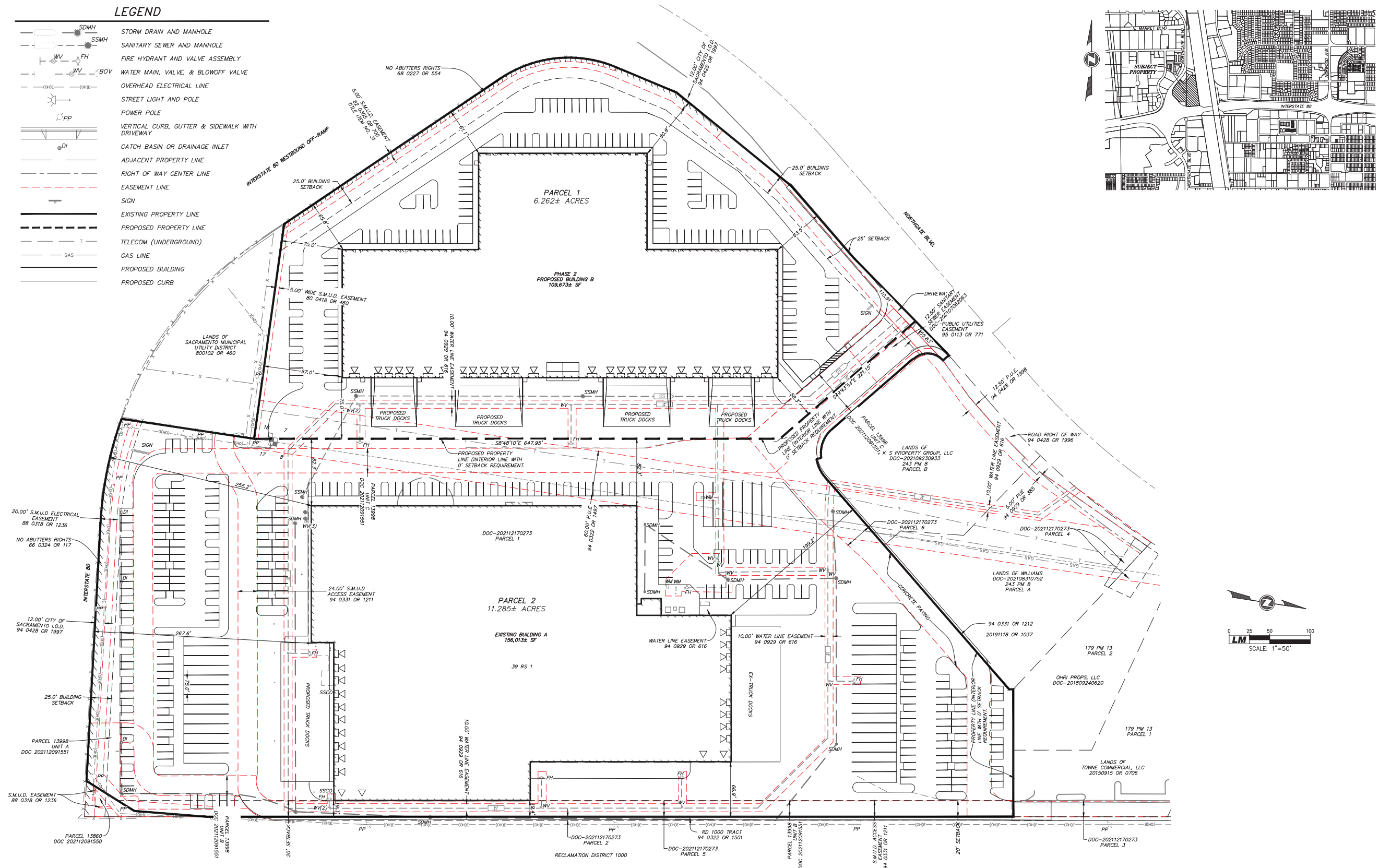


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SOURCE: RMW Architecture & Interiors, 2022

Northgate Industrial Park

Figure 7
Project Landscape Plan Map



SOURCE: Laugenour and Meikle, 2022

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES, WILDFIRE

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses impacts related to agricultural resources and wildfire.

Discussion

Land Use

The proposed project would include conversion of an existing retail building to a warehouse building and construction of a new warehouse building and associated site improvements such as parking, internal circulation, stormwater drainage features, and landscaping. The project site is zoned M-1(S) PUD (Light Industrial Zone - Planned Unit Development). The project site is designated Employment Center Low Rise by the 2035 General Plan, which allows for employment generating uses that generally do not produce loud noise or noxious odor. Examples of permitted uses are industrial or manufacturing, office flex-space, residential and commercial flex-space, office uses, retail, and public or quasi-public special uses. The project is consistent with the City of Sacramento 2035 General Plan, and North Natomas Community Plan land use designations for the project site. The project would not modify the existing land use designation or underlying M-1(S) zoning of the project site. However, the project site is within the Incredible Universe Planned Unit Development (PUD), which was adopted for a single-user warehouse/retail use, such as the former Fry's electronics that was previously located at the project site. The proposed project would repurpose the former Fry's building into an industrial warehouse and include a new warehouse building adjacent to the existing building. The project applicant is proposing to amend the PUD schematic plan to allow for light industrial uses and amend the PUD Guidelines to rename the PUD, allow for additional signage, and provide updates to make language consistent with current planning practices. Approval of this amendment would bring the proposed project into consistency with zoning code and the PUD.

Population and Housing

The City of Sacramento 2035 General Plan Master Environmental Impact Report (2035 General Plan Master EIR) projected that Sacramento's population would grow to approximately 640,400 residents by 2035, including 131,076 residents living in multifamily (MF) housing (City of Sacramento, 2015). The 2035 General Plan Master EIR estimated that, in order to support these projections, approximately 68,000 housing units would need to be developed. These projections were influenced by a variety of factors, including employment opportunities and housing conditions and needs.

The project site is currently a vacant retail site and is not designated for residential development as part of the 2035 General Plan build-out projections for provision of housing units. The proposed project would not induce substantial unplanned population growth in the project area either directly or indirectly. Additionally, the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The proposed project would therefore have no impact to population and housing in the area.

Agricultural Resources

The project site is located within an urbanized area, which includes surrounding commercial and light industrial development. Agricultural activities do not currently occur within the vicinity of the project site. In addition, the area does not include land that is designated as Prime Farmland, nor is the land under a Williamson Act contract. Therefore, the proposed project would have no impact on agricultural resources.

Wildfire

The project site is located in a Low Fire Hazard Severity Zone within a Local Responsibility Area (LRA) in the City of Sacramento. The site and its surroundings are not located in the Very High Fire Hazard Severity Zone (VHFHSZ) as mapped by the California Department of Forestry and Fire Protection (CAL FIRE) (City of Sacramento, 2015). The project site is located within the City of Sacramento's Fire Department service area (California Department of Forestry and Fire Protection, 2022).

Construction and operation of the proposed project would not affect, alter, or impair an adopted emergency response plan or emergency evacuation plan adopted by the City of Sacramento in cooperation with the County. Additionally, there are no site or project characteristics such as slope, prevailing winds, and other factors that would exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impacts related to wildfire would occur with implementation of the proposed project.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<u>1. AESTHETICS</u>			
Would the proposal:			X
A) Create a source of glare that would cause a public hazard or annoyance?			
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

ENVIRONMENTAL SETTING

The approximately 17.55-acre project site is located in the North Natomas community in the city of Sacramento. The project site is bounded on the east by Steelhead Creek (also known as the Natomas East Main Drainage Canal), I-80 to the south, and Northgate Boulevard to the west and northwest. The project site includes the former Fry's Electronics retail store building, which is no longer in use, and paved parking areas to the west and south, which include planters with mature trees, landscaped parking medians, and a landscaped perimeter. The project area includes a mix of industrial, commercial, and office uses.

Public views of the project site include views from motorists, bicyclists, and pedestrians traveling on Northgate Boulevard; motorists traveling on I-80 to the south; patrons of service and restaurant uses immediately north of the project site; and employees and patrons of commercial uses west of the site.

Given that the project site is currently vacant, sources of light and glare are minimal on the project site. Principal sources of nighttime lighting and illumination in project area include exterior building, security, and parking lot lighting and illuminated signage associated with industrial, commercial, and office uses and headlights from vehicles traveling on I-80 and other area roadways.

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- Substantially interfere with an important scenic resource or substantially degrade the view of an existing scenic resource; or
- Create a new source of substantial light or glare that is substantially greater than typical urban sources and could cause sustained annoyance or hazard for nearby sensitive receptors.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR described the existing visual conditions in the general plan City of Sacramento, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 4.13, *Visual Resources*.

The Master EIR identified potential impacts for light and glare (Impact 4.13-1) and concluded that impacts would be less than significant.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

According to the Master EIR, the City of Sacramento is mostly built out, and a large amount of widespread, ambient light from urban uses already exists. New development permitted under the 2035 General Plan would add sources of light that are similar to the existing urban light sources from any of the following: exterior building lighting, new street lighting, parking lot lights, and headlights of vehicular traffic. Sensitive land uses would generally be residential uses, especially single- and multi-family residential uses. The project area includes a mix of industrial, commercial, and office uses, and there are no residential uses in the vicinity of the project site. Potential new sources of light associated with development and operation of the proposed project would be similar to adjacent commercial and light industrial uses to the north and west of the project site respectively. Such sources would likely include, but not be limited to, building lighting, parking lot lighting, and vehicle headlights.

The City's 2035 General Plan encourages infill development within the City. Infill development would serve to concentrate growth within those areas of the City that are currently well-lit, and lighting resulting from infill development under the General Plan would be similar to the existing character of urban lighting. Given that the proposed project would be consistent with the project site's existing Employment Center Low Rise land use designation, introduction of new sources of light and glare to the site has been previously addressed in the Master EIR. Furthermore, new development allowed under the 2035 General Plan would be subject to General Plan policies, building codes, and design review, all of which would ensure that new sources of light within the project site would be properly designed so as not to result in substantial increases in light or spillover of light into adjacent parcels. The Visual Resources section of the Master EIR addresses lighting and glare standards for development projects. Policy ER 7.1.3: Lighting requires the City to minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare. In addition, Policy ER 7.1.4: Reflective Glass prohibits new development from resulting in any of the following: (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors; (2) using mirrored glass; (3) using black glass that exceeds 25 percent of any surface of a building; (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building; and (5) using exposed concrete that exceeds 50 percent of any building. The proposed project would be required to comply with the aforementioned General Plan policies, which would be ensured through the Site Plan and Design Review process.

Based on the above, while the proposed project would introduce new sources of light and glare to the project site, the type and intensity of light and glare would be similar to that of the surrounding commercial developments and would be consistent with what has been anticipated for the site in the 2035 General Plan and analyzed in the Master EIR. The proposed project would comply with all applicable General Plan policies related to minimizing light and glare, and compliance with such policies would be ensured during the design review for the project. Therefore, the proposed project would have ***no additional significant environmental effects*** related to sources of glare.

Question C

The City of Sacramento is primarily built out; however, new development associated with the 2035 General Plan could result in changes to important scenic resources as seen from visually sensitive locations. Important existing scenic resources include major natural open space features such as the American River and Sacramento River and important historic structures. Visually sensitive public locations include viewpoints where a change to the visibility of an important scenic resource, or a visual change to the resource itself, would affect the general public. Visually-sensitive public locations include public plazas, trails, parks, parkways, or designated publicly available and important scenic corridors. The proposed project is not located in the vicinity of any significant visual resources. Thus, the proposed project would not result in any impacts related to changing the visual character of such resources.

The 2035 General Plan designates the site as Employment Center Low Rise which permits employment generating uses that generally do not produce loud noise or noxious odors; acceptable uses include industrial or manufacturing uses, office space, retail and service uses, and public or quasi-public uses. The construction of two industrial warehouse buildings associated with the proposed project would be consistent

with the permitted land use designation for the site and would be visually compatible with existing commercial and industrial uses in the surrounding area. Therefore, the proposed project would not contribute to the degradation of the visual character of the site and surrounding areas. Furthermore, City staff would conduct Site Plan and Design Review prior to implementation of the proposed project. As noted in Chapter 17.808 of the Sacramento City Code, the purpose of Site Plan and Design Review is to ensure that the physical aspects of development projects are consistent with the General Plan and any other applicable specific plans or design guidelines, that projects are high quality and compatible with surrounding development, among other considerations. Accordingly, Site Plan and Design Review for the proposed project would ensure that the proposed development would not result in a substantial degradation in the existing visual character of the project site. Therefore, potential impacts to the visual character of the site and its surroundings associated with development of the site with light industrial uses have been previously analyzed in the Master EIR, and the proposed project would have **no additional significant environmental effects** beyond what was anticipated for the site in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to Aesthetics. Therefore, implementation of the proposed project would result in **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. <u>AIR QUALITY</u> <i>Would the proposal:</i>			X
A) Result in construction emissions of NOx above 85 pounds per day?			X
B) Result in operational emissions of NOx or ROG above 65 pounds per day?			X
C) Violate any air quality standard or have a cumulatively considerable contribution to an existing or projected air quality violation?			X
D) Result in PM ₁₀ and PM _{2.5} concentrations that exceed SAMQMD requirements?		X	
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X

ENVIRONMENTAL SETTING

The City of Sacramento is located within the Sacramento Valley Air Basin (SVAB), which is a valley bounded by the North Coast Mountain Ranges to the west and the Northern Sierra Nevada Mountains to the east. The terrain in the valley is flat and approximately 25 feet above sea level.

Hot, dry summers and mild, rainy winters characterize the Mediterranean climate of the Sacramento Valley. Throughout the year, daily temperatures may range by 20 degrees Fahrenheit with summer highs often exceeding 100 degrees and winter lows occasionally below freezing. Average annual rainfall is about 20 inches and snowfall is very rare. Summertime temperatures are normally moderated by the presence of the "Delta breeze" that arrives through the Carquinez Strait in the evening hours.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants in the valley. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating, reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap cooler air and pollutants near the ground.

The warmer months in the SVAB (May through October) are characterized by stagnant morning air or light winds, and the Delta breeze that arrives in the evening out of the southwest. Usually, the evening breeze transports a portion of airborne pollutants to the north and out of the Sacramento Valley. During about half of the day from July to September, however, a phenomenon called the "Schultz Eddy" prevents this from occurring. Instead of allowing the prevailing wind patterns to move north, carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This phenomenon exacerbates the

pollution levels in the area and increases the likelihood of violating Federal or State standards. The Schultz Eddy normally dissipates around noon when the Delta breeze begins.

Criteria Air Pollutants

Concentrations of emissions from criteria air pollutants (the most prevalent air pollutants known to be harmful to human health) are used to indicate the quality of the ambient air. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable and fine particulate matter (PM₁₀ and PM_{2.5}), and lead. The sources of criteria air pollutants and their respective acute and chronic health impacts are described in **Table 1**.

TABLE 1
SOURCES AND HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Sources	Acute¹ Health Effects	Chronic² Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO _x in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO _x results from the combustion of fuels	Increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	Permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	Headache, dizziness, fatigue, nausea, vomiting, death	Permanent heart and brain damage
Nitrogen dioxide (NO ₂)	Combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	Coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	Chronic bronchitis, decreased lung function
Sulfur dioxide (SO ₂)	Coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO ₂ exposure to chronic health impacts
Respirable particulate matter (PM ₁₀), Fine particulate matter (PM _{2.5})	Fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO ₂ and ROG	Breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	Alterations to the immune system, carcinogenesis
Lead	Metal processing	Reproductive/developmental effects (fetuses and children)	Numerous effects including neurological, endocrine, and cardiovascular effects

NOTES: NO_x = oxides of nitrogen; ROG = reactive organic gases.

¹ "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

² "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

SOURCE: EPA 2018

Attainment Status of the SVAB

The U.S. Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970 and most recently amended by Congress in 1990. The CAA required EPA to establish the National Ambient Air Quality Standards (NAAQS) for the following criteria air pollutants: ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. CAA also requires each state to prepare a State implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. Individual SIPs are modified periodically to reflect the latest emissions

inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required CARB to establish its own California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, in addition to the six criteria air pollutants regulated under the CAA. In most cases, the CAAQS are more stringent than the NAAQS.

The SVAB is currently designated as nonattainment for the NAAQS 8-hour ozone standard and the CAAQS for both 1-hour and 8-hour O₃ standard. The SVAB is also currently designated as nonattainment for both NAAQS and CAAQS 24-hour PM₁₀ standards. In addition, the SVAB is currently designated as nonattainment for the NAAQS 24-hour PM_{2.5} standard. The air basin is designated as unclassified or in attainment for the remaining criteria air pollutants (SMAQMD 2019).

Toxic Air Contaminants

Toxic air contaminants (TACs) are state-designated, airborne substances that are capable of causing short-term (acute) and long-term (chronic or carcinogenic, i.e., cancer-causing) adverse human health effects (injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted by a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations, as well as heavy-duty trucks and heavy equipment. The current California list of TACs includes nearly 200 compounds, including diesel particulate matter (DPM) emissions from diesel-fueled engines, which is driving most of the inhalation pathway health risks in the state.

According to the California Almanac of Emissions and Air Quality (CARB, 2013), the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being diesel particulate matter (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Sensitive Receptors

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants.

Land uses surrounding the proposed project site include various retail spaces. Interstate 80 (I-80) is located approximately 500 feet south of the site. There are no sensitive receptors within 1,000 feet of the project site.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or operation of the proposed project would result in the following impacts (SMAQMD, 2020):

- Construction emissions of NO_x above 85 pounds per day;
- Operational emissions of NO_x or ROG above 65 pounds per day;
- Violation of any air quality standard or contribute substantially to an existing or projected air quality violation;

- Any increase in PM₁₀ concentrations, unless all feasible Best Available Control Technology (BACT) and Best Management Practices (BMPs) have been applied, then increases above 80 pounds per day or 14.6 tons per year;
- CO concentrations that exceed the 1-hour State ambient air quality standard (i.e., 20.0 ppm) or the 8-hour State ambient standard (i.e., 9.0 ppm); or
- Exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for TACs. TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthy pollutant concentrations. See Master EIR, Chapter 4.2.

Policies in the 2035 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.2 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.4 and ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of TACs as a potential effect. Policies in the 2035 General Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.4, requiring coordination with SMAQMD in evaluating exposure of sensitive receptors to TACs, and impose appropriate conditions on projects to protect public health and safety; as well as Policy LU 2.7.5 requiring extensive landscaping and trees along freeways fronting elevation and design elements that provide proper filtering, ventilation, and exhaust of vehicle air emissions from buildings.

ANSWERS TO CHECKLIST QUESTIONS

Question A

In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the SMAQMD has established recommended thresholds of significance. As the SVAB is designated as a nonattainment area with respect to ozone, significance thresholds have been established for the ozone precursors reactive organic compounds (ROG) and oxides of nitrogen (NO_x). The SMAQMD's recommended construction threshold of significance for NO_x are in units of pounds per day.

In order to determine whether the proposed project would exceed applicable thresholds of significance for ozone emissions, the proposed project's construction-related and operational emissions have been estimated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0. CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. Project construction would begin in late 2022 and is expected to last for a period of 15 months. Project-specific construction information was used for modeling when possible; where project-specific data were unavailable, defaults were used, which capture assumed values consistent with standard practice. Project-specific data was used for construction start and end dates, construction equipment used, and number of

workers for each construction phase. CalEEMod defaults were used for size (horsepower [hp]) of construction equipment, activity level of equipment, number of vendor and haul trips including trip lengths. CalEEMod inputs and outputs can be found in **Appendix A**.

Emissions of ozone precursors (ROG and NO_x) are generated primarily by construction equipment and construction vehicles and largely vary as a function of vehicle trips per day and the type, quantity, intensity, and frequency of heavy-duty, off-road equipment used. Typically, a large portion of construction-related ROG emissions results from the application of asphalt on to roads and parking areas, and the application of architectural coatings. ROG and NO_x emissions from project construction are summarized in **Table 2**. The table also compares NO_x emissions to the SMAQMD threshold. SMAQMD has not adopted a construction emissions threshold for ROG.

TABLE 2
MAXIMUM DAILY EMISSIONS FROM PROJECT CONSTRUCTION

Construction Year	Maximum Daily Construction Emissions (lbs/day)	
	ROG	NO _x
2022	2.9	28.9
2023	22.4	28.2
2024	20.3	11.1
SMAQMD Significance Threshold	--	85
Maximum Emissions	22.4	28.9
Significant?	No	No

SOURCE: Table compiled by ESA in 2022 based on Appendix A.

As shown in Table 2, the proposed project's maximum unmitigated construction-related NO_x emissions would not exceed the applicable threshold of significance of 85 pounds per day during any construction year. Therefore, construction of the proposed project would have **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

Question B

ROG and NO_x emissions during project operation would be generated from energy use in project buildings, vehicle trips generated by project uses, operation of material handling equipment at the warehouse, and area sources such as landscaping and use of consumer products. The proposed project's operational emissions were also estimated using CalEEMod and are presented in **Table 3**. Vehicle trip generation rates within CalEEMod were updated with project-specific rates provided by Linscott, Law & Greenspan, Engineers (LLG; LLG, 2022). As shown in Table 3, the proposed project would not result in operational emissions of NO_x or ROG above the 65-pounds-per-day SMAQMD threshold of significance. The proposed project would replace an existing use at the project site that is generating emissions as part of the existing baseline scenario. Operational emissions from the existing uses were also estimated using CalEEMod and are presented in Table 3. The table shows that with the implementation of the project, operational emissions of ROG and NO_x would decrease when compared to existing emissions. This is primarily because the proposed project would generate fewer vehicle trips and vehicle miles traveled (VMT) than the existing use. Therefore, there are no project-specific impacts related to operational emissions of ROG and NO_x and operation of the proposed project would have **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

TABLE 3
MAXIMUM DAILY ROG AND NO_x EMISSIONS FROM PROJECT OPERATION

Source	Maximum Daily Operational Emissions (lbs/day)	
	ROG	NO _x
Existing		
Area Sources	3.7	<0.01
Energy (Natural Gas Combustion)	<0.1	0.3
Mobile Sources	43.2	31.4
Existing Total	46.9	31.7
Proposed Project		
Area Sources	6.4	<0.01
Energy (Natural Gas Combustion)	<0.1	0.04
Mobile Sources	3.5	3.6
Offroad Equipment	0.4	6.1
Proposed Project Total	10.3	9.7
Net Change with Project	-36.7	-21.9
SMAQMD Significance Threshold	65	65
Significant?	No	No
Source: Table compiled by ESA in 2022 based on Appendix A.		

Question C

SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of ambient air quality standards (AAQS), or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD CEQA Guide, by exceeding the SMAQMD's project-level thresholds for construction or operational emissions, a project could contribute to the region's nonattainment status for ozone and PM emissions and could be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

As discussed under questions A, B, D and E, the proposed project would result in construction and operational emissions below all applicable SMAQMD thresholds of significance. Therefore, the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR would result from implementation of the proposed project.

Question D

The SVAB is designated a nonattainment area with respect to the State PM₁₀ and PM_{2.5} standards.

For construction, SMAQMD has established a zero-emissions threshold for PM₁₀ and PM_{2.5}, requiring that all projects implement SMAQMD's Basic Construction Emission Control Practices which are essentially Best Management Practices (BMPs) to control PM₁₀ and PM_{2.5}. The non-zero thresholds become applicable only upon implementation of BMPs. **Table 4** shows the unmitigated PM₁₀ and PM_{2.5} emissions for each construction year.

TABLE 4
UNMITIGATED PROJECT CONSTRUCTION EMISSIONS

Construction Year	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2022	0.60	0.27	0.11	0.05
2023	1.75	0.82	0.32	0.15
2024	0.44	0.05	0.02	0.01
SMAQMD Thresholds	0	0	0	0
Maximum Emissions	1.75	0.82	0.32	0.15
Significant (Yes or No)?	Yes	Yes	Yes	Yes

NOTES: PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter; ppd = pounds per day; tpy = tons per year; SMAQMD = Sacramento Metropolitan Air Quality Management District

¹ Project construction emissions were estimated using CalEEMod, Version 2020.4.0. See Appendix A for model outputs and detailed assumptions.

² Values in bold are in excess of the applicable SMAQMD significance threshold.

³ SMAQMD has established a zero-emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement SMAQMD's BMPs.

SOURCE: Table compiled by ESA in 2022 based on Appendix A.

With implementation of SMAQMD's BMPs as required by **Mitigation Measure AQ-1**, the maximum daily and annual thresholds for construction increase to 80 pounds per day and 14.6 tons per year of PM₁₀ and 82 pounds per day and 15 tons per year of PM_{2.5}. **Table 5** shows the mitigated maximum daily and annual construction emissions for each construction year.

TABLE 5
MITIGATED PM EMISSIONS FROM PROJECT CONSTRUCTION

Construction Year	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2022	3.2	1.4	0.12	0.05
2023	3.1	1.6	0.33	0.16
2024	0.9	0.6	0.03	0.02
Maximum Emissions	3.2	1.6	0.33	0.16
SMAQMD Thresholds	80	82	14.6	15
Significant (Yes or No)?	No	No	No	No

NOTES: PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter; ppd = pounds per day; tpy = tons per year; SMAQMD = Sacramento Metropolitan Air Quality Management District

¹ Project construction emissions estimates were made using the CalEEMod, Version 2020.4.0. See Appendix A for assumptions and model outputs.

SOURCE: Table compiled by ESA in 2022 based on Appendix A.

With implementation of Mitigation Measure 2-1 (SMAQMD BMPs), construction of the proposed project would result in emissions of PM₁₀ and PM_{2.5} below the SMAQMD significance thresholds, and therefore project construction would have ***effects that can be mitigated to less than significant***.

Once operational, the proposed project would generate PM emissions associated with vehicle trips generated by the project uses, energy use, operation of offroad equipment at the proposed warehouses

and from other area sources. However, operational emissions generated by the proposed project would be less than the operational emissions generated by existing uses at the project site, which results in a net decrease in overall emissions associated with operations. Operational PM emissions for both existing uses and the proposed project, as estimated using CalEEMod are presented in **Table 6**. The proposed project would result in a decrease in operational PM₁₀ and PM_{2.5} emissions when compared to existing conditions. Therefore, implementation of the proposed project would have **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

TABLE 6
PM EMISSIONS FROM PROJECT OPERATION

Operational Source	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Existing Uses	33.0	9.1	4.55	1.25
Proposed Project	6.4	1.9	1.10	0.30
Net Change	-26.6	-7.2	-3.4	-1.0
SMAQMD Thresholds	80	82	14.6	15
Significant (Yes or No)?	No	No	No	No

NOTES: PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter; ppd = pounds per day; tpy = tons per year; SMAQMD = Sacramento Metropolitan Air Quality Management District

¹ Project operation emissions estimates were made using the California Emissions Estimator Model, Version 2020.4.0. See Appendix A for assumptions and model outputs.

SOURCE: Table compiled by ESA in 2022 based on Appendix A.

Question E

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. The proposed project would generate fewer trips and VMT when compared to existing conditions. Data from the VMT Assessment provided by LLG is shown in **Table 7** which shows that with the project, there would be a decrease in both trips generated and overall VMT when compared to the existing condition.

TABLE 7
DAILY TRIPS AND VEHICLE MILES TRAVELED FOR THE PROPOSED PROJECT AND EXISTING USES

Land Use	Average Daily Trips	Average Daily Vehicle Miles Traveled (VMT)
Existing Electronic Superstore	6,405	33,306
Proposed Project	896	8,064
Net Change	-5,509	-25,242

SOURCE: LLG, 2022

Implementation of the proposed project would therefore decrease traffic volumes on streets near the project site when compared to existing conditions which would in turn decrease local CO concentrations in the project vicinity. Therefore, implementation of the proposed project is anticipated to have **no additional significant environmental effects** beyond the effects analyzed in the Master EIR.

Questions F and G

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC and could contribute to health risks to sensitive receptors. For assessing community risks and hazards,

a 1,000-foot radius is recommended around the project property boundary. The Bay Area Air Quality Management District recommends that any proposed project that includes the siting of a new source or receptor assess associated impacts within 1,000 feet, taking into account both individual and nearby cumulative sources (BAAQMD, 2017). The area surrounding the project site is generally built out with a mix of industrial, commercial, and office uses with no residential uses within 1,000 feet of the project site. The project site has direct access to I-80 and heavy duty trucks associated with project construction and operation would be able to access I-80 without needing to travel through any residential neighborhoods or other sensitive uses. A health risk assessment was therefore not found to be necessary. The proposed project would have ***no additional significant environmental effects*** beyond the effects analyzed in the Master EIR.

MITIGATION MEASURES

Mitigation Measure AQ-1: Implement SMAQMD Best Management Practices during Construction.

The project shall implement the following required best management practices to control fugitive dust from project construction activities.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.
- Maintain equipment inspection and maintenance programs to ensure work and fuel efficiencies.

FINDINGS

Implementation of Mitigation Measure AQ-1 would control fugitive dust from project construction activities. Mitigation Measure AQ-1 would be sufficient to ensure that all additional significant environmental effects of the proposed project relating to Air Quality would be reduced to a less-than-significant level. Therefore, implementation of the proposed project would have ***no additional significant environmental effects*** beyond what was previously analyzed in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. <u>BIOLOGICAL RESOURCES</u> Would the proposal:			
A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	

ENVIRONMENTAL SETTING

Regional Setting

The project is located within the City of Sacramento. The regional setting is mainly urban with a nearby Sacramento River corridor that supports riparian woodlands composed of cottonwood, willow, sycamore and valley oak. Agricultural and grassland areas dominate the unincorporated areas of Sacramento County.

Prior to human development, the natural habitats within the region included perennial grasslands, riparian woodlands, oak woodlands, and a variety of wetlands including vernal pools, seasonal wetlands, freshwater marshes, ponds, streams, and rivers. Over the last 150 years, agriculture, irrigation, flood control, and urbanization have resulted in land use changes and the loss or alteration of much of the natural habitat within the City limits.

Project Setting

The project site is located within a developed, commercial area. It is bordered to the east by a levee and Steelhead Creek, to the south and southwest by Highway 80, and to the west and north by Northgate Boulevard. Land uses in the immediate surrounding area are primarily commercial development along with residential development and agricultural areas. The developed area includes unvegetated areas occupied by buildings, roads, parking lots, and paved areas, as well as vegetated areas that support ornamental landscaping and small patches of ruderal vegetation. Trees within the site include a mixture of native trees and non-native ornamental trees such as white mulberry (*Morus alba*), London plane (*Platanus × acerifolia*), coast live oak (*Quercus agrifolia*), red oak (*Quercus rubra*), Chinese pistache (*Pistacia chinensis*), common hackberry (*Celtis occidentalis*), black locust (*Robinia pseudoacacia*) and deodar cedar (*Cedrus deodara*). Ruderal vegetation on the project site includes prickly lettuce (*Lactuca serriola*), ribwort plantain (*Plantago lanceolata*), English ivy (*Hedera helix*), and ripgut brome (*Bromus diandrus*).

Generally, ornamental landscape trees and shrubs provide limited food and cover for wildlife. However, landscaped areas in an otherwise urban environment can provide cover, foraging habitat, and nesting habitat for a variety of bird species, as well as reptiles and small mammals, especially those that are tolerant of disturbance and human presence. Wildlife observed on the project site include cedar waxwing (*Bombycilla cedrorum*), bushtit (*Psaltiriparus minimus*), Eurasian collared dove (*Streptopelia decaocto*) spotted towhee (*Pipilo maculatus*), lesser goldfinch (*Spinus psaltria*), and rock dove (*Columba livia*).

Sensitive Biological Resources

Information in this section is based a review of relevant documentation for the project site and surrounding vicinity, database searches, and a biological survey conducted on May 6, 2022. The following background data was obtained:

- California Natural Diversity Database (CNDDDB) records search for the Rio Linda, Taylor Monument, Sacramento West, and Sacramento East U.S. Geological Survey (USGS) quadrangles (Appendix B); (CDFW, 2022)
- U.S. Fish and Wildlife Service (USFWS) List of Threatened and Endangered Species (Appendix B); (USFWS, 2022)
- California Native Plant Society (CNPS) online database of plant species documented on for the Rio Linda U.S. Geological Survey (USGS) quadrangle and 8 surrounding quadrangles (Appendix B); (California Native Plant Society, 2022)
- Sacramento 2035 General Plan; (City of Sacramento, 2015)
- Sacramento 2035 General Plan Master Environmental Impact Report (EIR). (City of Sacramento, 2015)

Special-status plant species are those listed by USFWS and/or CDFW as endangered, threatened, or rare. Regulatory statutes that have designated certain plant species as having special-status include the federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), the California Fish and Game Code, and the Native Plant Protection Act of 1977 (NPPA). In addition, CNPS has developed and maintains a database of rare, threatened, and endangered plants of California. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. The CNPS rare plant ranks are as follows:

- Rank 1A: Plants presumed to be extinct in California.
- Rank 1B: Plants that are rare, threatened, or endangered in California and elsewhere.
- Rank 2: Plants that are rare, threatened, or endangered in California, but are more numerous elsewhere.
- Rank 3: Plants about which more information is needed (a review list).
- Rank 4: Plants of limited distribution (a watch list).

CNPS Rank 1B and Rank 2 species are considered eligible for state listing as endangered or threatened pursuant to the California Fish and Game Code. Such species should be considered during the California Environmental Quality Act (CEQA) process, as they meet the definition of threatened or endangered under the NPPA and sections 2062 and 2067 of the California Fish and Game Code. CNPS Rank 3 and Rank 4 species are either considered to be plants about which more information is needed or are uncommon enough that their status should be monitored regularly. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend evaluating these species for consideration when preparing CEQA documents, as some of the species may meet NPPA and CESA criteria as threatened or endangered.

Special-status wildlife species include those listed by USFWS and/or CDFW as endangered, threatened, or rare, or as candidates for listing, and other wildlife species regarded as having special status according to the CDFW April 2022 Special Animals List. Additionally, some bird species receive special protection under the federal Bald and Golden Eagle Protection Act, the federal Migratory Bird Treaty Act (MBTA), and California Fish and Game Code section 3503. In addition, the National Marine Fisheries Service (NMFS) maintains a Species of Concern list, identifying those species about which NMFS has concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the FESA.

Special-status species considered for this analysis are based on the CNDDDB, CNPS, and USFWS lists (Appendix B). A comprehensive table of regionally occurring special-status plant and wildlife species is provided in Appendix B. The table includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and a discussion of the potential for occurrence within the project site. Habitats present in the project site were compared to the habitat requirements of the regionally occurring special-status species and used to determine which of these species had the potential to occur within or adjacent to the project footprint. The potential for occurrence within the project site category is defined as follows:

- **None:** The project site and/or surrounding area do not support suitable habitat, the project site occurs outside of the known extant geographic or elevation range, or plant species were not observed within the evident and identifiable period during the May 6, 2022 biological reconnaissance survey.
- **Low:** The project site and/or immediate area only provide limited amounts and low quality habitat for a particular species.
- **Moderate:** The project site and/or immediate area provide suitable habitat for a particular species and there are records of this species occurring within 5 miles of the project site.
- **High:** The project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and/or within the project site.

Only species classified as having moderate or high potential for occurrence were considered in the impact analysis.

Special Status Plants

A total of 10 special-status plant species were derived from database queries (Appendix B). No special-status plants have the potential to occur in the project site.

Special Status Wildlife

A total of 38 special-status wildlife species were derived from database queries (Appendix B). **Table 8** identifies wildlife species with a moderate or greater potential to occur within the vicinity of the project site, and that could be affected by implementation of the project.

Migratory birds and other birds of prey have the potential to nest in the native and ornamental trees within or within the vicinity of the project site including the state-threatened Swainson's hawk (*Buteo swainsoni*), the state fully-protected white-tailed kite (*Elanus leucurus*), and the California species of special concern purple martin (*Progne subis*). Other migratory birds and birds of prey such burrowing owl (*Athene cunicularia*) have the potential to nest within the nonnative ruderal and grassland habitat on the levee east of the project site. Special-status bats such as hoary bat (*Lasiurus cinereus*), a tree roosting bat, also have the potential to roost in trees and buildings on site. The adjacent Steelhead Creek provides foraging habitat for bat species.

Designated Critical Habitat

USFWS can designate critical habitat for species that have been listed as threatened or endangered. *Critical habitat* is defined in section 3(5)(A) of the FESA as those lands (or waters) within a listed species' current range that contain the physical or biological features that are considered essential to its conservation. The project site is not located within designated or proposed critical habitat for any listed species. (USFWS, 2021)

TABLE 8
SPECIAL-STATUS WILDLIFE SPECIES WITH MODERATE OR HIGH POTENTIAL TO OCCUR WITHIN THE VICINITY OF THE PROJECT SITE

Common Name	Scientific Name	Status	Habitat Requirement	Potential To Occur
Birds				
Cooper's hawk	<i>Accipiter cooperii</i>	–/WL	Forest and woodland birds, Regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around. Primarily eats birds. Builds nests in pines, oaks, Douglas-firs, beeches, spruces, and other tree species, often on flat ground rather than hillsides, and in dense woods.	High. The mature trees in the vicinity of the project site provide suitable nesting habitat. The nearest CNDDDB record located approximately 2.5 miles south of the project site (Occurrence No. 61). This nest was located along Steelhead Creek and was observed on July 17, 1996.
Burrowing owl	<i>Athene cunicularia</i>	–/CSC	Yearlong resident of open, dry grassland and desert habitat, and in grass, forb, and open shrub stages of pinyon-juniper and Ponderosa pine habitats, from sea level to 5,300 feet. Uses small mammal burrows, often those of ground squirrels, for roosting and nesting cover. Nest boxes, pipes, and culverts may be used if burrows are scarce. Occurs throughout CA except the high mountains and northwestern coastal forests.	High. Project site does not provide suitable nesting habitat. However, suitable nesting habitat present on levee that runs adjacent to the east border of the project site. The nearest CNDDDB record is just west of the project site on this Steelhead Creek levee, just west of East Levee Road (Occurrence No. 841). Two owls and a burrow were observed in this area on July 1, 2006; two adults with two juveniles were observed on June 9, 2007. Four juveniles were observed on June 28, 2007.
Swainson's hawk	<i>Buteo swainsoni</i>	–/CT	Nests in valley riparian systems in lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley.	High. The mature trees in the vicinity of the project site provide suitable nesting habitat. No foraging habitat occurs on site. A Swainson's hawk was observed carrying nesting material during the May 6, 2022 reconnaissance survey. The nearest CNDDDB record for this species is located approximately 1.2 miles north of the project site along Dry Creek, just west of Steelhead Creek (Occurrence No. 1018). The Dry Creek nest was observed in 2002.
White-tailed kite	<i>Elanus leucurus</i>	–/CFP	Yearlong resident in coastal and valley lowlands and rarely found away from agricultural areas. Nests in trees near open foraging areas in lowland grasslands, agricultural areas, wetlands, oak-woodland and savannah habitats, and riparian areas associated with open areas.	Moderate. The trees within the project site and vicinity provide suitable nesting habitat for this species; however, project site is not immediately adjacent to open foraging habitat. The nearest CNDDDB record is located approximately 0.8-mile north of the project site (Occurrence No. 69). The nest tree in this occurrence was an ornamental tree on a vacant lot; surrounded by residential to the north, Steelhead Creek to the east, and vacant land to the south and west.
Purple martin	<i>Progne subis</i>	–/CSC	In the western U.S. occurs in the Rocky Mountains, Sonoran Desert, Central Mexico, and Pacific Coast states. Breeding occurs from April into August. Inhabits open areas with an open water source nearby. Purple martins nest colonially or singly in cavities both natural and human-made in a variety of open and partly open situations, frequently near water or around town.	Moderate. The mature trees in the vicinity of the project site provide suitable nesting habitat. The nearest CNDDDB record for this species is from 2003 and is located approximately 3 miles southeast of the project site (Occurrence No. 17). These birds were nesting in weep holes in freeway and street overpasses.

Common Name	Scientific Name	Status	Habitat Requirement	Potential To Occur
Mammals				
Hoary bat	<i>Lasiurus cinereus</i>	—/—/ WBWG:M	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Moderate. Trees within the project site provide potential roosting habitat. Although unlikely, may roost on buildings. The adjacent Steelhead Creek provides potential foraging habitat. The nearest CNDDDB record for this species is located approximately 4 miles southwest from the project site, sited 1991 (Occurrence No. 137).

NOTES:

Federal Status (listed under the Endangered Species Act): FE = Federally Endangered; FT = Federally Threatened; FC = Candidate for federal listing; BGEPA = Bald and Golden Eagle Protection Act.

State Status: SE = State Endangered; ST = State Threatened; SSC = California Department of Fish and Wildlife Species of Special Concern; FP = Fully Protected.

Western Bat Working Group (WBWG) Ranks: L = Low; M = Medium; H = High.

Sensitive Natural Communities

A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to federal, state, or local agencies. Most sensitive natural communities are given special consideration because they perform important ecological functions, such as maintaining water quality and providing essential habitat for plants and wildlife. Some plant communities support a unique or diverse assemblage of plant species and therefore are considered sensitive from a botanical standpoint. Until the mid-1990s, CDFW tracked sensitive natural community occurrences in the CNDDDB. These occurrences were classified according to the *Preliminary Descriptions of the Terrestrial Natural Communities of California*. (Holland, 1986)

The project site does not contain a sensitive natural community.

Waters of the U.S. and Waters of the State

The project site does not contain any waters of the U.S. or waters of the state. The nearest aquatic feature to the site is Steelhead Creek, formerly known as Natomas East Main Drainage Canal. Steelhead Creek flows south before entering the Sacramento River and is used by fall-run Chinook salmon (*Onchorhynchus tshawytscha*) and Steelhead trout (*Oncorhynchus mykiss irideus*) that pass through the creek on their way north to Dry Creek to spawn. The project will not impact Steelhead Creek or any other aquatic feature.

Wildlife Movement

The project site does not provide a wildlife corridor or nursery as it is a developed area and surrounded by development. The adjacent Steelhead Creek may serve as a migratory corridor for wildlife, but is separated from the project site by a levee and East Levee Road.

Protected Trees

Native trees, such as the coast live oak, within the project site may be protected under the City of Sacramento Tree Preservation Ordinance as private protected trees if they measure 12 inches or greater diameter at standard height (DSH). The other non-native ornamental trees may be protected under the City of Sacramento Tree Preservation Ordinance as private protected trees if they measure at least 24 inches or greater DSH.

REGULATORY SETTING

Federal

Federal Endangered Species Act (FESA) prohibits the unauthorized “take” of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. The term “take” is defined by the Endangered Species Act as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

Federal law protects raptors, migratory birds, and their nests under the Migratory Bird Treaty Act (MBTA). The federal MBTA (15 USC 703-711 and 16 USC Section 7.3, Supp I 1989), 50 CFR Part 21, and 50 CFR Part 10, prohibits killing, possessing or trading in migratory birds. The law also applies to the intentional disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season. The federal Clean Water Act (CWA) was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the U.S. The CWA serves as the primary federal law protecting the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands.

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the U.S. Waters of the U.S. refers to oceans, bays, rivers, streams, lakes, ponds, and wetlands. Applicants must obtain a permit from the U.S. Army Corps of Engineers (USACE) for all discharges of dredged or fill material into waters of the U.S., including wetlands, before proceeding with a proposed activity. Waters of the U.S. are under the jurisdiction of the USACE and the Environmental Protection Agency (EPA). Compliance with CWA Section 404 requires compliance with several other environmental laws and regulations. The USACE cannot issue an individual permit or verify the use of a general nationwide permit until the requirements of FESA and the National Historic Preservation Act (NHPA) have been met. In addition, the USACE cannot issue or verify any permit until a water quality certification or a waiver of certification has been issued pursuant to CWA Section 401.

Under CWA Section 401, applicants for a federal license or permit to conduct activities which may result in the discharge of a pollutant into waters of the U.S. must obtain certification from the state in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect State water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401.

State

The California Endangered Species Act (CESA) prohibits the take of plant and animal species that the California Fish and Game Commission have designated as either threatened or endangered in California. “Take” in the context of the CESA means to hunt, pursue, kill, or capture a listed species, as well as any other actions that may result in adverse impacts when a person is attempting to take individuals of a listed species. The take prohibitions also apply to candidates for listing under the CESA.

Under Section 3503 of the CFGC, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation under it. Section 3503.5 prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) allow the designation of a species as fully protected. This is a greater level of protection than that afforded by the CESA. Except for take related to scientific research, all take of fully protected species is prohibited.

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) (together “Boards”) are the principal State agencies with primary responsibility for the coordination and control of water quality. In the Porter-Cologne Water Quality Control Act (Porter-Cologne), the Legislature declared that the “state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation...” (California Water Code section 13000).

Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. Waters of the State determined to be jurisdictional would require, if impacted, waste discharge permitting and/or a CWA Section 401 certification (in the case of a required USACE permit under Section 404). The enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies (e.g., the CDFW under Section 5650 of the California Fish and Game Code) have the authority to enforce certain water quality provisions in State law.

Local

City of Sacramento Tree Ordinance

The City of Sacramento (City) has adopted an ordinance to protect trees as a significant resource to the community (City Code Title 12, Chapter 12.56, Ordinance 2016-0026 Section 4). The City's policy is to retain all trees when possible regardless of their size. When circumstances will not allow for retention, permits are required to remove trees that are within City jurisdiction. City trees are defined as any tree the trunk of which, when measured 4.5 feet above the ground (diameter at standard height; DSH), is partially or completely located in a City park, on real property the City owns in fee, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip, or alley. Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and is located on private property. Private protected trees are:

- All native trees at 12-inch DSH. Native trees include: coast, interior, valley and blue oaks; California sycamore; and buckeye.
- All trees at 32 inch DSH with an existing single family or duplex dwelling.
- All trees at 24-inch DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments.

Regulated work, including removal, pruning, or construction around trees that are protected by the tree ordinance, requires a tree permit and is subject to permission by the Director. The City considers several factors when making a determination for tree removal including, but not limited to, the health and structural condition of the tree, the desirability of the species, and the need for the proposed work in order to develop the property. The director may require, where appropriate, the replacement of city trees or private protected trees proposed for removal.

The City of Sacramento 2035 General Plan includes policies for both identification and preservation of biological resources (Policies ER 2.1.1 through 2.1.17) and the urban forest (Policies 3.1.1 through 3.1.9). Specifically, these policies address issues ranging from identification, retention, preservation, and public awareness of habitat areas, including open space, riparian areas, wetlands, annual grasslands, oak woodlands, and wildlife corridors. Policies relating to the urban forest focus on managing and enhancing the City's tree canopy and trees of significance.

Natomas Basin Habitat Conservation Plan

Development within the Natomas Basin is subject to the Natomas Basin Habitat Conservation Plan (NBHCP). The NBHCP establishes a multi-species conservation program to minimize and mitigate the expected loss of habitat values and incidental take of covered species that could result from urban development, operation and maintenance of irrigation and drainage systems, and certain activities associated with the Natomas Basin Conservancy (TNBC) management of its system of serves established under the NBHCP. The NBHCP applies to the 53,537-acre area interior to the toe of levees surrounding the Natomas Basin with the exception of areas that were considered to be existing development when the NBHCP was established. Development within the covered areas of the NBHCP is subject to HCP fees and compliance with the requirements of the NBHCP. Development within the covered areas of the NBHCP is subject to HCP fees and compliance with the requirements of the NBHCP. The project site is located within an area considered exempt from compliance with the NBHCP. (City of Sacramento, 2006) Therefore, the proposed project is exempt from HCP fees and compliance with the NBHCP.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, “special-status” has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Wildlife (CDFW);
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the City. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy ER 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants and wildlife for each project and to require pre-construction surveys when appropriate; and Policy ER 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Wildlife, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR discussed biological resources in Chapter 4.3. The Master EIR concluded that policies in the general plan, combined with compliance with the California Endangered Species Act, Natomas Basin HCP (when applicable) and CEQA would minimize the impacts on special-status species to a less-than-significant level (see Impact 4.3-1), and that the general plan policies, along with similar compliance with local, state and federal regulation would reduce impacts to a less-than-significant level for habitat for special-status invertebrates, birds, amphibians and reptiles, mammals and fish (Impacts 4.3-3-6).

ANSWERS TO CHECKLIST QUESTIONS

Question A

The proposed project would not expose plant or animal populations to existing known contaminated soil during construction activities. The approximately 17.55-acre site is located in North Sacramento and does not include any known hazardous site conditions (SCEMD, 2021). Therefore, the proposed project would

result in **no additional significant effects** beyond what was previously analyzed in the Master EIR. Please refer to the Hazards section of this Initial Study regarding the risk of an accidental release of hazardous substances.

Question B

The project site provides limited value to threatened and endangered wildlife species because it is primarily disturbed with little vegetation and development of the site would not eliminate any habitat important to the long-term survival of any species or community and would not substantially reduce the number or restrict the range of any species.

No threatened or endangered plants were observed during reconnaissance surveys or database reviews to be on site. It is unlikely that any threatened or endangered plants would be found at the site due to the urban, disturbed nature and lack of natural habitats at the site. Therefore, construction and operation of the project would not have an impact on special-status plants.

Due to the urban nature of the site, it is unlikely that Swainson's hawks would occupy the trees on site. However, Swainson's hawk is known to nest along Steelhead Creek; and therefore there is potential for Swainson's hawk within the site and vicinity. If active nests are present in trees that would be removed during the raptor breeding season (February–August), mortality of eggs and chicks could result. Construction activities would elevate noise levels and could cause disturbance to nesting or roosting of Swainson's hawks on site or nearby. Similarly, western burrowing owls are unlikely to occur within the limits of the project site but could nest on the adjacent levee. Construction occurring during breeding, reproduction, and juvenile rearing periods would mean there is potential for noise disturbance to negatively affect breeding or reproduction of species on or adjacent to the project site, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs.

These impacts would be in conflict with CESA, CDFW 3503.5 code and the Migratory Bird Act. The loss of an active Swainson's Hawk or burrowing owl nest or take of individuals from construction would be a significant impact. **Mitigation Measures BIO-1 and BIO-2** would implement impact avoidance and minimization measures, which would reduce impacts to Swainson's hawk or burrowing owl. With implementation of Mitigation Measures BIO-1 and BIO-2, ***effects can be mitigated to less than significant.***

Question C

The project site provides limited value to wildlife species and development of the site would not eliminate any habitat important to the long-term survival of any species or community and would not substantially reduce the number or restrict the range of any species. No wetland, riparian, aquatic, or other sensitive habitat would be affected by the proposed project as none of these special-status habitats exist on the site or would be affected offsite.

There are no native wildlife nursery sites or established migratory routes through the project site. Project implementation would not significantly interfere with the movement of native resident or migratory wildlife species because the site is already developed and surrounded by commercial development.

Tree and vegetation removal along with ground disturbances associated with construction of the project site could result in direct destruction of bird nests protected under the Migratory Bird Treaty Act and CDFW 3503.5 code. Project construction noise could also result in disturbance of raptors and migratory birds causing nest abandonment by the adults and mortality of chicks and eggs and thus negatively affect breeding or reproduction of species on or adjacent to the project site. The destruction of any migratory bird nest is a violation of the Migratory Bird Treaty Act and would be considered a significant impact. If the trees were utilized for nesting by raptors at the time of removal, adults or young could be killed. This impact would be in conflict with CDFW 3503.5 code. The loss of an active raptor nest or take of individuals from construction would, therefore, be a significant impact. Implementation of **Mitigation Measures BIO-1 and BIO-2** would reduce these impacts to both migratory bird and raptors. With implementation of Mitigation Measure BIO-1 and BIO-2 ***effects can be mitigated to less than significant.***

The proposed project could impact special-status bats if they are present in buildings, or crevices in structures, that would be demolished, or in mature trees that would be removed or pruned to accommodate

project construction. Suitable roosting habitat for hoary bats includes trees within the project site. Although unlikely, buildings on site could also provide roosting habitat as unusual hoary bat roosts have been reported in caves, beneath a rock ledge, in a woodpecker hole, in a grey squirrel nest, under a driftwood plank, and clinging to the side of a building. (Western Bat Working Group, 2017) If tree removal or building demolition were to occur during periods of winter torpor or maternity roosting, any bats present would likely not survive the disturbance. (Tuttle, 1991) The impact of these disturbances would be potentially significant. Implementation of **Mitigation Measure BIO-3** would implement impact avoidance and minimization measures that would reduce these impacts to roosting bats, such that ***effects can be mitigated to less than significant***.

Removal of existing tree resources were anticipated within City Code 12.56. The applicant would be required to obtain a tree permit for any existing tree resource protected under City Code 12.56 and proposed for removal. Replacement measures for the loss of Private Protected Trees must provide for the replacement of one tree for each Private Protected Tree removed. Any other tree replacement plan for other existing tree resources would be determined in consultation with the City's Director of the Department of Public Works and could include on-site or off-site replacement, payment of an in-lieu fee, or credit for existing trees that are preserved on the same lot. Compliance with established requirements would ensure that no significant impact would occur. The proposed project could result in disturbance of City protected trees consisting of the adjacent ornamental landscape trees. However, compliance with the City's tree ordinance, including replacement of protected trees, as directed by the City, would ensure that ***no additional significant environmental effect*** occurs as a result of implementation of the proposed project.

MITIGATION MEASURES

Mitigation Measure BIO-1: Avoid and Minimize Impacts on Nesting Birds.

Adequate measures shall be taken to avoid inadvertent take of Swainson's hawk and other nesting birds protected under the Migratory Bird Treaty Act when in active use. This shall be accomplished by taking the following steps.

- a. If construction is proposed during the nesting season (February 15 to August 31), a pre-construction survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal or construction, to identify any active nests on the project site and in the vicinity of proposed construction. Surveys shall be performed for the project area, vehicle and equipment staging areas, and suitable habitat within 0.25 mile to locate any Swainson's hawk nest, 250 feet to locate any active passerine (e.g., songbird) nests, and within 500 feet to locate any other active raptor (bird of prey) nests. To the extent feasible, guidelines provided in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley (Swainson's Hawk Technical Advisory Committee 2000) will be followed.
- b. If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September 1 to February 14), construction may proceed with no restrictions.
- c. If bird nests are found, an adequate no-disturbance buffer shall be established around the nest location and construction activities restricted within the buffer until the qualified biologist has confirmed that any young birds have fledged and are able to leave the construction area. Required setback distances for the no-disturbance zone shall be established by the qualified biologist and may vary depending on species, line-of-sight between the nest and the construction activity, and the birds' sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the development site. For Swainson's hawk nests, CDFW guidelines (1994) recommend maintenance of 0.25 mile buffers around Swainson's hawk nests in developed areas, but the size of the buffer may be adjusted if a qualified biologist, in consultation with CDFW, determines that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist will be required if the activity has potential to adversely affect the nest.

- d. Any birds that begin nesting within the project area and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and in these cases work exclusion zones shall not be established around active nests; however, should birds nesting nearby begin to show disturbance associated with construction activities, no-disturbance buffers shall be established as determined by the qualified wildlife biologist.
- e. Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest's success, work within the no-disturbance buffer shall halt until the nest occupants have fledged.

Mitigation Measure BIO-2: Avoid and Minimize Impacts on Western Burrowing Owl.

The following measure shall be implemented to avoid or minimize impacts to burrowing owl:

- 1. Within 14 days prior to any ground disturbing activities for each phase of construction, the project applicant shall retain a qualified biologist to conduct a preconstruction survey of the site, any off-site improvement areas, and all publicly accessible potential burrowing owl habitat within 500 feet of the project construction footprint. The survey shall be performed in accordance with the applicable sections of the March 7, 2012 (or subsequent applicable), CDFW Staff Report on Burrowing Owl Mitigation. The qualified biologist shall be familiar with burrowing owl identification, behavior, and biology, and shall meet the minimum qualifications described in the 2012 CDFW Staff Report. If the survey does not identify any nesting burrowing owls on the site, further mitigation is not required for that phase unless activity ceases for a period in excess of 14 days in which case the survey requirements and obligations shall be repeated. The results of the survey shall be submitted to the City's Community Development Department.
- 2. If active burrowing owl dens are found within the survey area in an area where disturbance would occur, the project applicant shall implement measures at least equal to the 2012 (or subsequent applicable) CDFW Staff Report, as determined by the qualified biologist.
- 3. If active burrows are found, the following measures shall be implemented during the breeding season (February 1 through August 31):
 - a. Disturbance-free buffers will be established around the active burrow. During the peak of the breeding season, between April 1 and August 15, a minimum of a 500-foot buffer will be maintained. Between August 16 and March 31, a minimum of a 150-foot buffer will be maintained. The qualified biologist (as defined above) will determine, in consultation with the City of Sacramento Planning Division and CDFW, if the buffer should be increased or decreased based on site conditions, breeding status, and non-project-related disturbance at the time of construction.
 - b. Monitoring of the active burrow will be conducted by the qualified biologist during construction on a weekly basis to verify that no disturbance is occurring.
 - c. After the qualified biologist determines that the young have fledged and are foraging independently, or that breeding attempts were not successful, the owls may be excluded in accordance with the nonbreeding season measures below. Daily monitoring will be conducted for one week prior to exclusion to verify the status of owls at the burrow.
- 4. During the non-breeding season (September 1 to January 31), owls occupying burrows that cannot be avoided will be passively excluded consistent with Appendix E of the 2012 CDFW Staff Report:
 - a. Within 24 hours prior to installation of one-way doors, a survey will be conducted to verify the status of burrowing owls on the site.

- b. Passive exclusion will be conducted using one-way doors on all burrows suitable for burrowing owl occupation.
- c. One-way doors shall be left in place a minimum of 48 hours to ensure burrowing owls have left the burrow before excavation. While the one-way doors are in place, the qualified biologist will visit the site twice daily to monitor for evidence that owls are inside and are unable to escape. If owls are trapped, the device shall be reset and another 48-hour period shall begin.
- d. After a minimum of 48 hours, the one-way doors will be removed and the burrows will be excavated using hand tools to prevent reoccupation. The use of a pipe is recommended to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow.
- e. If burrowing owls are found outside the project site during preconstruction surveys, the qualified biologist shall evaluate the potential for disturbance. Passive exclusion of burrowing owls shall be avoided to the maximum extent feasible where no ground disturbance will occur. In cases where ground disturbance occurs within the no-disturbance buffer of an occupied burrow, the qualified biologist shall determine in consultation with the City of Sacramento Planning Division and CDFW whether reduced buffers, additional monitoring, or passive exclusion is appropriate.

Mitigation Measure BIO-3: Avoid and Minimize Impact on Roosting Bats.

A qualified biologist is experienced with bat surveying techniques (including auditory sampling methods), behavior, roosting habitat, and identification of local bat species shall be consulted prior to demolition or building relocation activities or tree work to conduct a pre-construction habitat assessment of the project area to characterize potential bat habitat and identify potentially active roost sites. No further action is required should the pre-construction habitat assessment not identify bat habitat or signs of potentially active bat roosts within the project area (e.g., guano, urine staining, dead bats, etc.).

The following measures shall be implemented should potential roosting habitat or potentially active bat roosts be identified during the habitat assessment in buildings to be demolished or relocated, or in trees adjacent to construction activities that could be trimmed or removed within the project site:

1. In areas identified as potential roosting habitat during the habitat assessment, initial building demolition, relocation, and any tree work (trimming or removal) shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid the bat maternity roosting season and period of winter torpor.¹
2. If seasonal avoidance of potential roosting habitat is infeasible, the qualified biologist shall conduct pre-construction surveys of potential bat roost sites identified during the initial habitat assessment no more than 14 days prior to building demolition or relocation, or any tree trimming or removal.
3. If active bat roosts or evidence of roosting is identified during pre-construction surveys for building demolition and relocation or tree work, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites until the seasonal windows identified above or the qualified biologist determines they are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site.

¹ Torpor refers to a state of decreased physiological activity with reduced body temperature and metabolic rate.

4. Buildings and trees with potential bat roosting habitat or active roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit.
5. The demolition or relocation of buildings containing or suspected to contain potential bat roosting habitat or active bat roosts shall be done under the supervision of the qualified biologist. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.
6. Trimming or removal of existing trees with potential bat roosting habitat or active (non-maternity or hibernation) bat roost sites shall follow a two-step removal process (which shall occur during the time of year when bats are active, according to a) above.
 - a. On the first day and under supervision of the qualified biologist, tree branches and limbs not containing cavities or fissures in which bats could roost shall be cut using chainsaws or other hand held equipment.
 - b. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be trimmed or removed, either using chainsaws or other equipment (e.g., excavator or backhoe).
 - c. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches.

FINDINGS

With implementation of the above MEIR and project-specific mitigation measures, the proposed project would not result in a significant impact on special-status species and other biological resources. All additional significant environmental effects of the project relating to biological resources are mitigated to a **less than significant** level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. <u>CULTURAL RESOURCES</u> Would the project:			X
A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?			
B) Directly or indirectly destroy a unique paleontological resource?		X	
C) Disturb any human remains?		X	

ENVIRONMENTAL SETTING

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the city, some in deeply buried context. One of the tools used to identify the potential for cultural resources to be present in the project area is the 2035 General Plan Background Report. Generalized areas of high sensitivity for cultural resources are located within close proximity to the Sacramento and American rivers and moderate sensitivity was identified near other watercourses. The proposed project site is not adjacent to these high or moderate sensitivity units shown in the 2035 General Plan Background Report.

The 2035 General Plan land use diagram designates a wide swath of land along the American River as Parks, which limits development and impacts on sensitive cultural resources. High sensitivity areas may be found in other areas related to the ancient flows of the rivers, with differing meanders than found today. Recent discoveries during infill construction in downtown Sacramento have shown that the downtown area is highly sensitive for both historic- and -period archaeological resources and pre-contact indigenous resources. Native American burials and artifacts were found in 2005 during construction of the New City Hall and historic period archaeological resources are abundant downtown due to the evolving development of the area and, in part, to the raising of the surface street level in the 1860s and 1870s, which created basements out of the first floors of many buildings.

Background cultural resources research of the project site and surroundings to support this analysis is included in Appendix C and discussed here. Staff at the North Central Information Center (NCIC) of the California Historical Resources Information System completed a records search of the project site and surrounding ¼-mile area on April 25, 2022 (File No.: SAC-22-92). The purpose of the background research was to: (1) determine whether known cultural resources have been recorded within the vicinity of the proposed project; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources. The records search consisted of an examination of the following documents:

- NCIC base maps (USGS Rio Linda 7.5-minute topographic maps), to identify recorded archaeological sites and studies within a ¼-mile radius of the project site.
- NCIC base maps (USGS Rio Linda 7.5-minute topographic maps), to identify recorded historic-period resources of the built environment (building, structures, and objects) within and adjacent to the project site.
- Resource Inventories: California Inventory of Historical Resources, California Historical Landmarks, Office of Historic Preservation's Built Environment Resources Directory (BERD)

Records at the NCIC indicate that 22 cultural resources investigations have been completed in the project vicinity. Portions of project site itself have been subject to an intensive pedestrian survey (Derr, 1993).

No pre-contact archaeological resources have been previously recorded within the project site or within a ¼-mile radius of the project site.

The project site is situated within a previously recorded historic district comprising the RD 1000 jurisdiction (P-34-005251) (Coleman et al., 2019). Additionally, one historic-era roadway has been recorded running north-south through the project site (P-34-000740) (Derr, 1993). Records for both resources indicate that agricultural, infrastructural, and commercial development have imparted major impacts on the landscapes supporting these resources. RD 1000 remains active in reclamation activities in contemporary times, and while it has served an important role in shaping the American River Basin landscape as well as agricultural and land use history, substantial and continuous development of lands within the District's jurisdiction have resulted in delisting of RD 1000 from the National Register of Historic Places due to degradation of integrity (SHPO, 2021). No other historic-era resources have been previously documented within ¼-mile of the project site.

The nearest source of water is the East Drainage Canal (also known as Steelhead Creek), which parallels the eastern edge of the project site approximately 50 feet east of the eastern boundary. The East Drainage Canal is confined by the Reclamation District 1000 River Levee system, and the canal conveys water to the confluence of the Sacramento and American Rivers approximately 3.5 miles to the south (Coleman et al., 2019). Stratigraphic profiling of soils underlying the project site demonstrates that Older Pleistocene sediments greater than 100,000 years in age underly a stratum of cut-fill sediments (Meyer et al., 2008; USDA, 2013). Given the interface of modern fill and Older Pleistocene sediments, and spatial relation to the Sacramento and American Rivers, the environmental context indicates that there is low sensitivity for archaeological resources to be present in the project site and below the modern built environment, or present in the toe of the River Levee system less than 10 feet from the project site boundary. Further, prior ground disturbance related to agricultural, infrastructural, and commercial activities, including the establishment of the River Levee system and the East Drainage Canal, likely would have exposed, removed, or redistributed buried cultural materials.

On May 10, 2022, an ESA archaeologist conducted an intensive pedestrian survey of the project site. The project site consists of approximately 16 acres of paved and landscaped surfaces surrounding the now vacant Fry's Electronics building, as well as one active substation. While the built environment afforded limited view of soils underlying parking and landscaped areas, occasional exposure of soils at the base of mature trees in the landscaped margins of the project site presented light brown silty loam with negligible concentrations of gravel and larger coarse sediments, and in association with a buried sprinkler system and other utilities. In contrast to the prevailing San Joaquin series fine sandy loam, the observed silty loam represents engineered cut-fill soil and disturbance of the original soil matrix (Meyer et al., 2008; USDA, 2013). Approximately 10 feet east of the eastern boundary, the RD 1000 River Levee system parallels the project site, and while the landside toe of the levee was inspected from within the project site, as historic-era levees frequently possess heightened sensitivity for cultural resources, the levee prism is situated outside of the project site.

No cultural materials, either pre-contact, such as midden soils, artifacts, or faunal remains, or historic-era materials, such as historic-era glass or ceramic fragments or foundation remnants, were identified in the project site. Additionally, the historic-era road previously documented within the project site (P-34-000740) was no longer present, having been removed and subsequently built over for the establishment of the Fry's Electronics facilities (Derr, 1993). No resources representing historic-era RD 1000 were observed during survey of the project site.

Standards of Significance

For purposes of this Initial Study, cultural resource impacts may be considered significant if construction and/or implementation of the proposed project would result in one or more of the following:

1. Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5; or

2. Directly or indirectly destroy a unique paleontological resource; or A substantial adverse change in the significance of such resources.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 4.4.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10) and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.14). Demolition of historic resources is deemed a last resort. (Policy HCR 2.1.15)

The Master EIR concluded that implementation of the 2035 General Plan would have a significant and unavoidable effect on historic resources and archaeological resources. (Impacts 4.4-1, 2)

ANSWERS TO CHECKLIST QUESTIONS

Question A

A significant impact would occur if the project would cause a substantial adverse change to a historical resource, herein referring to historic-era architectural resources or the built environment, including buildings, structures, and objects. A significant impact could occur if the project would cause a substantial adverse change to a historical resource through physical demolition, destruction, relocation, or alteration of the resource.

There are no buildings or structures on the project site that could be considered historical resources, as defined by CEQA Section 15064.5. As there are no historical resources in the project site, the project would have ***no additional significant environmental effects*** on historical resources beyond what has been previously analyzed in the Master EIR.

Question B

Archaeological resources can be considered historical resources, according to Section 15064.5, as well as unique archaeological resources, as defined in Section 21083.2(g). A significant impact could occur if the project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Based on the results of the survey, paucity of nearby archaeological sites, previous disturbance, and the environmental context, the project has a low potential to impact archaeological resources. Despite the low potential, the discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted. The inadvertent discovery of cultural materials during project implementation could be a potentially significant impact. Implementation of **Mitigation Measure CUL-1** would require avoidance measures or the appropriate treatment of archaeological resources if discovered during project implementation. With implementation of Mitigation Measure CUL-1, ***effects can be mitigated to less than significant***.

Question C

There is no indication from the archival research that any part of the project site has been used for human burial purposes in the recent or distant past. Therefore, it is unlikely that human remains would be encountered during construction of the project. Despite the low potential, the possibility of inadvertent discovery cannot be entirely discounted and would result in a potentially significant impact. With implementation of **Mitigation Measure CUL-2**, which requires avoidance measures or the appropriate treatment of human remains if accidentally discovered during project construction, ***effects can be mitigated to less than significant***.

MITIGATION MEASURES

Mitigation Measure CUL-1: Avoidance and Minimization of Impacts to Cultural Resources

In the Event that Cultural Resources Are Discovered During Construction, Implement Avoidance and Minimization Measures to Avoid Significant Impacts and Procedures to Evaluate Resources.

If cultural resources (such as structural features, unusual amounts of bone or shell, artifacts, or human remains) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural materials), and the construction contractor shall immediately notify the project's City representative. Avoidance and preservation in place is the preferred manner of mitigating impacts to cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Planning construction to avoid archaeological sites and/or other cultural resources; incorporating cultural resources within parks, green-space or other open space; covering archaeological resources; deeding a cultural resource to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.
- Recommendations for avoidance of cultural resources will be reviewed by the City representative and other appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project site to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource.
- If the discovered cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.
- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".

If a cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of cultural resources:

- Each resource will be evaluated for California Register of Historical Resources- (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes, as applicable.

If a cultural resource is determined to be eligible for listing in the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. The City shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by the City. As part of the site investigation and resource assessment, the City and the archaeologist shall assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record.

Mitigation Measure CUL-2: Implement Procedures in the Event of the Inadvertent Discovery of Human Remains.

If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the City the following performance standards shall be met prior to implementing or continuing actions such as construction, which may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code (HSC), if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (HSC Section 7050.5[b]).

If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the HSC Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

FINDINGS

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
5. <u>ENERGY</u> Would the project:			
A) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation			X
B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X

ENVIRONMENTAL SETTING

Sacramento Municipal Utility District (SMUD) is a community-owned and not-for-profit utility that provides electric services to 900 square miles, including most of Sacramento County (SMUD 2020). Pacific Gas and Electric (PG&E) is an inventory-owned utility that provides electric and natural gas services to approximately 16 million people within a 70,000-square-mile service area in both northern and central California (PG&E 2020). SMUD is the primary electricity supplier, and PG&E is the primary natural gas supplier for the City of Sacramento and the project area.

Energy demand related to the proposed project would include energy directly consumed for space heating and cooling and proposed electric facilities and lighting. Indirect energy consumption would be associated with the generation of electricity at power plants. Transportation-related energy consumption includes the use of fuels and electricity to power cars, trucks, and public transportation. Energy would also be consumed by equipment and vehicles used during project construction and routine maintenance activities.

Energy Policy and Conservation Act, and CAFE Standards

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Under this act, the National Highway Traffic and Safety Administration, is responsible for revising existing fuel economy standards and establishing new vehicle economy standards. The Corporate Average Fuel Economy program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Three Energy Policy Acts have been passed, in 1992, 2005, and 2007, to reduce dependence on foreign petroleum, provide tax incentives for alternative fuels, and support energy conservation.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

State of California Energy Efficiency Action Plan

The 2019 California Energy Efficiency Action Plan has three primary goals for the state: double energy efficiency savings by 2030 relative to a 2015 base year (per SB 350), expand energy efficiency in low-income and disadvantaged communities, and reduce greenhouse gas emissions from buildings. This plan provides guiding principles and recommendations on how the state would achieve those goals. These recommendations include:

- identifying funding sources that support energy efficiency programs,
- identifying opportunities to improve energy efficiency through data analysis,
- using program designs as a way to encourage increased energy efficiency on the consumer end,
- improving energy efficiency through workforce education and training, and
- supporting rulemaking and programs that incorporate energy demand flexibility and building decarbonization. (CEC 2019)

California Green Building Standards

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2019 California Energy Code was adopted by CEC on May 9, 2018 and applies to projects constructed after January 1, 2020. The 2019 California Energy Code is designed to move the State closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install enough renewable energy to offset all the electricity needs of each residential unit (California Code of Regulations (CCR), Title 24, Part 6, Section 150.1(c)4). CEC estimates that the combination of mandatory on-site renewable energy and prescriptively required energy efficiency standards will result in a 53 percent reduction in new residential construction as compared to the 2016 California Energy Code. Non-residential buildings are anticipated to reduce energy consumption by 30 percent as compared to the 2016 California Energy Code primarily through prescriptive requirements for high-efficiency lighting (CEC 2018). The Energy Code is enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in the California Energy Code.

Transportation-Related Regulations

Various regulatory and planning efforts are aimed at reducing dependency on fossil fuels, increasing the use of alternative fuels, and improving California's vehicle fleet. Senate Bill (SB) 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. CARB, in consultation with the metropolitan planning organizations, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the CARB prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003).

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare the State Alternative Fuels Plan to increase the use of alternative fuels in California.

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025.

On August 2, 2018, the National Highway Traffic Safety Administration (NHTSA and EPA proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). Part One of the SAFE Rule revokes a waiver granted by EPA to the State of California under Section 209 of the CAA to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of GHG emission reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction. On March 31, 2020, Part Two of the SAFE Rule was published and would amend existing CAFE and tailpipe CO₂ emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026.

GHG Reduction Regulations

Several regulatory measures such as AB 32 and the Climate Change Scoping Plan, EO B-30-15, SB 32, and AB 197 were enacted to reduce GHGs and have the co-benefit of reducing California's dependency on fossil fuels and making land use development and transportation systems more energy efficient.

Renewable Energy Regulations

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

SB 100, signed in September 2018, requires that all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, supply 44 percent of retail sales from renewable resources by December 31, 2024, 50 percent of all electricity sold by December 31, 2026, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. The law also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases 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, which represents a nearly five-fold increase over current levels; and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Structures built would be subject to Titles 20 and 24 of the California Code of Regulations, which reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2035 General Plan includes policies (see 2035 General Plan Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives

to commercial and residential developers, coordination with local utility providers and recruitment of businesses that research and promote energy conservation and efficiency.

The Master EIR discussed energy conservation and relevant General Plan policies in section 6.3 (page 6-3). The discussion concluded that with implementation of the General Plan policies and energy regulation (e.g., Title 24) development allowed in the General Plan would not result in the inefficient, wasteful or unnecessary consumption of energy.

See also Section 12, below, discussing impacts related to energy. The Master EIR concluded that implementation of state regulation, coordination with energy providers and implementation of General Plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level.

Sacramento Climate Action Plan

The Sacramento CAP was adopted on February 14, 2012 by the Sacramento City Council and was incorporated into the 2035 General Plan. The Sacramento CAP includes GHG emission reduction targets, strategies, and implementation measures developed to help the City reach these targets. Reduction strategies address GHG emissions associated with transportation and land use, energy, water, waste management and recycling, agriculture, and open space.

Standards of Significance

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; and/or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Neither federal or State law nor the State CEQA Guidelines establish thresholds that define when energy consumption is considered wasteful, inefficient and unnecessary. Compliance with CCR Title 24 Energy Efficiency Standards would result in energy-efficient buildings. However, compliance with building codes does not adequately address all potential energy impacts during construction and operation. For example, energy would be required to transport people and goods to and from the project site. Energy use is discussed by anticipated use type below.

Both construction and operation of the project would involve expenditure of energy. During construction, energy use would be both direct and indirect. Direct energy use would include the consumption of fuel (typically gasoline and diesel fuel) for operation of construction equipment and vehicles. Energy in the form of electricity may also be consumed by some pieces of construction equipment, such as welding machines, power tools, lighting, etc.; however, the amount of consumed electricity would be relatively minimal. Indirect energy use would include the energy required to make the materials and components used in construction. This includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing. Direct energy use represents about one-quarter of total construction-related consumption while indirect energy use typically represents the remaining three-quarters (Hannon, 1978).

Construction

The estimates of direct energy use provided below are based on the energy input assumptions used in the analysis included in Section 2, *Air Quality*. Because the California Emissions Estimator Model (CalEEMod) program used for that analysis does not specifically quantify diesel and gasoline fuel volumes used for construction and operational sources, additional calculations were completed to calculate diesel and gasoline volumes based on estimated carbon dioxide (CO₂) emissions and default factors from The Climate Registry for calculating CO₂ emissions from combustion of transport fuels.

Over the course of construction, the project is expected to consume approximately 78,862 gallons of diesel fuel from construction equipment and vehicles, and approximately 14,300 gallons of gasoline from worker transportation.

Due to the relatively small scope of the project, the small construction crew required for the project, as well as the limited duration of construction activities, the consumption of fuel energy during construction would be temporary, localized, and would not represent a significant amount of fuel in comparison to the 600 million gallons of gasoline and 87 million gallons of diesel that were sold in Sacramento County in 2019 (CEC, 2020). Vehicles used for project construction would be required to comply with all federal and state efficiency standards. Additionally, there are no project characteristics or features that would be inefficient or that would result in the use of construction-related equipment and vehicles in a manner that would be less energy efficient than similar projects. Although project construction would result in the consumption of energy, the energy consumption would not be wasteful, inefficient, or unnecessary. Fuel use for project construction would be consistent with typical construction and manufacturing practices, and energy standards such as the National Energy Policy Acts of 1975 and 2005, which promote strategic planning and building standards that reduce consumption of fossil fuels, increase use of renewable resources, and enhance energy efficiency.

In addition, the temporary energy consumption during construction would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Because project construction would not interrupt existing local energy services and because project-specific construction-related energy demand would not be expected to have a material effect on energy resources, or result in wasteful, inefficient, or unnecessary use of energy, construction activities would result in **no additional significant environmental effects** associated with energy consumption beyond what was analyzed in the Master EIR.

Operational

Once operational, project trips would be conservatively estimated to consume up to approximately 79,999 gallons of gasoline and 15,891 gallons of diesel annually. Electricity use would amount to up to approximately 848 Megawatt hours per year assuming all natural gas energy needs would be met by electricity. This estimate conservatively excludes any electricity generated by rooftop solar. Project buildings would be subject to the most recent 2019 Title 24 energy efficiency standards that also emphasize use of renewable electricity by requiring photovoltaic (PV) panels be installed on all project buildings. Further, as discussed in Section 7, Greenhouse Gas Emissions, the project would also be consistent with the energy efficiency measures in the City's current Climate Action Plan. Project vehicle trips would continue to be subject to increasingly stringent fuel efficiency standards which would increase the fuel efficiency of the overall fleet as newer fuel efficient and electric vehicles replace older lesser efficient vehicles.

Therefore, project construction and operation would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and **no additional significant environmental effects** would occur beyond what was analyzed in the Master EIR.

Question B

To address energy usage from heavy-duty construction vehicles, EPA and the National Highway Traffic Safety Administration (NHTSA) in 2011 established a comprehensive Heavy-Duty National Program that would reduce greenhouse gas emissions from, and increase the fuel efficiency of, on-road heavy-duty vehicles beginning with model year 2014 (USEPA & NHTSA, 2011). California Air Resources Board's Truck and Bus Regulation also requires that diesel trucks in California with a gross vehicle weight rating that are greater than 14,000 pounds, must be upgraded to reduce exhaust emissions so that all truck engines would have 2010 or newer model year by 2023 (CARB, 2021). Vehicles used during construction would already incorporate these standards; therefore, the proposed project would not impede the efficient use of fuel for heavy-duty vehicles. Off-road construction equipment would be subject to regulations for off-road equipment such as Tier 4 standards or the Off-Road Regulation implemented by CARB, and would therefore not impede the implementation of CARB's energy efficiency programs.

Once operational, the project would be required to be consistent with the most recent Title 24 energy efficiency standards. The current 2019 standards require that rooftop PV panels be installed on all new low-rise residential buildings (single family homes and multifamily three stories or less). In addition, project dwellings would overall be energy efficient with the use of energy efficient lighting and appliances, dual pane windows, etc.

Vehicles used by construction workers and project employees would be subject to NHTSA's Corporate Average Fuel Economy (CAFE) standards for passenger cars and for light trucks (collectively, light-duty vehicles). The current CAFE standards set by NHTSA in 2012 increase fuel efficiency to 41 mpg by 2021 and 49.7 mpg by 2025. In the course of more than 40 years, the National Energy Conservation Policy Act's regulatory program has resulted in improved fuel economy throughout the United States' vehicle fleet, and has protected against the inefficient, wasteful, and unnecessary use of energy. In addition, CARB's Advanced Clean Cars Program would continue to improve fuel efficiency and reduce gasoline use by promoting an increase in the number of zero-emission vehicles and plug-in hybrid electric vehicles. Vehicles used by project construction workers and future project residents would already incorporate these standards and programs; therefore, the proposed project would not impede the efficient use of fuel for light-duty vehicles.

Because the proposed project would have relatively low energy demand and would comply with fuel and energy-efficiency regulations, it would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and would have **no additional significant environmental effect** related to energy efficiency beyond what was analyzed in the Master EIR. Structures built would be subject to Title 24 of the California Code of Regulations, which reduce demand for electrical energy by prescribing energy efficiency standards for residential and non-residential buildings. The 2035 General Plan includes policies (see 2035 General Plan Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives to commercial and residential developers, coordination with local utility providers and recruitment of businesses that research and promote energy conservation and efficiency.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Energy.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>6. <u>GEOLOGY AND SOILS</u></p> <p>A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?</p>			X

ENVIRONMENTAL SETTING

The City of Sacramento is located within the Great Valley of California, a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California, also known as the Sacramento Valley, and is drained by the Sacramento River. The Valley is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, the Cascade Range to the north, and the Coastal Range to the west. Overall, the City of Sacramento gradually slopes from the sea levels at the delta in the southwestern portion of the City approximately 75 feet above sea level in the northeastern portion of the City.

The project site is located in North Sacramento, an area in the north of Downtown Sacramento and across the American River. The project site is flat and covered by existing structures, paved parking lots and driveways, or landscaped areas.

Project Site Soils

The USDA's Natural Resources Conservation Service Web Soil Survey shows that the project site has the following soil types:

- San Joaquin fine sandy loam, 0 to 3 percent slopes: The San Joaquin fine sandy loam soil profile typically consists of an up-to-13-inch layer of fine sandy loam, a layer of up to 17 inches of sandy clay loam, a deeper layer consisting of up to five inches of clay loam, an indurated layer up to 60 inches deep, and a thin layer of stratified sandy loam to loam.
- Xerarents-Urban land-San Joaquin complex, 0 to 5 percent slopes: The Xerarents-Urban land-San Joaquin complex soil profile typically consists of a fine sandy loam layer up to 13 inches deep, 13 to 30 more inches of loam, a thin layer of clay loam, an indurated layer, and a stratified loamy coarse sand to loam layer 60 to 67 inches below the surface.
- Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes: The Clear Lake clay soil profile typically consists of 15-inch-thick dark gray clay over a 19-inch-thick dark gray and yellowish brown clay with segregated lime concentrations over silica cemented hardpan that extends to 64 inches below the surface.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the City. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policy EC 1.1.1 requires regular review of the City's seismic and geologic safety standards, and Policy

EC 1.1.2 requires geotechnical investigations for project sites to identify and respond to geologic hazards, when present.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Geologic Hazards

The proposed project would not introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards. At present, the project site does not pose any existing geologic or seismic hazards. A General Soil Map from the United States Department of Agriculture shows that the project site is located in an area with somewhat poorly drained and poorly drained soils that have a seasonal high water table and are protected by levees. (USDA) This designation does not pose any geologic hazards to the site.

Additionally, the project site is not an Earthquake Fault Zone (EFZ) as delineated by the Earthquake Zones of Required Investigation Map (EZIRM) published by the California Geological Survey (CGS) as required by the Alquist-Priolo Earthquake Fault Zoning Act. (CITE) The City of Sacramento is not located within an Alquist-Priolo Earthquake Fault Zone and there are no known faults within the project area and the greater Sacramento area. The closest faults outside the city of Sacramento are the Midland Fault and the San Andreas faults to the west, Dunningan Fault to the northwest, and the Foothills fault system to the east. In the event of major seismic activity outside the city of Sacramento, it is likely that the project may be subject to minor ground shaking. (City of Sacramento, 2015) To prevent the primary and secondary effects of potential seismic activities in the City of Sacramento, all commercial, institutional, and large residential buildings and all associated infrastructure are required to reduce the exposure to potentially damaging seismic vibrations through seismic resistant design, in conformance with Chapter 16, Structural Design Requirements, Division IV, Earthquake Design, of the CBC.

As mapped on the EZIRM published by the CGS (which delineates liquefaction and earthquake-induced landslide zones, as well as EFXs), the project site is not located in a liquefaction zone. (California Geological Survey, 2021) Due to the site's flat terrain and large distances from known faults, liquefaction impacts are anticipated to be low. The project's flat terrain also reduces its potential for landslides.

The proposed project would not result in a substantial increase in the number of people to the site. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, ground shaking, liquefaction, and landslides and impacts would be less than significant.

Furthermore, the proposed project would not destroy any unique geologic features on the project site. Due to the nature of the soils in the project site and the nature of the proposed project, the probability of encountering paleontological resources within the project site is minimal. Project construction would be subject to Mitigation Measure GEO-1, as described below.

It should further be noted that as part of the building permit process, a Geotechnical Investigation is required to be submitted with the building permit application and implemented via the building plan review process prior to issuance of the building permit. The Geotechnical Investigation would include site-specific recommendations for general construction procedures; site clearing; site preparation and sub-excavation; engineered fill construction; utility trench backfill; foundation design; interior floor slab support; floor slab moisture penetration resistance; exterior flatwork; pavement design; construction testing and observation; and review of final plans and specifications to ensure that the recommendations within the investigation are implemented as part of the proposed project.

The proposed project would be required to be consistent with the City of Sacramento Building Code; and, therefore would comply with the CBSC as the City implements the CBSC through the building permit process. The CBSC provides minimum standards for building design in the State of California. Chapter 16 of the CBSC (Structural Design Requirements) includes regulations and building standards governing seismically-resistant construction and construction techniques to protect people and property from hazards associated with excavation cave-ins and falling debris/construction materials. Chapter 18 of the CBC

provides regulations regarding site excavations, foundations, retaining walls, and grading, including, but not limited to, requirements for seismically-resistant design, foundation investigation, stable cut and fill slopes, and excavation, shoring, and trenching. The CBSC also defines different building regions in California and ranks them according to their seismic hazard potential. Seismic Zone 1 has the least seismic potential and Zone 4 has the highest seismic potential. The City of Sacramento is in Seismic Zone 3; accordingly, the proposed project would be required to comply with all design standards applicable to Seismic Zone 3.

Consistent with the conclusions of the Master EIR, implementation of the Sacramento City Code, which requires preparation and implementation of a site-specific Geotechnical Investigation and compliance with the CBSC, would ensure that the proposed project would include protections against possible seismic hazards.

Soil Hazards

The proposed project would require grading and excavation during the construction period and would, therefore, require a Grading and Erosion and Sediment Control Plan to be submitted and approved per Chapter 15.88 of the City's Code. Chapter 15.88 of the City's Code (Grading and Erosion and Sediment Control) is used to regulate grading on property within the City of Sacramento to safeguard life, limb, health, property and the public welfare; to avoid pollution of watercourses with nutrients, sediments, or other materials generated by surface runoff from construction activities; to comply with the City's National Pollution Discharge Elimination System (NPDES) Permit; and, to ensure graded sites within the City comply with all applicable City standards and ordinances.

As discussed previously, a Geotechnical Investigation would be required prior to implementation of the proposed project. The Geotechnical Investigation would include a description of existing soil conditions, identification of any potential building hazards related to existing soil conditions, and recommendation of methods to reduce such hazards in compliance with the requirements of the CBSC and Chapter 15.88 of the City's Code.

Furthermore, as discussed above, liquefiable soils are not anticipated to pose a risk to the proposed structures. According to the NRCS, the project site is not located in an area subject to risk from expansive soils. Thus, proposed structures would not pose a hazard due to the presence of expansive soils

The proposed project would not include the use of septic tanks or alternative wastewater disposal systems; therefore, impacts would not occur due to inadequate soils being able to support such wastewater storage/disposal systems.

Conclusion

The proposed project is consistent with the City's 2035 General Plan, and, as discussed in the Master EIR, the policies included in the City's 2035 General Plan as well as the requirements of the CBSC and the City's Code would ensure that development in compliance with the City's 2035 General Plan would not result in significant impacts related to seismic or soil hazards. Therefore, implementation of the proposed project would have ***no additional significant environmental effects*** beyond what has been previously analyzed in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

All additional significant environmental effects of the project relating to Geology and Soils can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
7. <u>GREENHOUSE GAS EMISSIONS</u>			
Would the project:			
A) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X
B) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X

ENVIRONMENTAL SETTING

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs are responsible for "trapping" solar radiation in the earth's atmosphere, a phenomenon known as the greenhouse effect. Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of 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. Emissions of GHGs contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial on-site fuel usage, and agriculture and forestry. Emissions of CO₂ are, largely, byproducts of fossil fuel combustion.

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Current regulations pertaining to GHG emissions include Executive Order S-3-05, and Senate Bill (SB) 32. Executive Order S-3-05 established the GHG emission reduction target for the State to reduce to the 2000 level by 2010, the 1990 level by 2020 (AB 32), 40 percent below the 1990 level by 2030, and to 80 percent below the 1990 level by 2050 (SB 32).

To meet the statewide GHG emission targets, the City adopted the City of Sacramento Climate Action Plan (CAP) on February 14, 2012 to comply with AB 32. The CAP identified how the City and the broader community could reduce Sacramento's GHG emissions and included reduction targets, strategies, and specific actions. It included several initiatives to reach its goal of reducing community-wide GHG emissions by 15 percent below 2005 levels by 2020, 38 percent below 2005 levels by 2030, and 83 percent below 2005 levels by 2050. In 2015, the City of Sacramento adopted the 2035 General Plan Update. The update incorporated measures and actions from the CAP into Appendix B, General Plan CAP Policies and Programs, which includes citywide policies and programs that are supportive of reducing GHG emissions.

Although the current CAP, as presented in the 2035 General Plan, is a CEQA-qualified CAP consistent with the Section 15183.5 requirements for tiering GHG analysis of projects, it was only valid as such through 2020. As discussed above, it includes a 2020 Citywide GHG target derived from the AB 32 statewide target for 2020 and also includes GHG emissions forecasts through the year 2030 and beyond, and GHG reduction "goals" for the years 2030 and 2050. However, it does not present citywide targets beyond the year 2020, nor does it demonstrate with specific enforceable actions how the City would achieve its 2030 and 2050 goals. Therefore, it is not CEQA-qualified for the planning horizons of 2030 and 2050, and cannot

be used for tiering CEQA analysis of post-2020 projects, such as the proposed project, by demonstrating project consistency with the CAP.

In 2018, the City initiated an update to the General Plan. The 2040 General Plan will be the City's blueprint for how and where Sacramento will grow over the next 20 years. In parallel, the City will also be preparing an updated CAP that outlines a community-wide framework for reducing GHG emissions consistent with SB 32 and with the goal of providing a CEQA-qualified plan that can be used for project tiering out to 2030 and beyond.

STANDARDS OF SIGNIFICANCE

- A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.
- A project is considered to have a significant effect relating to greenhouse gas emissions if it conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases if it conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

As described above in the local regulatory setting discussion, the City's 2012 CAP was adopted prior to the passing of SB 32 and does not present a 2030 community GHG target based on the SB 32 statewide emissions reduction goal for 2030. Therefore, it is not used here.

Sacramento Metropolitan Air Quality Management District's (SMAQMD) has developed and adopted an update to its land use development project GHG thresholds, which require a project to demonstrate consistency with CARB's 2017 Climate Change Scoping Plan that identifies the framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels. In the absence of a qualified CAP for post-2020 projects, SMAQMD's updated guidance provides recommended thresholds, including required Best Management Practices (BMPs) to assess project impacts with respect to the State's 2030 GHG reduction goals (SMAQMD, 2020). SMAQMD recommends a quantitative threshold of 1,100 MTCO_{2e} per year to assess GHG emissions from the construction phase of all project types. Should the project's construction emissions exceed 1,100 MTCO_{2e} in any year, there would be a significant impact. SMAQMD considers a project's operational GHG impact to be less than significant if annual operational emissions are less than 1,100 MTCO_{2e} per year with full implementation of the appropriate level of BMPs identified.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would contribute to climate change on a cumulative basis. Policies of the General Plan identified in the Master EIR that would reduce construction related GHG emissions include: ER 6.1.2, ER 6.1.11 requiring coordination with SMAQMD to ensure feasible mitigation measures are incorporated to reduce GHG emissions, and ER 6.1.15. The 2035 General Plan incorporates the GHG reduction strategy of the 2012 Climate Action Plan (CAP), which demonstrates compliance mechanism for achieving the City's adopted GHG reduction target of 15 percent below 2005 emissions by 2020. Policy ER 6.1.8 commits the City to assess and monitor performance of GHG emission reduction efforts beyond 2020, and progress toward meeting long-term GHG emission reduction goals, ER 6.1.9 also commits the City to evaluate the feasibility and effectiveness of new GHG emissions reduction measures in view of the City's longer-term GHG emission reductions goal. The discussion of greenhouse gas emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this Initial Study. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change. See Draft Master EIR, Chapter 4.14, and pages 4.14-1 et seq. The Master EIR is available for review online at

<http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

ANSWERS TO CHECKLIST QUESTIONS

Question A

Construction of the proposed project is assumed to begin in late 2022 and be completed over a period of 15 months. Construction-related GHG emissions would be generated from a variety of sources including operation of construction equipment and trips from workers, vendors, and haul trucks. As with the air quality analysis, GHG emissions from construction equipment and vehicle trips were estimated using the most recent version of CalEEMod (2020.4.0) using project-specific inputs when available, supplemented by CalEEMod default values when project-specific data was not available.

Annual construction emissions associated with the project are presented in **Table 9**. As shown in Table 6-1, project construction emissions would not exceed the SMAQMD's significance threshold of 1,100 MTCO₂e during any of the construction years, and therefore, the impact of GHG emissions from project construction would be less than significant.

TABLE 9
PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS

Construction Year	MTCO ₂ e/year
2022	162
2023	688
2024	91
Construction Emissions Significance Threshold	1,100
Maximum Emissions	688
Exceeds Threshold?	No

NOTES: CO₂e = carbon dioxide equivalent, MT = metric tons
 Project construction emissions were estimated using CalEEMod version 2020.4.0. See Appendix A for model outputs and detailed assumptions.
 SOURCE: ESA, 2022.

Over the long-term, the proposed project would result in an increase in direct GHG emissions primarily due to motor vehicle trips, energy use on-site (natural gas combustion for space and water heating), material handling equipment at the warehouse, and other on-site area sources (e.g., landscape maintenance, use of consumer products such as cleaning products). Indirect GHG emissions would be generated from the electricity used to power the project, treat and transport water and wastewater, and disposal of generated solid waste.

For the operational phase, SMAQMD requires projects to demonstrate consistency with CARB's most recent Climate Change Scoping Plan by implementing the following BMPs, as applicable, or equivalent on-site or off-site mitigation.

All projects are required to implement Tier 1 BMPs (BMP 1 & 2) which include:

- BMP 1: Projects shall be designed and constructed without natural gas infrastructure.

- BMP 2: Projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle (EV) capable² spaces shall instead be EV ready.³

Projects that exceed 1,100 MTCO₂e per year after implementation of Tier 1 BMPs must implement Tier 2 BMPs (BMP 3):

- BMP 3: Residential projects shall achieve a 15 percent reduction in vehicle miles traveled (VMT) per resident and office projects shall achieve a 15 percent reduction in VMT per worker compared to existing average VMT for the county, and retail projects shall achieve a no net increase in total VMT to show consistency with SB 743.
- As described in Chapter 2, *Project Description*, the existing building at the project site (Building A) is currently and would continue to be served by Pacific Gas and Electric Company (PG&E) for natural gas service. The proposed Building B would be constructed as an all-electric building consistent with the City of Sacramento's electrification ordinance. SMAQMD's BMP 1 requires all new construction in projects to be fully electric with no natural gas; this requirement does not apply to existing buildings. Therefore, the project would fully comply with BMP 1. In addition, the project would include 389 parking spaces, a minimum of 40 (or 10 percent) of which would be equipped with EV charging stations and an additional 10 percent would be EV ready. SMAQMD BMP 2 requires projects to meet the current CALGreen Tier 2 standards, except all EV capable spaces shall instead be EV ready. Current (2019) CALGreen Tier 2 requires that new construction and major alterations include EV capable spaces based on the total number of parking spaces. For nonresidential uses that include more than 200 parking spaces, such as the proposed project, 20 percent of parking spaces are required to be EV capable. The proposed project would install EV charging stations at 10 percent of the proposed spaces when CALGreen Tier 2 only requires them to be EV capable. The project would exceed this requirement by providing EVCS at 10 percent of the spaces and EV ready capability for another 10 percent. Therefore, the project could comply with BMP 2.
- Though the proposed project completely implements BMP 1 and BMP 2, operational GHG emissions generated a significant impact would occur. Per SMAQMD guidance, GHG emission reductions that would have occurred had BMP 1 been implemented have been estimated. The project would be required to implement **Mitigation Measure 6-1** which includes on-site measures to offset these emissions.
- **Table 10** shows the project's operational emissions including implementation of BMP 1 would be 1,670 MTCO₂e per year, which would exceed 1,100 MTCO₂e per year. However, the proposed project would replace an existing use at the project site that is currently generating emissions. Operational GHG emissions from the existing uses at the project site are also shown in Table 6. After accounting for existing emissions, the proposed project would result in a net decrease in annual operational emissions. This is primarily due to the fact that the proposed project would replace an existing use that currently generates more vehicle trips and VMT than the project. As the project would fully implement BMP 1 and BMP 2 and would result in a net increase in operational emissions less than 1,100 MTCO₂e per year, this impact would be **less than significant**.

² "EV Capable" includes installation of "raceway" (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s).

³ "EV Ready" is EV Capable plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations.

TABLE 10
PROPOSED PROJECT AND EXISTING OPERATIONAL GREENHOUSE GAS EMISSIONS

Source	MTCO ₂ e per year
Proposed Project	
Area	<0.1
Electricity Use (Natural Gas)	4
Electricity Use (Electricity)	145
Mobile	993
Offroad Equipment	313
Waste	126
Water	90
Proposed Project Total	1,671
Operational Emissions Significance Threshold	1,100
Existing	
Area	<0.01
Electricity Use (Natural Gas)	54
Electricity Use (Electricity)	347
Mobile	4,502
Waste	236
Water	30
Existing Total	5,169
Net Change with Project	3,498
Exceeds Threshold Requiring Implementation of BMP 3?	No
NOTES: MTCO ₂ e = metric tons of carbon dioxide equivalent Operational GHG emissions for the existing uses and the proposed project were estimated using CalEEMod version 2020.4.0. See Appendix A for model outputs and more detailed assumptions. SOURCE: ESA, 2022.	

Question B

As described below, the project would be consistent with the following plans and regulations adopted to reduce GHG emissions within the City of Sacramento and the State of California:

- CARB 2017 Scoping Plan Update (CARB, 2017);
- The policies and programs as presented in Appendix B of the 2035 General Plan and Climate Action Plan (City of Sacramento, 2015); and
- The Mayors' Commission on Climate Change's Achieving Carbon Zero in Sacramento and West Sacramento by 2045 Final Report (Mayors' Commission on Climate Change, 2020).

Consistency with 2017 Scoping Plan Update

The 2017 Scoping Plan Update establishes the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The plan update details local actions that land use development projects and municipalities can implement to support the statewide goal. For project-level CEQA analyses, the 2017 Scoping Plan Update states that projects should implement feasible mitigation, preferably

measures that can be implemented onsite. Many of the project features align with these actions and would contribute to direct and indirect reduction of GHG emissions.

The Scoping Plan Update incorporates a broad array of regulations, policies, and state plans designed to reduce GHG emissions. Those that are applicable to the construction and operation of the proposed project are listed in **Table 11**. As shown below, the proposed project would implement sustainable materials and construction practices to reduce energy use, conserve water, and reduce waste generation. As a result, the proposed project would not conflict with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

TABLE 11
CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION ACTIONS IN 2017
SCOPING PLAN UPDATE

Sector / Source	Category / Description	Consistency Analysis
Energy and Water		
California Renewables Portfolio Standard (RPS)	SB 100 requires that the proportion of electricity from renewable sources be 60 percent renewable power by 2030 and 100 percent renewable power by 2045.	Consistent. The proposed project's electricity will be provided by SMUD. SMUD is required to comply with SB 100 and the RPS.
California Renewables Portfolio Standard and SB 350	SB 350 requires that the proportion of electricity from renewable sources be 50 percent renewable power by 2030 (superseded by SB 100). It also requires the state to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	Consistent. The proposed project's electricity will be provided through SMUD. SMUD is required to comply with both the RPS and SB 350 and will meet these standards.
California Building Efficiency Standards (CCR, Title 24, Part 6)	Energy Efficiency Standards for Residential and Nonresidential Buildings.	Consistent. The renovated building and newly constructed building would be designed to comply with the applicable Title 24 Building Energy Efficiency Standards.
California Green Building Standards Code (CCR, Title 24, Part 11 - CALGreen)	California's Green Building Standards (CALGreen) Code includes energy and water efficiency requirements, as well as waste management and other design regulations.	Consistent. The repurposed building and newly constructed building within the project site would comply with mandatory CalGreen measures.
Senate Bill X7-7	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal.	Consistent. Water delivered to the project site would be supplied by the City of Sacramento Department of Utilities, which is required to comply with SB X7-7 and would meet these standards.
Mobile Sources		
Advanced Clean Cars Program (ACC) and Mobile Source Strategy (MSS)	In 2012, CARB adopted the Advanced Clean Cars (ACC) program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. The ACC would reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles in addition to the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The Mobile Source Strategy (2106) calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) on the road by 2025, and 4.2 million ZEVs by 2030.	Consistent. The standards would apply to all vehicles used by the construction workers and employees traveling to and from the project site.

TABLE 11
CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION ACTIONS IN 2017
SCOPING PLAN UPDATE

Sector / Source	Category / Description	Consistency Analysis
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandated that state agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50 percent of their solid waste from disposal facilities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. The proposed project would be served by a solid waste collection and recycling services from the City of Sacramento that includes weekly garbage and yard waste collection and recycling collection every other week. This yields waste diversion results comparable to source separation and consistent with Citywide recycling targets. The City of Sacramento has a goal to achieve 75 percent waste diversion by 2020 and zero waste to landfills by 2040.

SOURCE: Table compiled by ESA based on CARB, 2017.

Consistency with the City of Sacramento 2035 General Plan and Climate Action Plan

The City of Sacramento first adopted a Climate Action Plan in 2012 to reduce GHG emissions and adapt to climate change. In 2015 the CAP was incorporated into the 2035 General Plan (City of Sacramento, 2015). The Sacramento CAP includes emission reduction targets, strategies, and specific actions for addressing climate change within the community and established a goal of reducing GHG emissions 15 percent below 2005 levels by 2020. The City of Sacramento met this 2020 climate goal in 2016. Between 2005 and 2016, community wide emissions decreased by over 19 percent and per capita emissions decreased by over 26 percent demonstrating that even though the City has grown substantially since 2005, emissions have decreased at a more rapid rate. The City is currently working on an updated CAP to help the community reach even more aggressive climate targets in line with State goals, including carbon neutrality (zero MTCO_{2e}) in 2045.

In the absence of a CAP that addresses the State's GHG reduction goals beyond 2020, the analysis in this section presented as part of checklist question A above used SMAQMD recommended thresholds for the evaluation of project GHG impacts. As detailed above, SMAQMD thresholds include requiring Best Management Practices for operational emissions to establish consistency with CARB's Climate Change Scoping Plan. Nevertheless, a consistency analysis of the project with the strategies, measures, and actions contained in the 2012 Climate Action Plan is provided below.

Policies from the 2012 Climate Action Plan contained in the 2035 General Plan that are applicable to the construction and operation of the proposed project are listed in **Table 12**. As shown below, the proposed project would implement sustainable construction practices to reduce energy use, conserve water, and minimize barriers to alternative modes of transportation. As a result, the project would not conflict with applicable 2035 General Plan and Climate Action Plan policies to reduce GHG emissions.

TABLE 12
CONSISTENCY WITH CITY OF SACRAMENTO GENERAL PLAN AND CLIMATE ACTION PLAN

General Plan Policy	Description	Consistency Analysis
Policy M 5.1.5	Motorists, Bicyclists, and Pedestrian Conflicts. City shall develop safe and convenient bikeways, streets, roadways, and intersections that reduce conflicts between bicyclists and motor vehicles on streets, between bicyclists and pedestrians on multi-use trails and sidewalks, and between all users at intersections.	Consistent. The proposed project would connect to existing sidewalks along Tandy Drive and Northgate Boulevard. The project site is served by an existing Class II bike lane along Northgate Boulevard. In addition, both buildings will include short-term and long-term bicycle parking spaces.
Policy U 2.1.10	Water Conservation Standards. The City shall achieve a 20 percent reduction in per-capita water use by 2020 consistent with the State's 20x2020 Water Conservation Plan.	Consistent. The proposed project would comply with existing mandatory CalGreen standards regarding water use and efficiency.
Policy U 2.1.15	Landscaping. The City shall continue to require the use of water-efficient and river-friendly landscaping in all new development, and shall use water conservation gardens (e.g., Glen Ellen Water Conservation Office) to demonstrate and promote water conserving landscapes.	Consistent. Project landscaping would include plants appropriate for and indigenous to City of Sacramento and other low water use species. A fully automatic irrigation system meeting current water efficient landscape ordinance requirements will be installed and water use reduction methods will be incorporated.
Policy U 6.1.5	Energy Consumption per Capita. The City shall encourage residents and businesses to consume 25 percent less energy by 2030 compared to the baseline year of 2005.	Consistent. The proposed project would be constructed in compliance with the California Building Standards Code (CBSC), which includes the California Building Energy Efficiency Standards and the California Green Building Code thus increasing the sustainability of new development through requiring energy efficiency and sustainable design practices

SOURCE: Table compiled by ESA based on City of Sacramento, 2015

Consistency with the Mayors' Commission on Climate's Achieving Carbon Zero in Sacramento and West Sacramento by 2045 Final Report

The Mayors' Commission on Climate published the *Achieving Carbon Zero in Sacramento and West Sacramento by 2045 Final Report*, which aims to reduce contributions to climate change by achieving "Carbon Zero" in the City of Sacramento and the City of West Sacramento (Mayors' Commission on Climate Change, 2020). The report includes various recommendations which would reduce carbon emissions from the built environment and the transportation sector, as well as through community health and resiliency efforts. The proposed project would be consistent with the recommendations included in the Achieving Carbon Zero in Sacramento and West Sacramento by 2045 Final Report as it is in close proximity to transit opportunities and include several sustainability characteristics consistent with the most recent CalGreen standards. These project characteristics and project design features make the proposed project consistent with the applicable recommendations described in the Mayors' Commission on Climate's Achieving Carbon Zero in Sacramento and West Sacramento by 2045 Final Report.

The proposed project would implement sustainability measures so that it would be consistent with all applicable GHG reduction plans and policies. Therefore, this impact would be less than significant.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to GHG emissions. Therefore, implementation of the proposed project would have ***no additional significant environmental effects*** beyond what was previously analyzed in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. <u>HAZARDS</u> Would the project:			
A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?			X
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

ENVIRONMENTAL AND REGULATORY SETTING

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD Rule 902 and Commercial Structures

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM. To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD.

The City of Sacramento General Plan Goal PHS 3.1 aims to reduce exposure to hazardous materials and waste. General Plan Policies PSH 3.1.1 and PSH 3.1.2 ensure investigations of sites for contamination and for known contamination sites, preparation of a Hazardous Material Contamination Management Plan. The 17.55-acre site is currently vacant. A search of the State Water Resources Control Board (SWRCB) GeoTracker and Department of Toxic Substances Control (DTSC) EnviroStor databases indicates that there are no known hazardous materials sites within the project site. (California SWRCB, 2022) (DTSC, 2022)

The project site is not on the Sacramento County Environmental Management Department (SCEMD's) toxic site list. (SCEMD, 2021) Additionally, the proposed project site is not present on the California Department of Toxic Substances Control's Hazardous Waste and Substances Site Cleanup List, or, the Cortese List.

The State Water Resources Control Board (SWRCB) GeoTracker database, which is a data management system for sites that impact or have the potential to impact water quality in California, indicates that there are no Cleanup Program Sites and Leaking Underground Storage Tanks (LUST) within the proposed project site (California SWRCB, 2022).

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 4.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the general plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 general Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

ANSWERS TO CHECKLIST QUESTIONS

Question A

The proposed project would not expose people to existing contaminated soil during construction activities. The approximate 17.55-acre site is located in North Sacramento and does not indicate any known hazards site conditions. As mentioned above, the project site is not on the Sacramento County Environmental Management Department's (SCEMD's) toxic site list (SCEMD, 2021). Additionally, the proposed project site is not present on the California Department of Toxic Substances Control's Hazardous Waste and Substances Site Cleanup List, or, the Cortese List. Residents, pedestrians, or construction workers would not be exposed to any known contaminated soil during the process of building construction or landscaping implementation. Therefore, the proposed project would be anticipated to result in no impact related to the exposure of individuals to existing contaminated soil during construction activities for the proposed project. The project would have ***no additional significant environmental effect*** beyond what was analyzed in the Master EIR.

Question B

The Master EIR determined that buildout of the 2035 General Plan could necessitate demolition of existing structures which could potentially result in the exposure of construction workers or other sensitive receptors to hazardous substances such as asbestos or lead-based paints. The proposed project would not expose

people to asbestos-containing materials or other hazardous materials. As previously noted, the project site is not on land which actively contains toxic substances or hazardous waste. Based on the age of the existing structure on the project site, demolition of interior features as part of the proposed renovation of that structure would not result in the exposure of workers to asbestos as the structure was not constructed with building materials that contain asbestos. Project construction would not involve asbestos-containing materials, which would therefore limit the exposure of people within the project site to such materials. There would thus be ***no additional significant environmental effect*** related to asbestos-containing materials or other hazardous materials beyond what was previously analyzed in the Master EIR.

Question C

The proposed project would not expose people to existing contaminated groundwater during dewatering activities. As discussed above, the State Water Resources Control Board (SWRCB) GeoTracker database, which is a data management system for sites that impact or have the potential to impact water quality in California, indicates that there are no Cleanup Program Sites and Leaking Underground Storage Tanks (LUST) within the proposed project site (California SWRCB, 2022). There is no indication that activities proposed for the project would encounter any contaminated groundwater during dewatering activities and construction. As such, there is ***no additional significant environmental effect*** related to exposure to contaminated groundwater beyond what was previously analyzed in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

Considering the above, the project site does is not subject to any RECs, and the proposed project would not have the potential to result in impacts related to Hazards. The proposed project would be consistent with the type and intensity of uses anticipated for the site under the City's 2035 General Plan. Thus, implementation of the proposed project would result in ***no additional significant environmental effects***.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
9. HYDROLOGY AND WATER QUALITY Would the project:			
A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

ENVIRONMENTAL SETTING

The City of Sacramento is located at the confluence of the Sacramento and American rivers in the Sacramento River Basin. The Sacramento River Basin is approximately 27,000 square miles and is bound by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento-San Joaquin Delta to the southeast. The Sacramento River Basin is the largest river basin within the State of California, receiving an average of approximately 22 million acre-feet of precipitation per year (City of Sacramento, 2015. City of Sacramento 2035 General Plan). The City of Sacramento includes both the 351,000-acre North American Subbasin and the 248,000-acre South American Subbasin. The proposed project site would fall within the North American Subbasin and is adjacent to a flood way within Steelhead Creek.

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRMs) that delineate flood hazard zones for communities. The project site is designated by FIRM *Community Panel Number 06067C0063J* as being located within an area designated as Zone A99. Zone A99 is used when the flood protection system has reached specified statutory progress toward completion, or is otherwise known as an "Adequate Progress" determination.

The project site contains existing wastewater and water supply infrastructure consisting of water mains, valves, blowoff valves, storm drains and manholes. The existing wastewater infrastructure discharges runoff to connections with Sacramento Area Sewer District (SASD). The City of Sacramento provides drainage service and drainage inlets line the eastern edge of the project site's existing parking area.

The City of Sacramento's Grading Ordinance requires that development projects comply with the requirements of the City's Stormwater Quality Improvement Plan (SQIP). The SQIP outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management Program. The Program is based on the NPDES municipal stormwater discharge permit. The comprehensive Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. In addition, before the onset of any construction activities, where the disturbed area is one acre or more in size, projects are required to obtain coverage under the NPDES General Construction Permit and include erosion and sediment control plans. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff. Measures that reduce or eliminate post-construction-related water quality problems range from source controls, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. The City's SQIP and the *Stormwater Quality Design Manual for the Sacramento Region* (Sacramento Stormwater Quality Partnership 2014) include BMPs to be implemented to mitigate impacts from new development and redevelopment projects, as well as requirements for low impact development (LID) standards.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 4.7-1, 4.7-2), and exposure of people to flood risks (Impacts 4.7-3). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1), comprehensive flood management (Policy EC 2.1.22), and construction of adequate drainage facilities with new development (Policy ER 1.1.1 to ER 1.1.10) were identified that the Master EIR concluded would reduce all impacts to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Water quality in the City of Sacramento is regulated by the City of Sacramento Stormwater Quality Improvement Program (SQIP), a comprehensive program intended to reduce stormwater pollution to the Maximum Extent Practicable (MEP) (City of Sacramento, 2021). The State Water Resources Control Board (SWRCB) adopts a statewide general National Pollutant Discharge Elimination System (NPDES) permit to regulate stormwater discharges associated with construction activity. Projects which disturb at least one acre of soil are also required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ (General Permit). This permit applies to construction activities that include construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects (LUP), including installation of water pipelines and other utility lines.

Implementation of the proposed project would include construction activities which could potentially degrade water quality as a result of increased sedimentation and discharge associated with stormwater runoff. The potential for stormwater erosion due to the disturbance of soils onsite would also be increased by the proposed project. As the proposed project would disturb more than one acre of land, it would be required to comply with the Construction General Permit by filing a Notice of Intent (NOI) through the State's Stormwater Multiple Application and Report Tracking System (SMARTS) and receiving a valid identification number prior to the issuance of any grading permits. During construction, the proposed project would be subject to the requirements of the Construction General Permit, NPDES, and General Permit. Dischargers are responsible for notifying the SWRCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected.

The Project would include development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared by a State Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. The objectives of a SWPPP are to identify pollutant sources that may be delivered off-site (in the form of runoff) and affect the quality of storm water discharge; to implement site controls and practices to reduce stormwater pollution; and to protect water quality of receiving waters. The SWPPP would include site-specific Best Management Practices (BMPs) such as strategically placed silt fences and straw wattles to minimize erosion on site and reduce or otherwise prevent conditions of erosion and storm water runoff during construction. The SWPPP also includes a visual monitoring program, and chemical monitoring program for "non-visible" pollutants to

be implemented in case of BMP failure, and a sediment monitoring plan if the site discharges directly to a body of water listed on the 303(d) list for sediment.

Operation of the proposed project would be designed in adherence with standards and guidelines for source control, runoff reduction, and treatment control measures established in the Stormwater Quality Design Manual for the Sacramento Region, and with the stormwater pollutant reduction requirements of the Stormwater Management and Discharge Control Code under Chapter 13.16 of the Sacramento City Code.

Compliance with the aforementioned permit requirements, Stormwater Quality Design Manual standards and guidelines, and Sacramento City Code regulations, along with the implementation of a SWPPP, BMPs and associated monitoring programs, would result in ***no additional significant environmental effects*** related to water quality standards beyond what was previously analyzed in the Master EIR.

Question B

The proposed project is located within the Federal Emergency Management Agency (FEMA) designated area of Zone A99 (City of Sacramento, 2015. Flood Zones). Zone A99 areas are subject to inundation by a one-percent-annual-chance flood event, but are considered protected under the specified statutory progress toward or complete construction of flood protection systems.

Under existing conditions, the proposed project is bordered by the Steelhead Creek on the eastern side with the creek draining towards the southern part of the proposed project site. This natural channel has been diverted to a flood channel.

To offset impacts related to flooding, the proposed project would be required to comply with the City of Sacramento Flood Control Policy for development within the 100-year flood plain (A99 Zone). The proposed project would also be required to comply with the floodplain management and building requirements of Section 60.3 of the NFIP, consistent with the A99 flood zone designation. Furthermore, the proposed project would be required to comply with the City of Sacramento requirement that all new structures are constructed to be above the existing 100-year base flood elevation (BFE), and if a structure is proposed below the BFE, the developer would be required to sign a new construction agreement. The project would be required to follow Policy EC 2.1.12 under the 2035 City of Sacramento General Plan, detailing new development located within a 100-year flood hazard area to be designed to minimize the risk of damage in the event of a flood.

The proposed project would also comply with Section 15.88.010 of the Sacramento City Code, which prohibits development of a project such that the project would obstruct, impede, or interfere with the natural flow of existing off-site drainage crossing the proposed project site.

The proposed project site is not located near a body of water such that the project would place individuals or structures at risk of tsunami or seiche. However, the proposed project site is located within an A99 zone, as mapped by FEMA. Because of this designation, the proposed project would be subject to mandatory flood insurance purchase requirements and floodplain management and building requirements as contained in Section 60 of NFIP regulations. These regulations include, but are not limited to, the provisions that:

- flood insurance not be sold or renewed within a community, unless the community has adopted adequate flood plain management regulations consistent with Federal criteria;
- all permit applications for proposed construction be reviewed to determine whether proposed building sites will be reasonably safe from flooding;
- and review subdivision proposals and other new development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding.

Although the proposed project would alter existing drainage on the site through the addition of impervious surfaces, the proposed project is not anticipated to substantially alter existing patterns of the project site or vicinity in a manner which would result in flooding on- or off-site. Completion of a project-specific drainage study would reduce potential flooding hazards resulting from project implementation. Compliance with relevant policies of the 2035 General Plan and with the requirements of the NPDES, General Permit, and General Construction Permit, as well as with Stormwater Quality Design Manual standards and guidelines

and Stormwater Management and Discharge Control regulations would reduce the potential environmental effects of increased surface runoff resulting from the proposed project. Compliance with the NFIP floodplain management and building requirements delineated in Section 60.3, as well as previously mentioned permit conditions and BMPs, and relevant City Code regulations to reduce erosion, sedimentation, and pollution discharge, the proposed project would not substantially risk the release of pollutants due to project inundation resulting from flood hazard. Thus, the proposed project would result in ***no additional significant environmental effects***, with respect to flood hazard, beyond that which was previously analyzed in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to Hydrology and Water Quality. Therefore, implementation of the proposed project would have ***no additional significant environmental effects*** beyond what was previously analyzed in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
10. <u>NOISE</u> Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento general plan or Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with 0 dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead focusing on the frequency mid-range. This method of frequency weighting is referred

to as A-weighting and is expressed in units of A-weighted decibels (dBA). All sound pressure levels and sound power levels reported below are A-weighted.

Noise Exposure and Ambient Noise

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. In fact, noise varies continuously with time with respect to the contributing sources in the noise environment. Different noise descriptors used to characterize environmental noise are summarized below:

- L_{eq} : The equivalent sound level is used to describe noise over a specified period of time, in terms of a single numerical value. The L_{eq} is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- L_{dn} : The energy average of the A-weighted sound levels occurring during a 24-hour period, and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10 p.m. and seven a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises.
- L_{max} : The instantaneous maximum noise level measured during the measurement period of interest.

Effects of Noise on People

The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers at industrial plants often experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way the new noise compares to the existing noise levels that one has adapted to, which is referred to as the "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur (California Department of Transportation, 2013):

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence, the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. However, where ambient noise levels are high in comparison to a new noise source, there will be a small change in noise levels. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source, the resulting noise level equals 70.4 dBA.

Noise Attenuation

Sound level naturally decreases with more distance from the source. This basic attenuation rate is referred to as the *geometric spreading loss*. The basic rate of geometric spreading loss depends on whether a given noise source can be characterized as a point source or a line source. Point sources of noise, including stationary mobile sources such as idling vehicles or on-site construction equipment, attenuate (lessen) at a rate of 6.0 to 7.5 dBA per doubling of distance from the source. Widely distributed noises such as a street with moving vehicles (a “line” source) would typically attenuate at a lower rate of approximately 3.0 to 4.5 dBA for each doubling of distance between the source and the receiver depending on the ground conditions between the source and the receiver. Atmospheric effects, such as wind and temperature gradients, presence of trees and vegetation, buildings, and barriers also influence noise attenuation rates from both line and point sources of noise. Generally, a solid noise barrier that breaks the line of sight between source and receiver will provide at least a 5-dBA reduction in noise.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal and is typically expressed in units of inches per second (in/sec). The PPV is most frequently used to describe vibration impacts on buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2018). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

Some common sources of ground-borne vibration are trains, heavy trucks traveling on rough roads, and construction activities such as blasting, pile driving, and operation of heavy earthmoving equipment. The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. In residential areas, the background vibration velocity level is usually around 50 VdB.

Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate are also sensitive to noise. Commercial and industrial uses are considered the least sensitive to noise.

The proposed project is located in the North Natomas Area of the City of Sacramento. A mix of industrial, commercial, and office uses exist surrounding the project site. The nearest residential receptors are 0.33 miles (approximately 1,740 feet) northeast from the project site. The primary noise sources in the vicinity of the project site primarily include vehicle traffics on Interstate 80 and Northgate Boulevard.

REGULATORY SETTING

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans tend to identify general principles intended to guide and influence development plans; local ordinances establish standards and procedures for addressing specific noise sources and activities.

City of Sacramento 2035 General Plan

The following noise and vibration-related standards identified in the Environmental Constraints Element of the City of Sacramento 2035 General Plan are relevant to the proposed project.

Exterior Noise Standards. Per Policy EC 3.1.1, the City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in **Table 13** (Table EC 1 in the General Plan), to the extent feasible.

Exterior Incremental Noise Standards. Policy EC 3.1.2 requires that the City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in **Table 14** (Table EC 2 in the General Plan), to the extent feasible.

TABLE 13
EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES

Land Use Type	Highest Level of Noise Exposure that is Regarded as "Normally Acceptable" ^a (L _{dn} ^b or CNEL ^c)
Residential—Low Density Single Family, Duplex, Mobile Homes	60 dBA ^{d,e}
Residential—Multi-family	65 dBA
Urban Residential Infill ^f and Mixed-Use Projects ^g	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings—Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

NOTES:

^a As defined in the **State of California General Plan Guidelines**, "Normally Acceptable" means that the "specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements."

^b L_{dn} or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.

^c CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.

^d dBA or A-weighted decibel scale is a measurement of noise levels.

^e The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.

^f With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).

^g All mixed-use projects located anywhere in the City of Sacramento.

SOURCE: City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

TABLE 14
EXTERIOR INCREMENTAL NOISE IMPACT STANDARDS FOR NOISE-SENSITIVE USES (DBA)

Residences and Buildings where People Normally Sleep ^a		Institutional Land Uses with Primarily Daytime and Evening Uses ^b	
Existing L _{dn}	Allowable Noise Increment	Existing Peak Hour L _{eq}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

NOTES:

^a This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

^b This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

SOURCE: City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

Interior Noise Standards. Policy EC 3.1.3 requires new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA L_{dn} for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA L_{eq} (peak hour) for office buildings and similar uses.

Vibration. Policy EC 3.1.5 requires construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or FTA criteria. Policy EC 3.1.7 requires an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible measures be implemented to ensure no damage would occur.

Operational Noise. Policy EC 3.1.8 requires mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.

Construction Noise. Policy EC 3.1.10 requires development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

City of Sacramento Municipal Code (Noise Control Ordinance)

The Sacramento Municipal Code includes noise regulations in Title 8 – Health and Safety, Chapter 8.68 – Noise Control (referred to generally as the Noise Control Ordinance). Of the regulations in Chapter 8.68, the following regulations would be applicable to the proposed project:

- Section 8.68.080 exempts certain activities from Chapter 8.68, including “noise sources due to the erection (including excavation), demolition, alteration, or repair of any building or structure” as long as these activities are limited to between the hours of 7:00 am and 6:00 pm Monday through Saturday, and between the hours of 9:00 am and 6:00 pm on Sunday. The use of exhaust and intake silencers for internal combustion engines is also required. Construction work can occur outside of the designated hours if the work is of urgent necessity and in the interest of public health and welfare for a period not to exceed 3 days. Section 8.68.080 also exempts noise from any

mechanical device, apparatus, or equipment related to or connected with emergency activities or emergency work from Chapter 8.68 requirements.

- Section 8.68.060 sets standards for cumulative exterior noise levels at residential and agricultural properties, including exterior noise standards of 55 dBA from 7:00 am to 10:00 pm, and 50 dBA from 10:00 pm to 7:00 am. Per Section 8.68.060(b), the allowable decibel increase above the exterior noise standards in any one hour are: 0 dB for cumulative period of 30 minutes per hour;
 1. 5 dB for cumulative period of 15 minutes per hour;
 2. 10 dB for cumulative period of 5 minutes per hour;
 3. 15 dB for cumulative period of 1 minutes per hour; or
 4. 20 dB not to be exceeded for any time per hour.

In addition, per Section 8.68.060(c), each of the noise limits above shall be reduced by 5 dB for impulsive or simple tone noises, or for noises consisting of speech or music. If the ambient noise level exceeds that permitted by any of the first four noise limit categories specified in subsection (b) above, the allowable noise limit shall be increased in 5 dB increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of general plan policies:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (Policy EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 4.8-1) and interior noise levels (Impact 4.8-2), and vibration impacts (Impact 4.8-4) were found to be significant and unavoidable.

ANSWERS TO CHECKLIST QUESTIONS

Questions A, B, and C

This noise impact analysis evaluates the temporary noise increases associated with project construction, as well as operational noise generated primarily from the increase in traffic noise associated with changes in traffic volumes and patterns due to project.

Construction Noise

The project would repurpose the existing approximately 156,013-square-foot former retail structure for the development of an industrial warehouse building, as well as develop an additional approximately 109,673-square-foot warehouse industrial building to the existing structure. Construction of the project is expected to take place over a period of 15 months starting in the fourth quarter of 2022.

Construction, although typically short-term, can be a significant source of noise. Construction is most significant when it takes place near sensitive land uses, occurs during noise-sensitive evening and nighttime hours or when construction takes place over an extended period of time. Construction activities would temporarily increase ambient noise levels within and in the vicinity of the project area over the duration of construction. Construction activities would be temporary and intermittent, occurring at different parts of the site. Construction-related noise levels would fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment. The effect of construction noise would depend upon the phase of construction, level of construction activity on a given day, the related noise generated by that activity, the distance between construction activities and the nearest noise-sensitive uses, the presence or absence of barriers between the noise and the receptor, and the existing noise levels at the receptors.

Noise associated with construction equipment and activities is regulated through the enforcement of City of Sacramento noise ordinance standards, implementation of General Plan policies and imposition of conditions of approval for building or grading permits. As detailed earlier, Section 8.68.080 exempts certain activities from complying with standards in the noise ordinance, including “noise sources due to the erection (including excavation), demolition, alteration, or repair of any building or structure” as long as these activities are limited to between the hours of 7:00 am and 6:00 pm Monday through Saturday, and between the hours of 9:00 am and 6:00 pm on Sunday and use exhaust and intake silencers for internal combustion engines. All construction activities associated with the project would occur during these hours pursuant to Section 8.68.080, and would be required to comply with these construction hour restrictions as a condition of approval for building permits.

In lieu of a specified criterion for assessing the magnitude of a construction noise impact in local regulations, the resultant noise levels are compared to the construction noise impact criteria developed by the FTA. While the FTA's *Transit Noise and Vibration Impact Assessment Manual* was developed for determining significant noise and vibration impacts for transit projects and is not a regulation, it is one of the few federal sources that suggest both a methodology and criteria for assessing construction noise impacts. (Federal Transit Administration, 2018) The FTA noise impact criteria used to assess construction noise impacts on residential uses is 90 dBA during daytime hours and 80 dBA during nighttime hours. These criteria are absolute contribution values from construction activity and are independent of existing background noise levels.

The operation of each piece of equipment would not be constant throughout the day, as equipment would be turned off when not in use. Over a typical workday, the equipment would be operated at different locations and all the equipment would not operate concurrently at the same location of the project sites and alignments. Construction noise levels have been estimated using typical equipment source noise levels suggested in the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) and based on the type of construction equipment that are proposed to be used. To quantify construction-related noise exposure that would occur at the nearest sensitive receptors, it was assumed that the two loudest pieces of construction equipment would operate concurrently at the closest location of the project sites and alignments to the nearest sensitive receptor locations.

The estimated L_{max} and L_{eq} for each of the two loudest pieces of equipment that would be used to construct the project components, and the combined L_{eq} noise level associated with the two loudest pieces of construction equipment at the closest sensitive receptor location for each project component are identified

in **Table 15**. The combined L_{eq} construction noise levels would generate noise levels at the nearest sensitive receptors below the 90 dBA daytime criterion for residential uses of the FTA.

TABLE 15
CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Distance to Closest Sensitive Receptor (feet)	Equipment L _{max} , dBA	Equipment Hourly L _{eq} , dBA/Usage%	Combined Leq at Sensitive Receptor, dBA
Site Preparation				
Scraper	1,740 (Residences)	52.7	48.7/40%	52.0
Tractors		53.2	49.2/40%	
Grading				
Grader	1,740 (Residences)	54.2	50.2/40%	52.7
Tractors		53.2	49.2/40%	
Building Construction				
Forklift	1,740 (Residences)	52.6	48.6/40%	51.9
Tractors		53.2	49.2/40%	
Paving Phase				
Generator	1,740 (Residences)	49.8	46.8/50%	48.1
Roller		49.2	42.2/20%	

NOTES: L_{max} = maximum instantaneous noise level; L_{eq} = the equivalent sound level used to describe noise over a specified period of time, in terms of a single numerical value.

SOURCE: Federal Highway Administration, 2008. *FHWA Roadway Construction Noise Model, Version 1.1*, December 2008.

Residential uses along Bollenbacher Avenue are located approximately 1,740 feet from the northeastern boundary of the project site. The potential impact in temporary increases in ambient noise levels from the two loudest pieces of equipment from construction would be considered a less than significant impact on the nearby sensitive receptors because construction would be conducted during daytime hours when construction activities are exempt from the restrictions of the noise ordinance. Additionally, the contribution of construction noise at the nearest sensitive receptors would not be substantial enough to result in a noticeable increase in noise levels at the nearest receptors. Consequently, construction-related noise from the proposed project would result in **no additional significant environmental effects** related to construction noise beyond what was previously analyzed in the Master EIR.

Operational Noise

Operational vehicle traffic would not need access to local roadways where sensitive areas could be impacted. The project's vehicle trips would be distributed on the roadway network in the vicinity of the project site but would all traverse Interstate 80 and Northgate Boulevard to access the project site. Relative to baseline traffic volumes at the project site, the project would not contribute to an increase in local traffic volumes resulting a less than significant impact to noise-sensitive land uses.

Noise generated from stationary sources at the industrial warehouse building such as heating, ventilating, and air conditioning (HVAC) mechanical equipment would be minimal. The impact of project operational noise would, therefore, be less than significant. Project construction and project operation would not result in ambient noise levels in the vicinity of the project in excess of standards established in the City's general plan or noise ordinance. This impact would be less than significant and the project would result in **no additional significant environmental effects** related to operational noise beyond what was previously analyzed in the Master EIR.

Questions D, E, and F

Construction activity can result in varying degrees of groundborne vibration, depending on the type of soil, equipment, and methods employed. Operation of construction equipment can cause ground vibrations that spread through the ground and diminish in strength with distance. Buildings on the soil near the construction site respond to these vibrations with varying results, ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration.

There are no structures in the vicinity of the project site that are of historical significance. Therefore, the analysis below focuses on the potential for construction vibration to cause damage to buildings of conventional construction and generate human annoyance impacts. Policy EC 3.1.5 of the Sacramento General Plan requires construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or other criteria.

Construction vibration may generate perceptible vibration when impact equipment or heavy earth moving equipment are used. Construction equipment expected to be used for project construction are shown in Table 3.13-3 and do not include any high vibration generating equipment such as pile drivers or drill rigs. The City does not specify any vibration thresholds in its General Plan, but the FTA and Caltrans have adopted vibration standards that are used to evaluate potential impacts related to sensitive receiving land uses from vibration. The FTA *Transit Noise and Vibration Impact Assessment Manual* identifies 0.2 and 0.3 in/sec PPV as the levels at which potential damage could result to non-engineered timber and masonry buildings and engineered concrete and masonry buildings, respectively. The Caltrans' *Transportation and Construction Vibration Guidance Manual* identifies 0.24 in/sec PPV as the level at which vibration is distinctly perceivable to humans.

Based on groundborne vibration levels for standard types of construction equipment provided by the FTA, of the equipment proposed to be used for project construction, the use of a vibratory roller/compactor would be expected to generate the highest vibration levels. Vibratory rollers typically generate vibration levels of 0.21 in/sec PPV at a distance of 25 feet (Federal Transit Administration, 2018). Construction activities would take place approximately 1,740 feet from the nearest residential receptors. Vibration levels associated with a vibratory roller at this distance would be approximately 0.0004 in/sec PPV, which would be below both the building damage and human annoyance vibration thresholds identified above. Therefore, operation of the project's highest vibration generating construction equipment would result in less-than-significant impacts at nearby residences. Vibration impacts from other equipment are expected to be lower. Therefore, vibration impacts from project construction would have **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

Once operational, the project would not include any new sources of vibration. Therefore, project operation would have **no additional significant environmental effect** with regard to ground-borne vibration.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Noise.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. <u>PUBLIC SERVICES</u> A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?			X

ENVIRONMENTAL SETTING

Fire Protection Services

Fire protection and prevention services to the proposed project site would be provided by the City of Sacramento Fire Department (SFD). In addition to fire protection services, the SFD also provides Emergency Medical Services (EMS) and Special Operations services, including Hazardous Materials, Domestic Preparedness, Technical Rescue, Boat and Heavy Rescue, and Urban Search and Rescue programs to approximately 480,000 residents in the City of Sacramento (City of Sacramento, 2021. Special Operations). The SFD is also contracted to provide fire protection services to an additional 50,000 residents within the Pacific/Fruitridge and Natomas Fire Protection Districts over approximately 46 square miles (City of Sacramento Fire Department, 2017). The SFD maintains automatic aid agreements with neighboring agencies and is part of a state mutual aid response system to provide the use of Type I and Type III engine companies at the request of the California Office of Emergency Services (CALOES).

Police Protection Services

Police protection services are provided by the City of Sacramento Police Department (SPD) within incorporated areas of the city, and by the Sacramento County Sheriff's Department (Sheriff's Department) for areas located outside of the city but within the 2035 General Plan policy area. Law enforcement services may also be provided by the California Highway Patrol (CHP) in the form of traffic enforcement on highways and roadways within unincorporated portions of Sacramento (City of Sacramento, 2015). Services provided by the SPD are distributed among four offices: the Office of Operations, the Office of Investigations, the Office of Specialized Services, and the Office of the Chief.

The SPD is divided into four command areas, each of which is served by an SPD station: North Command, Central Command, East Command, and South Command. The SPD does not have an adopted officer-to-resident ratio staffing goal; however, the Department maintains an unofficial goal of 2.0 to 2.5 sworn police officers per 1,000 residents and one civilian staff per two sworn officers (City of Sacramento, 2015).

Schools

The proposed project site is designated as M-1 industrial by the City of Sacramento and therefore is not included within a school district.

Other Public Services

As mentioned above, public safety and education services are provided by the City of Sacramento.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. These include police, fire protection, schools, libraries, and emergency services (Chapter 4.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects of development that could occur under the general plan would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.4 that encourages joint-use development of facilities) reduce impacts on schools to a less-than-significant level. (Impacts 4.10-3, 4) Impacts on library facilities were considered less than significant (Impact 4.10-5).

ANSWERS TO CHECKLIST QUESTIONS

Question A

The Master EIR discusses the potential for impacts to public services as a result of increased development and population in the City of Sacramento. The Master EIR analyzes the 2035 General Plan policies related to law enforcement service, fire protection service, educational service, and library service, to determine if adequate public services will exist as development and population in the City increases. Individual projects developed in the City of Sacramento would be required to comply with the public service policies presented in the 2035 General Plan.

According to the Master EIR, implementation of the 2035 General Plan public service policies by individual projects would ensure that adequate public services are available in the City of Sacramento as development and population increases. The proposed project would be consistent with the type and intensity of development anticipated for the site in the 2035 General Plan. Therefore, based on the analysis in the Master EIR, the proposed project would not impact public services nor would the proposed project require the development of new public service facilities beyond what was anticipated in the 2035 General Plan.

The SPD provides law enforcement protection to the project site from the Rooney Station located at 300 Richards Boulevard. According to the Master EIR, the SPD currently has adequate staffing and response times to serve the proposed project during construction activities and operation. Surrounding residential, commercial, and industrial development is currently served by the SPD and the proposed project would include generally similar uses. Additionally, the project applicant would be required to pay development fees for City of Sacramento law enforcement services. Thus, the project would not substantially increase the need for police services beyond what has been previously anticipated in the 2035 General Plan and analyzed in the Master EIR. Thus the project would result in ***no additional significant environmental effects*** related to police protection services.

The SFD would provide fire protection services to the project. The SFD seeks to provide one station for every 1.5-mile service radius, per every 16,000 residents, and for every location where a company experiences call volumes exceeding 3,500 calls per year. Additionally, the SFD has a goal of first responding companies for fire suppression and emergency medical services arriving within four minutes of receiving a call. The SFD station nearest the proposed project site would be First station 18, located approximately 0.6 miles northwest of the project site at 746 North Market Boulevard. (City of Sacramento Fire Department). The proposed project would not involve construction of any residential units and therefore would not contribute to population growth, which would increase the number of residents within the SFD service area. Thus, no new SFD facilities would be required to serve the project site. Therefore, the project would result in ***no additional significant environmental effect*** related to fire protection services.

Development under the proposed project would be required to comply with the policies contained within the City of Sacramento 2035 General Plan, including Policies PHS 2.1.5, PHS 2.1.10, PHS 2.2.3, PHS 2.2.4, and PHS 2.2.9. These policies would, respectively: ensure that the development of fire facilities and the delivery of services keeps pace with development and growth in the city; require development projects to pay fees for the cost of fire protection services and facilities; promote the installation of fire sprinkler systems in new commercial and residential development; require that the City ensure adequate water supplies are

available for fire suppression throughout the city and that new development constructs all necessary fire suppression infrastructure and equipment; and mandate that the City include appropriate emergency responders in the review of development proposals to ensure adequate emergency response times can be maintained. Prior to the issuance of building permits, the proposed fire protection system for each building will be reviewed and approved by the SFD, and any modifications and/or additions identified by the Department will be incorporated into the proposed fire protection systems. The proposed project would also be required to comply with the development standards and requirements contained within the California Fire Code (CFC), particularly with respect to the timing, design, and installation of fire apparatus access roads and water supplies for protection, building and site access, and available water flow. Moreover, the fire hydrants necessary to serve the proposed project would be provided in accordance with both the CFC and the Sacramento Municipal Code, and the residential units would be equipped with an approved NFPA 13D sprinkler system, as mandated by the California Residential Code (California Office of the State Fire Marshal).

Compliance with 2035 General Plan policies and California Fire Code would reduce the potential environmental impact of increased demand on fire protection services resulting from the proposed project to a less than significant level.

The proposed project site would be served by Beat 1C of the North Command; this command broadly encompasses North Natomas, South Natomas, Robla, Del Paso Heights, Strawberry Manor, and Arden Fair. The North Command station which would serve the proposed project is the William J. Kinney Police Facility, located at 3550 Marysville Boulevard. (City of Sacramento, 2016). The proposed project would not result in any increase in population due to residential construction. The proposed project would result in the construction of an industrial building and increase the amount of people at the project location during work hours. This increase in people would contribute to an increase in the demand for police protection services provided by the SPD. The proposed project would likely not result in the need for additional or expanded law enforcement facilities and/or personnel.

Development under the proposed project would be constructed and operated in adherence to the policies of the City of Sacramento 2035 General Plan Public Health and Safety Element, including Policies PHS 1.1.2, PHS 1.1.3, PHS 1.1.4, PHS 1.1.5, PHS 1.1.17, and PHS 1.1.8. These policies, respectively, would ensure that the City of Sacramento: strives to maintain optimal response times for all call priority levels for police services; maintain optimum staffing levels for sworn officers and civilian support staff; ensures that the development of police facilities and delivery of police protection services remains commensurate with development and growth in the city; expands the distribution of police substation facilities such that all city residents receive an optimum response to calls for service; includes the SPD in the review of development proposals; and requires the payment by development projects of fees for the construction and operation of police facilities. (City of Sacramento, 2015. 2035 General Plan). Project development would also comply with SPD Crime Prevention through Environmental Design (CPTED) principles and operational recommendations pertaining to construction, lighting, landscaping, and security, in adherence to General Plan Policy PHS 1.1.7 of the 2035 General Plan. Compliance with these 2035 General Plan policies, in conjunction with the expansion of facilities and staffing anticipated by the 2035 General Plan, would reduce the potential environmental impact of increased demand for law enforcement facilities and staffing resulting from the proposed project to a less than significant level.

The proposed project would include the construction of an industrial building and remodel of an existing industrial building; the project will not introduce any new residents to the area. The project would not require the alteration to any existing school facilities and would not require future school facilities.

The environmental impacts resulting from the need for new or expanded facilities in these sectors, and public services as a whole, would include **no additional significant environmental effects** that were not previously analyzed in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to public services.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
12. <u>RECREATION</u>			
Would the project:			
A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?			X

ENVIRONMENTAL SETTING

The City of Sacramento has 230 developed and undeveloped park sites and 4,829 acres of open space, off-street bikeway and trails, sports fields, recreation facilities, and park amenities.

The proposed project site is currently developed but not in use with one previously developed building on site. At present, there are no neighborhood, local, or regional parks or bikeways existing on the proposed project site. In the immediate east vicinity of the project lies the Natomas East Main Drainage Canal, which is zoned as Parks under the Sacramento 2035 General Plan. Meadows Park, North Natomas Community Park, and Cottonwood Park are located just over 2 miles northwest of the project site. Robla Community Park is located about 2 ½ miles east of the proposed project, Charles Robertson Park is approximately 2 ½ miles southeast, and Chuckwagon Park is just over 2 miles southwest of the site.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Chapter 4.9 of the Master EIR considered the effects of the 2035 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities (Policy ERC 2.2.5). Impacts were considered less than significant after application of the applicable policies. (Impacts 4.9-1 and 4.9-2)

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B

The Master EIR analyzed potential impacts to parks and recreational facilities with implementation of future projects, including the proposed project. Policies were included in the 2035 General Plan to ensure that future residential and non-residential development would not impact existing parks and recreational facilities and to ensure that adequate park and recreational facilities are provided to the residents of Sacramento. The Master EIR concluded that, with implementation of the policies in the 2035 General Plan, future development would not have a significant impact on park and recreational facilities. The proposed

project is consistent with the land use designations of the 2035 General Plan, and, as a result, increased demand on parks and recreational facilities from development of the project were generally anticipated in the Master EIR. Therefore, the proposed project would not accelerate substantial deterioration of existing parks and recreational facilities, nor would the proposed project require the construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

The proposed project would not cause or accelerate substantial physical deterioration of existing area parks or recreational facilities. As mentioned in the Environmental Setting, there are no parks or recreational facilities on the project site. The Natomas East Main Drainage Canal in the immediate vicinity of the project would not be impacted by the proposed project, as the project would not warrant increased recreational use. Its designation as Light Industrial would limit recreational uses near the site. Therefore, no parks in the general area of the project site would face increased use as a direct result of proposed project construction. Additionally, the proposed project would not include any residential uses, so there would be no increase in residential population as a result of the project which would cause deterioration of nearby existing parks and recreational facilities. There would thus be ***no additional significant environmental effect*** related to deterioration of recreational facilities or demand for construction of new recreational facilities beyond what was previously analyzed in the Master EIR.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to recreation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
13. <u>TRANSPORTATION AND CIRCULATION</u> Would the project: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?			X
B) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X
C) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X
D) Result in inadequate emergency access?			X

ENVIRONMENTAL SETTING

The project site is located in the North Sacramento area, directly adjacent to I-80 to the south, Steelhead Creek to the east, and Northgate Boulevard to the northwest. The project proposes the renovation of one existing structure and the development of a second structure for approximately 256,686 square feet of warehouse/light industrial use that is consistent with the surrounding area. The area is generally utilized for industrial, commercial, and office purposes, and is not characterized by residential use. The proposed industrial site will include two warehouse industrial buildings, a total of 389 parking spaces, 38 loading bays, and 37 trailer parking stalls and truck stalls. Vehicular access to the site is located on Northgate Boulevard by Tandy Drive. This access is shared with an approved Dutch Bros Coffee and 7-Eleven fueling station project to the north, as well as an existing SMUD substation to the south near the I-80 off-ramp.

The major access road adjacent to the project site, Northgate Boulevard, is classified as an arterial road in the City of Sacramento's 2035 General Plan Mobility Element. (City of Sacramento, 2015) Northgate Boulevard lies perpendicular to I-80, which is classified as a freeway and extends directly adjacent to the project site. Tandy Drive provides access from the western edge of the project site and is classified as a local road.

This analysis is based on a VMT Technical Memorandum, dated May 9, 2022, prepared by Linscott, Law & Greenspan Engineers (**Appendix D**).

City of Sacramento uses several "screening thresholds" to determine whether a project may be presumed to have a less-than-significant VMT impact without conducting a detailed project-generated VMT analysis. Screening criteria include:

- Small Projects – Projects generating less than 237 average daily traffic (ADT) generally may be assumed to cause a less-than-significant transportation impact.
- Projects in CMT-Efficient Areas – Industrial Employment Project Located in a VMT Efficient Area: The project is an industrial project located in "VMT efficient area" (at or below the base year regional average VMT/employee) based on approved, location-based screening map using the SACSIMI19 regional model.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to transportation and circulation systems are considered significant if the proposed project would do any of the following:

- conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities;
- conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

Transportation and circulation were discussed in the Master EIR in Chapter 4.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. Provisions of the 2035 General Plan that provide substantial guidance include Mobility Goal 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), support for state highway expansion and management consistent with the Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG MTP/SCS) (Policy M 1.5.6) and development that encourages walking and biking (Policy LU 4.2.1).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 4.12-3 (roadway segments in adjacent communities, and Impact 4.12-4 (freeway segments).

ANSWERS TO CHECKLIST QUESTIONS

Question A

The proposed project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities.

Multimodal Access and Site Circulation

Project impacts to transit, bicycle facilities, and pedestrian circulation were determined based on the Sacramento 2035 General Plan. Considerations were given to offsite bicycle and pedestrian facilities and connectivity in the immediate vicinity of the project site.

The project proposes internal connected pedestrian access for the internal project site. Tandy Drive provides direct pedestrian access to the lot shared by the proposed buildings. Additional pedestrian access occurs along Steelhead Creek, where a pathway exists approximately 100 feet east of the project site. Accessible paths of travel at public sidewalks will exist outside of both Building A and Building B. Vehicular access isles will not compromise pedestrian accessibility. The project causes no impacts on the surrounding pedestrian network and is consistent with the city general plan goals and policies.

The proposed project would not include transit facilities or improvements to existing transit infrastructure. There is no transit service within the project area; all nearby transit routes are on roadways extending beyond the vicinity of the project site. The project causes no impacts on the surrounding transit network.

According to the City of Sacramento 2016 Bicycle Master Plan, a Class II Bike Lane, also known as an on-street bikeway, exists on Northgate Boulevard. A Class I Bike Path, or an off-street paved bike path, exists along Steelhead Creek directly east of the project site. Cyclists may access the project site directly through Tandy Drive. The project causes no impacts on the surrounding bicycle network and is consistent with the city general plan goals and policies.

Construction of the project site is consistent with adopted general plan goals and policies. The project is proposed to be constructed in one phase and construction traffic is not anticipated to affect the traffic operations of the study area. The proposed project does not conflict with the City of Sacramento's policies related to bicycle and pedestrian connectivity and regional plans related to transit. There are no impacts.

Conclusion

Based on the reasons described above, implementation of the proposed project would have **no additional significant environmental effects** related to conflict with a program plan, ordinance or policy addressing the circulation system, beyond what was previously analyzed in the Master EIR.

Question B

According to OPR's technical advisory, if a project that replaces existing VMT generating land uses leads to an overall net decrease in VMT, the project would lead to a less-than-significant transportation impact.

To assess if the proposed Project leads to an overall net decrease in the VMT, the VMT was calculated utilizing the average daily traffic and the trip length (i.e., $VMT = \text{Project Trips} \times \text{Trip Length}$).

The trip generation rates for the existing land use and proposed Project are based on the average trip rates in the 11th Edition of the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). The Electronic Superstore land use was utilized for the currently vacant Fry's Electronics building and the Industrial Park land use was utilized for the proposed Project. Appendix D contains the ITE land use informational sheets. **Table 16** tabulates the trip generation calculations. As shown in Table 16, the proposed Project is calculated to generate 896 ADT, which would replace the 6,405 ADT the existing land use was generating.

**TABLE 16
PROJECT TRIP GENERATION**

Land Use	Quantity	Daily Trip Ends (ADT)	
		Rate ¹	Volume
Existing Electronic Superstore (ITE 863)	156.013 KSF	41.05 / KSF	(6,405)
Proposed Industrial Park (ITE 130)	265.686 KSF	3.37 / KSF	896
Delta			(5,509)

NOTES:

¹ Trip rates obtained from ITE's Trip Generation Manual (11th Edition)

SOURCE: Linscott, Law & Greenspan Engineers, 2022

For the existing retail development on the site, the trip length of 5.2 miles associated with a regional shopping center land use was utilized to be conservative. For the proposed project, the trip length of 9.0 miles associated with an Industrial/Business Park land use was utilized. Based on the above, **Table 17** tabulates the VMT calculations. As shown in Table 17, the proposed project VMT is 8,064, which is substantially less than the VMT of the existing land use. Therefore, the proposed project that is replacing the existing VMT-generating land use would lead to an overall net decrease in VMT.

Based on the VMT assessment, the proposed project that is replacing the existing VMT-generating land use would lead to an overall net decrease in VMT. In conclusion, the proposed Project would have **no additional significant environmental effect** related to project traffic.

TABLE 17
PROJECT VEHICLE MILES TRAVELED

Land Use	Daily Trip Ends (ADT)	Trip Length (Miles)¹	Vehicle Miles Traveled (VMT)
Existing Electronic Superstore (ITE 863)	(6,405)	5.2	(33,306)
Proposed Industrial Park (ITE 130)	896	9.0	8,064
Delta			(25,242)

NOTES:

1 Trip lengths obtained from SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.

Source: Linscott, Law & Greenspan Engineers, 2022

Question C

The project would not increase any hazards due to a geometric design feature or incompatible uses. The proposed project does not introduce a geometrical or other design feature that would increase or substantially increase hazards related to roadway geometrics. There would be **no additional significant environmental effect** related to an increase in such hazards.

Question D

No Impact. The proposed project would not result in inadequate emergency access. No roadways accessing or surrounding the project site would be impeded by construction or operation of the proposed project. Emergency vehicles would be able to access the project site; therefore, there would be **no additional significant environmental effect** related to emergency access.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would be consistent with the land use designations within the 2035 General Plan, and potential impacts relating from development of the project site for such uses has been previously analyzed in the Master EIR. As discussed above, implementation of the proposed project is not anticipated to result in significant environmental effects relating to Transportation and Circulation. Therefore, implementation of the proposed project would have **no additional significant environmental effects** beyond what was previously analyzed in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>14. <u>TRIBAL CULTURAL RESOURCES</u></p> <p>Would the project:</p> <p>A) Cause a substantial adverse change in the significance of a tribal cultural resource, as 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:</p> <p>i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources code section 5020.1(k) or</p>		X	
<p>ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>		X	

ENVIRONMENTAL SETTING

For thousands of years Sacramento and the surrounding area has been known to be occupied by Native American groups. Tribal cultural resource and archaeological materials, including human burials, have been found throughout the city. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for tribal cultural resources are located within close proximity to the Sacramento and American rivers and other watercourses.

This section analyzes and evaluates the potential impacts of the project on Tribal cultural resources, both identified and undiscovered. Tribal cultural resources, as defined by Assembly Bill (AB) 52, Statutes of 2014, in Public Resources Code (PRC) Section 21074, are sites, features, places, cultural landscapes, sacred places and objects, with cultural value to a Tribe. A Tribal cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. The unanticipated find of Native American human remains would also be considered a Tribal cultural resource and are therefore analyzed in this section.

The proposed project area is situated within the lands traditionally occupied by the Valley Nisenan, or Southern Maidu. Many descendants of Valley Nisenan throughout the larger Sacramento region belong to the United Auburn Indian Community, Shingle Springs, Lone Band, Colfax-Todds Valley, and Wilton Rancheria Tribes. The Tribes actively participate in the identification, evaluation, preservation, and restoration of Tribal Cultural Resources.

The United Auburn Indian Community (UAIC) is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project area. The Tribe has a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations.

On April 25, 2022, ESA contacted the Native American Heritage Commission (NAHC) by email to request a search of their Sacred Lands File (SLF) and a list of local Native Americans who might have knowledge of cultural resources in the vicinity of the project. In a letter response on April 27, 2022, the NAHC responded that a record search of the SLF was completed and that the results were positive. The NAHC recommended contacting the United Auburn Indian Community of the Auburn Rancheria for more information on potential archaeological sites and tribal cultural resources within the vicinity of the project.

According to the provision of PRC Section 21080.3, 4 Native American tribes have requested consultation for projects in the jurisdiction of the City of Sacramento.

Native American Consultation

On April 26, 2022 formal invitations to participate in Assembly Bill (AB) 52 consultation on the proposed project were sent by the City to the tribal representatives that have previously requested to receive notifications of proposed projects. These tribes represented include:

- United Auburn Indian Community
- Wilton Rancheria
- Shingle Springs Band of Mi-Wok Indians
- Buena Vista Rancheria of Me-Wuk Indians

The United Auburn Indian Community provided a response via email on May 18, 2022, requesting the City include the unanticipated discoveries mitigation and TCR recommendations and close consultation. The Buena Vista Band of Me-Wuk Indians provided a response via email on June 28, 2021, declining consultation. No response was received from the Wilton Rancheria, the Shingle Springs Band of Miwok Indians or the Buena Vista Band of Me-Wuk Indian tribes within 30 calendar days of the request for formal invitation under AB 52.

Data Sources/Methodology

Under PRC section 21080.3.1 and 21082.3, the City must consult with tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

In response to the City's notification of the project to the United Auburn Indian Community of the Auburn Rancheria (UAIC), UAIC conducted a records search for the identification of Tribal Cultural Resources for this project which included a review of pertinent literature and historic maps, and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the Native American Heritage Commission (NAHC). The THRIS resources shown in this region also include previously recorded indigenous resources identified through the California Historic Resources Information System Center (CHRIS) as well as historic resources and survey data.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, a tribal cultural resource is considered to be a significant resource if the resource is: 1) listed or eligible for listing in the California Register of Historical Resources or in a local

register of historical resources; or 2) the resource has been 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. For purposes of this Initial Study, impacts on tribal cultural resources may be considered significant if construction and/or implementation of the proposed project would result in the following:

- cause a substantial change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources (see Master EIR Chapter 4.4 and Appendix C – Background Report, B. Cultural Resources Appendix), but did not specifically address tribal cultural resources because that resource type had not yet been defined in CEQA at the time the Master EIR was adopted. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources, some of which could be tribal cultural resources as defined Public Resources Code 21074. Ground-disturbing activities resulting from implementation of development under the 2035 General Plan could affect the integrity of an archaeological site (which may be a tribal cultural resource), thereby causing a substantial change in the significance of the resource. General plan policies identified as reducing such effects on cultural resources that may also be tribal cultural resources include identification of resources on project sites (Policy HCR 2.1.1); implementation of applicable laws and regulations (Policy HCR 2.1.2); consultation with appropriate organizations and individuals including the Native American Heritage Commission and implementation of their consultation guidelines (Policy HCR 2.1.3); enforcement programs to promote the maintenance, rehabilitation, preservation, and interpretation of the City's historic resources (Policy HCR 2.1.4); listing of qualified historic resources under appropriate national, State, and local registers (Policy HCR 2.1.5); consideration of historic and cultural resources in planning studies (Policy HCR 2.1.6); enforcement of compliance with local, State, and federal historic and cultural preservation requirements (Policy HCR 2.1.8); and early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10).

Of particular relevance to this project are policies that ensure compliance with protocol that protect or mitigate impacts to archaeological resources (Policy HCR 2.1.16) and that encourage preservation and minimization of impacts on cultural resources (Policy HCR 2.1.17).

ANSWERS TO CHECKLIST QUESTIONS

Question A

Less than Significant with Mitigation. Tribal cultural resources are: 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing in the California Register of Historical Resources (California Register), or local register of historical resources, as defined in PRC Section 5020.1(k); or, 2) a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (PRC Section 21074[b]). A historical resource, as defined in PRC Section 21084.1, unique archaeological resource, as defined in PRC Section 21083.2(g), or non-unique archaeological resource, as defined in PRC Section 21083.2(h), may also be a tribal cultural resource.

Through background research at the North Central Information Center of the California Historical Resources Information System and a survey, no known archaeological resources that could be considered tribal cultural resources, listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the project.

If any previously unrecorded archaeological resource were identified during ground-disturbing construction activities and were found to qualify as a tribal cultural resource pursuant to PRC Section 21074(a)(1) (determined to be eligible for listing in the California Register or in a local register of historical resources), any impacts to the resource resulting from the project could be potentially significant. Implementation of

Mitigation Measure TCR-1 & TCR-2 would ensure that work would halt in the vicinity of a find until a qualified archaeologist can make an assessment and provide additional recommendations if necessary, including contacting Native American tribes (refer to Section 3.5, *Cultural Resources*). Thus, with implementation of Mitigation Measures TCR-1 & TCR-2, this ***effect can be mitigated to less than significant***.

MITIGATION MEASURES

Implement Mitigation Measure TCR-1 & TCR-2.

Mitigation Measure TCR-1: In the Event that Cultural Resources or Tribal Cultural Resources Are Discovered During Construction, Implement Avoidance and Minimization Measures to Avoid Significant Impacts and Procedures to Evaluate Resources.

If cultural resources or tribal cultural resources (such as structural features, unusual amounts of bone or shell, artifacts, or human remains) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural materials), and the construction contractor shall immediately notify the project's City representative. Avoidance and preservation in place is the preferred manner of mitigating impacts to cultural resources and tribal cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Planning construction to avoid tribal cultural resources, archaeological sites and/or other cultural resources; incorporating cultural resources within parks, green-space or other open space; covering archaeological resources; deeding a cultural resource to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.
- Recommendations for avoidance of cultural resources and tribal cultural resources will be reviewed by the City representative, interested culturally affiliated Native American tribes and other appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project site to avoid cultural resources or tribal cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or tribal cultural resources or modification or realignment to avoid highly significant features within a cultural resource or tribal cultural resource.
- Native American representatives from interested culturally affiliated Native American tribes will be invited to review and comment on these analyses and shall have the opportunity to meet with the City representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.
- If the discovered cultural resource or tribal cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a cultural resource or a tribal cultural resource will be determined in consultation with interested culturally affiliated Native American tribes and tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.
- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".

If a cultural resource or a tribal cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of cultural resources or tribal cultural resources:

- Each resource will be evaluated for California Register of Historical Resources- (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American tribes, as applicable.

If a cultural resource or a tribal cultural resource is determined to be eligible for listing in the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. The City shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by the City and with interested culturally affiliated Native American tribes that respond to the City's invitation. As part of the site investigation and resource assessment, the City and the archaeologist shall consult with interested culturally affiliated Native American tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

Native American representatives from interested culturally affiliated Native American tribes and the City representative will also consult to develop measures for long-term management of any discovered tribal cultural resources. Consultation will be limited to actions consistent with the jurisdiction of the City and taking into account ownership of the subject property. To the extent that the City has jurisdiction, routine operation and maintenance within tribal cultural resources retaining tribal cultural integrity shall be consistent with the avoidance and minimization standards identified in this mitigation measure.

If the City determines that the project may cause a significant impact to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

- Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treat the resource with culturally appropriate dignity taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protect the cultural character and integrity of the resource.
 - Protect the traditional use of the resource.
 - Protect the confidentiality of the resource.
- Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.
- Protect the resource.

Mitigation Measure TCR-2: Implement Procedures in the Event of the Inadvertent Discovery of Human Remains.

If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the following performance standards shall be met prior to implementing or continuing actions such as construction, which may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code (HSC), if

human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (HSC Section 7050.5[b]).

If the human remains are of historic or modern age and are determined to be not of Native American origin, the City will follow the provisions of the HSC Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

FINDINGS

All additional significant environmental effects of the project relating to tribal cultural resources can be ***mitigated to a less-than-significant level.***

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
15. <u>UTILITIES AND SERVICE SYSTEMS</u>			
Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Water Supply

The Sacramento County Water Agency provides domestic water service to seven different hydraulic areas, including the Northgate 880 service area, which includes the project site and areas to the west and northwest of the project site. This area is isolated from the other SCWA service areas and is fed only by local groundwater supplies (Sacramento County Water Agency, 2020).

There are two primary groundwater subbasins described in the California Department of Water Resources' (DWR) Bulletin 118 that affect SCWA's groundwater extraction and use: The Sacramento Valley Basin – North American Subbasin (5-21.64) and the Sacramento Valley Basin—South American Subbasin (5-21.65). The North American Subbasin covers an area of approximately 548 square miles and is located under lands contained in Placer, Sutter, and Sacramento counties. The North American Subbasin is not in an overdraft condition and has no adjudicated areas. The 2000 Water Forum Agreement characterized a smaller sub-component of the North American Subbasin as the "North Basin." SCWA has three primary service areas that overlie the North Basin—the Airport and Metro Air Park, Northgate 880, and Arden Park Vista.

California Water Code requires that urban water suppliers prepare and adopt an Urban Water Management Plan (UWMP) every five years. The most recent UWMP for Sacramento County is the 2020 Urban Water Management Plan, which considers water demand for the County under normal, single dry year, and five consecutive dry year scenarios. Water supply and demand projections include anticipated future development through 2045. As the Northgate 880 service area is generally built out, SCWA does not anticipate a substantial change in water demand through years 2045 from the present.

Wastewater

The Sacramento Area Sewer District (SASD) would be responsible for providing local sewer service to the proposed project site via its local sanitary sewer collection system. Sacramento Regional County Sanitation District (Regional San) would be responsible for the conveyance of wastewater from the SASD collection system to the Sacramento Regional Wastewater Treatment Plant (SRWTP).

Stormwater

Storm water drainage for the proposed project site and its vicinity would be collected by storm drain systems owned and managed by the Sacramento County, and subsequently pumped into nearby rivers, creeks, and drainages. Drainage inlets will line the eastern edge of the project site's parking area. Additionally, storm drains and manholes are located within the property line of the proposed project site.

Electricity

Electrical utilities are provided to Sacramento County, including the proposed project site and its vicinity, by the Sacramento Municipal Utility District (SMUD). An existing SMUD substation lies to the south of the project site, with several SMUD easements of various sizes to be utilized throughout the project site. Gas service would be provided by PG&E and would be provided via a gas line that enters the project site from the west.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2035 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas, and telecommunications. See Chapter 4.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 4.11-1) but the Master EIR concluded that the potential increase in demand for potable water in excess of the City's existing diversion and treatment capacity, and which could require construction of new water supply facilities, would result in a significant and unavoidable effect (Impact 4.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a less-than-significant effect (Impact 4.11-4). Impacts on solid waste facilities were less than significant (Impact 4.11-5). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Wastewater

Sewer connections from public mains to the proposed project site would be provided by the SASD local sanitary sewer collection system. In addition to the sewer connections and associated SASD sewer infrastructure which would be constructed throughout the site, each residential logistics facility would have a separate connection to SASD's sewer system, per SASD requirements. Construction of this sewer infrastructure would adhere to current SASD Standards and Specifications for public sewer construction or modification and would be reflected on improvement plans prior to the approval of such plans. Additionally, the project applicant would be required to pay sewer impact fees prior to the issuance of building permits to alleviate sewer impact and connection costs. These considerations would help to reduce the environmental effects of the proposed project on sewer service systems.

Anticipated connections to the existing sewer conveyance system would comply with SASD Standards and Specifications, and the proposed project would not require changes to the local wastewater conveyance system. These considerations, in addition to the payment of fees to existing impact fee programs, would result in a less-than significant impact on sewer infrastructure following construction and operation of the proposed project.

The Sacramento Area Sewer District (SASD) is responsible for sewer collection in the project area. Buildout capacity of the areas within the City that are served by the SASD was anticipated in the 2035 General Plan.

As such, City has anticipated the need for wastewater services in the project area and requires development to obtain service from and pay impact fees to the SASD to support buildout demand of their service area (including the project site). The SRCSD would be able to provide sufficient wastewater services and conveyance to serve full buildout of the City, including the project area, per the 2035 Master EIR. The proposed project would be consistent with the existing General Plan land use designations for the site. The General Plan land use designations for the City are the basis for wastewater demand estimation and infrastructure planning within the City. Because the project is consistent with the City's General Plan increased demand from development of the project site for the proposed uses has been generally anticipated. Therefore, adequate capacity exists to serve the project site's demands.

The City of Sacramento uses an Equivalent Single Family Dwelling Unit (ESD) standard to determine project-specific wastewater demand relative to treatment and conveyance infrastructure. The existing standard for sewer generation is 310 gallons per day (gpd) per ESD (City of Sacramento, 2018). As shown in **Table 18**, the proposed project would generate approximately 15,500 gpd of wastewater according to current City standards and 50 ESD's.

TABLE 18
WASTEWATER GENERATION RESULTING FROM THE PROPOSED PROJECT

Land Use Type	Gross Floor Area	ESD Factor	ESD	Generation Rate ¹ (gpd/unit)	Average Dry Weather Flow (ADWF) (gpd)
Industrial: Light	200,000 sq ft.	0.25/1,000 sq. ft. of Gross Floor Area	50	77.5 gdp/unit	15,500 gpd

NOTES:

¹ 310 gpd x ESD factor

SOURCE: City of Sacramento, 2018. *City of Sacramento Design and Procedures Manual*, Section 9. July 24, 2018. Pp. 9-17 and 9-54.

As the proposed project will generate 25 or more ESD's, the project would be required to submit a plan study with the initial plan submittal and shall be approved by the Department of Utilities (DOU) prior to final acceptance of the Plans (City of Sacramento, 2018). With compliance with General Plan policies, along with the Master EIR and City of Sacramento policies, implementation of the proposed project would not result in a determination by SASD that it does not have adequate capacity to serve the proposed project's projected demand in addition to existing SASD commitments. Therefore, the proposed project would result in **no additional significant environmental effect** related to wastewater treatment capacity.

Question B

Less than significant. Existing utilities infrastructure on the proposed project site includes water mains, valves, and blowoff valves.

Water Infrastructure

The Sacramento County Water Agency (SCWA) is responsible for providing and maintaining water for the project site. The Urban Water Management Plan analyzes the water supply, water demand, and water shortage contingency planning for the SCWA's service area, which would include the project site. According to the SCWA's Urban Water Management Plan, under all drought conditions, the SCWA possesses sufficient groundwater supply to meet the demands of the SCWA's Northgate 880 service area up to the year 2045, and through five consecutive dry years. The proposed project is consistent with land use and zoning designations and would not generate an increase in demand from what has already been anticipated for the project site. As such, adequate capacity is expected to be available to serve the proposed project's water demands. As part of the COAs for the proposed project, the City's Department of Utilities will require preparation of a water study for the project. The water study will be required to demonstrate the project's compliance with the city and SCWA's requirements related to water service, and will be submitted for review and approval to the City's Department of Utilities. Preparation and review of the water study will

ensure that development of the project would include provision of adequate water infrastructure to support the proposed project.

The anticipated domestic water lines which would be used for the conveyance of both the on-site potable and fire system water supplies, and would connect to this main, and would be provided by the SCWA's local water service systems. SCWA has not identified existing capacity as a constraining factor in development of the proposed project; as such, the proposed project would result in ***no additional significant environmental effects*** related to water supply or water conveyance infrastructure.

Stormwater Infrastructure

The proposed project would add impervious surface to approximately 17.55 acres. All storm water runoff from impervious surfaces (roofs and paving) will be routed through specially designed water quality detention and treatment basins as appropriate. Although this development may increase peak storm water flow rates and rainfall run-off volume in the immediate project vicinity, the proposed project site was previously designated for industrial development and future drainage needs for the project vicinity were anticipated. Implementation of the proposed project would require the construction of storm drainage infrastructure for connection to the existing Sacramento County drainage conveyance system. Drainage inlets are planned to line the eastern edge of the project site's parking area. Stormwater would be pumped to this drainage canal via anticipated conveyance connections, and this existing infrastructure would be sufficient to serve the proposed project site.

Onsite storm drain systems anticipated by the proposed project would be private systems maintained by the project owner or other approved entity, and would be constructed per the recommendations of a project-specific drainage study subject to review and approval by the City of Sacramento Department of Utilities (DOU). This drainage study would comply with the Master Drainage Plan and would include analysis for mitigating sizing and drainage system design. Appropriate detention for the proposed project would be provided.

Design of the proposed project would comply with Section 15.88.010 of the Sacramento City Code, which prohibits development of the proposed project should the project obstruct, impede, or interfere with the natural flow of existing off-site drainage crossing the proposed project site. Grading of the proposed project site would not occur prior to the review and approval of a project-specific grading plan by the DOU. Any required stormwater drainage infrastructure would be constructed in compliance with the standards, regulations, and design guidelines of the Department of Utilities Onsite Design Manual, the Sacramento Region Stormwater Quality Design Manual, the City of Sacramento Stormwater Collection Systems, and with applicable goals and policies of the 2035 General Plan. Post-construction stormwater quality control measures to minimize additional urban runoff resulting from the proposed project would also be incorporated into the development, including certified full capture trash control devices in accordance with the requirements of the Sacramento Region Stormwater Quality Design Manual. Compliance with Sacramento City Code regulations, 2035 General Plan policies, and applicable design standards and guidelines, in addition to implementation of construction and post-construction mitigation proposed by the site-specific drainage study required by the DOU would therefore result in ***no additional significant environmental effects*** related to stormwater infrastructure resulting from the proposed project, beyond what was previously analyzed in the Master EIR.

Wastewater Infrastructure

Sewer connections from public mains to the proposed project site would be provided by the SASD local sanitary sewer collection system. Construction of this sewer infrastructure would adhere to current SASD Standards and Specifications for public sewer construction or modification and would be reflected on improvement plans prior to the approval of such plans. Additionally, the project applicant would be required to pay sewer impact fees prior to the issuance of building permits to alleviate sewer impact and connection costs. These considerations would help to reduce the environmental effects of the proposed project on sewer service systems.

Anticipated connections to the existing sewer conveyance system would comply with SASD Standards and Specifications, and the proposed project would not require changes to the local wastewater conveyance

system. These considerations, in addition to the payment of fees to existing impact fee programs, would result in ***no additional significant environmental effects*** related to sewer infrastructure following construction and operation of the proposed project.

Dry Utilities Infrastructure

Existing utilities infrastructure is also present on the proposed project site for the provision of electric power, natural gas, and telecommunications facilities to the proposed project site. Electrical service for the proposed project site would be provided by SMUD, and the proposed project would not utilize natural gas service. Beyond connections or service laterals which could be required to tie project systems into existing utilities service infrastructure, no additional requirements for electrical power, natural gas, or telecommunications facilities would be anticipated on the project site, at present, nor would these existing utilities require relocation which could result in significant environmental effects.

Solid Waste

Solid waste from surrounding developments are currently being transferred to Kiefer Landfill for disposal. The 2035 General Plan Master EIR concluded that adequate capacity at local landfills exists for full buildout of the general plan. The proposed project is consistent with the general plan land use designation for the project site, and the associated solid waste disposal needs was considered in the 2035 General Plan Master EIR analysis. The proposed project would not generate an increase in solid waste from what has been anticipated in the Master EIR. As such, adequate capacity would be expected to be available to serve the proposed project's solid waste disposal needs, and the project would result in ***no additional significant environmental effect*** related to solid waste.

MITIGATION MEASURES

None required.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to utilities and service systems. Therefore, implementation of the proposed project would have ***no additional significant environmental effects*** beyond what was previously analyzed in the Master EIR.

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
16. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u>			
A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

ANSWERS TO CHECKLIST QUESTIONSQuestion A

As discussed earlier in Section 2, *Biological Resources*, the proposed project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species or 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. For additional discussion, please refer to the impact analysis in Section 2.

There are no historic resources on site; and potential archaeological resources, if uncovered during construction, would be subject to the mitigation measures identified in Section 3, *Cultural Resources*. Therefore, **effects from the proposed project could be mitigated less than significant.**

Question B

Less than Significant. Consideration of the potential project-related impacts along with, or in combination with, other project-related impacts are defined as cumulative impacts. All the potential direct and indirect impacts of the proposed project were determined to be fully avoided or at less-than-significant levels. The project would not create significant impacts when in combination with other similar projects. Other projects in the vicinity of the proposed project would also be subject to the City of Sacramento General Plan policies, codes, and regional requirements similar to that applicable to the proposed project. As a result, the potential impacts of the proposed project are not considered cumulatively considerable, and **no additional significant environmental effects** would occur with implementation of the proposed project.

Question C

Less than Significant. All potential environmental impacts identified in support of the proposed project would either be minimal or reduced to a less-than-significant level with mitigation. The project site does not contain any hazards or known to have any sensitive biological and cultural resources. No potentially significant impacts, which could cause substantial adverse direct or indirect effects on human beings were identified. The proposed project would be required to implement all applicable policies of the 2035 General Plan. Any potentially significant impacts which could be anticipated to occur during project implementation would be subject to mitigation measures previously described and would be reduced to less-than-significant levels. For these reasons, all potentially significant ***effects of the proposed project can be mitigated to less than significant.***

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Hydrology and Water Quality
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Noise
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Public Services
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Recreation
<input type="checkbox"/> Energy	<input type="checkbox"/> Transportation and Circulation
<input type="checkbox"/> Geology and Soils	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Utilities and Service Systems
<input type="checkbox"/> Hazards	
<input type="checkbox"/> None Identified	

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Scott Johnson
Signature

August 12, 2022

Date

Scott Johnson
Printed Name

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Appendix A

Air Quality

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Northgate exisitng
Sacramento Valley Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Electronic Superstore	156.01	1000sqft	17.55	156,013.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	65
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - p.s info
- Vehicle Trips -
- Energy Use -
- Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	156,010.00	156,013.00
tblLandUse	LotAcreage	3.58	17.55

2.0 Emissions Summary

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.7011	38.8841	29.6708	0.0636	19.8049	1.6358	21.4183	10.1417	1.5049	11.6260	0.0000	6,168.809 1	6,168.809 1	1.9488	0.0972	6,218.745 4
2023	1.7837	15.6727	18.0671	0.0360	0.5869	0.7095	1.2964	0.1597	0.6677	0.8274	0.0000	3,501.224 1	3,501.224 1	0.6228	0.0934	3,544.633 2
2024	72.5259	14.7073	17.8706	0.0358	0.5869	0.6229	1.2098	0.1597	0.5860	0.7457	0.0000	3,478.496 6	3,478.496 6	0.7168	0.0913	3,521.151 6
Maximum	72.5259	38.8841	29.6708	0.0636	19.8049	1.6358	21.4183	10.1417	1.5049	11.6260	0.0000	6,168.809 1	6,168.809 1	1.9488	0.0972	6,218.745 4

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.7011	38.8841	29.6708	0.0636	19.8049	1.6358	21.4183	10.1417	1.5049	11.6260	0.0000	6,168.809 1	6,168.809 1	1.9488	0.0972	6,218.745 4
2023	1.7837	15.6727	18.0671	0.0360	0.5869	0.7095	1.2964	0.1597	0.6677	0.8274	0.0000	3,501.224 1	3,501.224 1	0.6228	0.0934	3,544.633 2
2024	72.5259	14.7073	17.8706	0.0358	0.5869	0.6229	1.2098	0.1597	0.5860	0.7457	0.0000	3,478.496 6	3,478.496 6	0.7168	0.0913	3,521.151 6
Maximum	72.5259	38.8841	29.6708	0.0636	19.8049	1.6358	21.4183	10.1417	1.5049	11.6260	0.0000	6,168.809 1	6,168.809 1	1.9488	0.0972	6,218.745 4

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

[illegible]

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364
Energy	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736
Mobile	23.8610	17.3560	117.7853	0.1963	18.0768	0.1813	18.2582	4.8237	0.1698	4.9935		20,006.1805	20,006.1805	1.7382	1.2618	20,425.6627
Total	27.6271	17.6264	118.0283	0.1979	18.0768	0.2019	18.2788	4.8237	0.1904	5.0141		20,330.5608	20,330.5608	1.7445	1.2678	20,751.9726

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364
Energy	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736
Mobile	23.8610	17.3560	117.7853	0.1963	18.0768	0.1813	18.2582	4.8237	0.1698	4.9935		20,006.1805	20,006.1805	1.7382	1.2618	20,425.6627
Total	27.6271	17.6264	118.0283	0.1979	18.0768	0.2019	18.2788	4.8237	0.1904	5.0141		20,330.5608	20,330.5608	1.7445	1.2678	20,751.9726

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2022	10/28/2022	5	20	
2	Site Preparation	Site Preparation	10/29/2022	11/11/2022	5	10	
3	Grading	Grading	11/12/2022	12/23/2022	5	30	
4	Building Construction	Building Construction	12/24/2022	2/16/2024	5	300	
5	Paving	Paving	2/17/2024	3/15/2024	5	20	
6	Architectural Coating	Architectural Coating	3/16/2024	4/12/2024	5	20	

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 90****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 234,020; Non-Residential Outdoor: 78,007; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	50.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0572	0.0304	0.4720	1.1700e-003	0.1232	6.7000e-004	0.1239	0.0327	6.2000e-004	0.0333		118.0490	118.0490	3.4400e-003	3.0600e-003	119.0471
Total	0.0572	0.0304	0.4720	1.1700e-003	0.1232	6.7000e-004	0.1239	0.0327	6.2000e-004	0.0333		118.0490	118.0490	3.4400e-003	3.0600e-003	119.0471

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0572	0.0304	0.4720	1.1700e-003	0.1232	6.7000e-004	0.1239	0.0327	6.2000e-004	0.0333		118.0490	118.0490	3.4400e-003	3.0600e-003	119.0471
Total	0.0572	0.0304	0.4720	1.1700e-003	0.1232	6.7000e-004	0.1239	0.0327	6.2000e-004	0.0333		118.0490	118.0490	3.4400e-003	3.0600e-003	119.0471

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.0619	3,686.0619	1.1922		3,715.8655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0687	0.0365	0.5663	1.4000e-003	0.1479	8.0000e-004	0.1487	0.0392	7.4000e-004	0.0400		141.6587	141.6587	4.1300e-003	3.6700e-003	142.8566
Total	0.0687	0.0365	0.5663	1.4000e-003	0.1479	8.0000e-004	0.1487	0.0392	7.4000e-004	0.0400		141.6587	141.6587	4.1300e-003	3.6700e-003	142.8566

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Site Preparation - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0687	0.0365	0.5663	1.4000e-003	0.1479	8.0000e-004	0.1487	0.0392	7.4000e-004	0.0400		141.6587	141.6587	4.1300e-003	3.6700e-003	142.8566
Total	0.0687	0.0365	0.5663	1.4000e-003	0.1479	8.0000e-004	0.1487	0.0392	7.4000e-004	0.0400		141.6587	141.6587	4.1300e-003	3.6700e-003	142.8566

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0763	0.0406	0.6293	1.5600e-003	0.1643	8.9000e-004	0.1652	0.0436	8.2000e-004	0.0444		157.3986	157.3986	4.5900e-003	4.0800e-003	158.7295
Total	0.0763	0.0406	0.6293	1.5600e-003	0.1643	8.9000e-004	0.1652	0.0436	8.2000e-004	0.0444		157.3986	157.3986	4.5900e-003	4.0800e-003	158.7295

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2036	1.6349	10.8385	3.6538	1.5041	5.1579	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0763	0.0406	0.6293	1.5600e-003	0.1643	8.9000e-004	0.1652	0.0436	8.2000e-004	0.0444		157.3986	157.3986	4.5900e-003	4.0800e-003	158.7295
Total	0.0763	0.0406	0.6293	1.5600e-003	0.1643	8.9000e-004	0.1652	0.0436	8.2000e-004	0.0444		157.3986	157.3986	4.5900e-003	4.0800e-003	158.7295

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0564	1.4207	0.4290	5.5300e-003	0.1761	0.0147	0.1908	0.0507	0.0141	0.0648		585.3926	585.3926	5.7800e-003	0.0870	611.4580
Worker	0.1908	0.1015	1.5732	3.8900e-003	0.4107	2.2300e-003	0.4130	0.1090	2.0500e-003	0.1110		393.4965	393.4965	0.0115	0.0102	396.8238
Total	0.2471	1.5222	2.0021	9.4200e-003	0.5869	0.0169	0.6038	0.1597	0.0161	0.1758		978.8891	978.8891	0.0173	0.0972	1,008.2818

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0564	1.4207	0.4290	5.5300e-003	0.1761	0.0147	0.1908	0.0507	0.0141	0.0648		585.3926	585.3926	5.7800e-003	0.0870	611.4580
Worker	0.1908	0.1015	1.5732	3.8900e-003	0.4107	2.2300e-003	0.4130	0.1090	2.0500e-003	0.1110		393.4965	393.4965	0.0115	0.0102	396.8238
Total	0.2471	1.5222	2.0021	9.4200e-003	0.5869	0.0169	0.6038	0.1597	0.0161	0.1758		978.8891	978.8891	0.0173	0.0972	1,008.2818

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0342	1.1983	0.3790	5.3300e-003	0.1761	7.6800e-003	0.1838	0.0507	7.3400e-003	0.0581		565.1455	565.1455	4.6700e-003	0.0840	590.2922
Worker	0.1767	0.0895	1.4441	3.7700e-003	0.4107	2.1100e-003	0.4129	0.1090	1.9400e-003	0.1109		380.8687	380.8687	0.0103	9.4300e-003	383.9350
Total	0.2109	1.2878	1.8231	9.1000e-003	0.5869	9.7900e-003	0.5967	0.1597	9.2800e-003	0.1689		946.0142	946.0142	0.0150	0.0934	974.2271

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0342	1.1983	0.3790	5.3300e-003	0.1761	7.6800e-003	0.1838	0.0507	7.3400e-003	0.0581		565.1455	565.1455	4.6700e-003	0.0840	590.2922
Worker	0.1767	0.0895	1.4441	3.7700e-003	0.4107	2.1100e-003	0.4129	0.1090	1.9400e-003	0.1109		380.8687	380.8687	0.0103	9.4300e-003	383.9350
Total	0.2109	1.2878	1.8231	9.1000e-003	0.5869	9.7900e-003	0.5967	0.1597	9.2800e-003	0.1689		946.0142	946.0142	0.0150	0.0934	974.2271

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0329	1.1841	0.3683	5.2300e-003	0.1761	7.6200e-003	0.1837	0.0507	7.2900e-003	0.0580		554.5225	554.5225	4.5200e-003	0.0825	579.2285
Worker	0.1644	0.0795	1.3355	3.6400e-003	0.4107	2.0000e-003	0.4127	0.1090	1.8400e-003	0.1108		368.2752	368.2752	9.2800e-003	8.7500e-003	371.1154
Total	0.1972	1.2635	1.7037	8.8700e-003	0.5869	9.6200e-003	0.5965	0.1597	9.1300e-003	0.1688		922.7977	922.7977	0.0138	0.0913	950.3439

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0329	1.1841	0.3683	5.2300e-003	0.1761	7.6200e-003	0.1837	0.0507	7.2900e-003	0.0580		554.5225	554.5225	4.5200e-003	0.0825	579.2285
Worker	0.1644	0.0795	1.3355	3.6400e-003	0.4107	2.0000e-003	0.4127	0.1090	1.8400e-003	0.1108		368.2752	368.2752	9.2800e-003	8.7500e-003	371.1154
Total	0.1972	1.2635	1.7037	8.8700e-003	0.5869	9.6200e-003	0.5965	0.1597	9.1300e-003	0.1688		922.7977	922.7977	0.0138	0.0913	950.3439

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0493	0.0238	0.4007	1.0900e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.4826	110.4826	2.7800e-003	2.6300e-003	111.3346
Total	0.0493	0.0238	0.4007	1.0900e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.4826	110.4826	2.7800e-003	2.6300e-003	111.3346

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0493	0.0238	0.4007	1.0900e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.4826	110.4826	2.7800e-003	2.6300e-003	111.3346
Total	0.0493	0.0238	0.4007	1.0900e-003	0.1232	6.0000e-004	0.1238	0.0327	5.5000e-004	0.0332		110.4826	110.4826	2.7800e-003	2.6300e-003	111.3346

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.3123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	72.4930	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0329	0.0159	0.2671	7.3000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		73.6550	73.6550	1.8600e-003	1.7500e-003	74.2231
Total	0.0329	0.0159	0.2671	7.3000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		73.6550	73.6550	1.8600e-003	1.7500e-003	74.2231

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.3123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	72.4930	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0329	0.0159	0.2671	7.3000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		73.6550	73.6550	1.8600e-003	1.7500e-003	74.2231
Total	0.0329	0.0159	0.2671	7.3000e-004	0.0822	4.0000e-004	0.0826	0.0218	3.7000e-004	0.0222		73.6550	73.6550	1.8600e-003	1.7500e-003	74.2231

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	23.8610	17.3560	117.7853	0.1963	18.0768	0.1813	18.2582	4.8237	0.1698	4.9935		20,006.1805	20,006.1805	1.7382	1.2618	20,425.6627
Unmitigated	23.8610	17.3560	117.7853	0.1963	18.0768	0.1813	18.2582	4.8237	0.1698	4.9935		20,006.1805	20,006.1805	1.7382	1.2618	20,425.6627

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Electronic Superstore	6,404.21	8,599.27	6669.43	6,721,743	6,721,743
Total	6,404.21	8,599.27	6,669.43	6,721,743	6,721,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Electronic Superstore	9.50	7.30	7.30	15.50	65.50	19.00	27	33	40

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Electronic Superstore	0.516022	0.055984	0.185115	0.140509	0.032838	0.007379	0.013399	0.013498	0.000737	0.000476	0.028833	0.001070	0.004141

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.0 Energy Detail**

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736
NaturalGas Unmitigated	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Electronic Superstore	2756.94	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736
Total		0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736

Northgate existng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Electronic Superstore	2.75694	0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736
Total		0.0297	0.2703	0.2270	1.6200e-003		0.0205	0.0205		0.0205	0.0205		324.3461	324.3461	6.2200e-003	5.9500e-003	326.2736

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364
Unmitigated	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3387					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4700e-003	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364
Total	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3962					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3387					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4700e-003	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364
Total	3.7364	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0341	0.0341	9.0000e-005		0.0364

7.0 Water Detail**7.1 Mitigation Measures Water**

Northgate exisitng - Sacramento Valley Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Northgate Industrial - Proposed - Sacramento County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Northgate Industrial - Proposed
Sacramento County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	265.69	1000sqft	17.55	265,686.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	374.84	CH4 Intensity (lb/MWhr)	0.013	N2O Intensity (lb/MWhr)	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From PD

Construction Phase - Project data. Added Architectural Coatings phase conservatively assumed to be concurrent with paving

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Assumed

Grading -

Trips and VMT - Project specific workers trips available, vendor trip default for building construction adjusted to include concrete delivery

Vehicle Trips - From project traffic study

Operational Off-Road Equipment - Equipment assumed based on a similar project

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	300.00	260.00
tblConstructionPhase	NumDays	30.00	130.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	PhaseEndDate	4/12/2024	3/31/2024
tblConstructionPhase	PhaseEndDate	2/16/2024	12/31/2023
tblConstructionPhase	PhaseEndDate	12/23/2022	3/31/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	3/31/2024
tblConstructionPhase	PhaseEndDate	11/11/2022	12/31/2022
tblConstructionPhase	PhaseStartDate	3/16/2024	10/1/2023
tblConstructionPhase	PhaseStartDate	12/24/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	11/12/2022	10/1/2022
tblConstructionPhase	PhaseStartDate	2/17/2024	10/1/2023
tblConstructionPhase	PhaseStartDate	10/29/2022	10/1/2022
tblLandUse	LotAcreage	6.10	17.55
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.44
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	44.00	49.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	112.00	120.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblVehicleTrips	ST_TR	1.74	3.37
tblVehicleTrips	SU_TR	1.74	3.37
tblVehicleTrips	WD_TR	1.74	3.37

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0939	0.9390	0.9454	1.8300e-003	0.0809	0.0405	0.1214	0.0106	0.0381	0.0487	0.0000	160.7211	160.7211	0.0390	3.0000e-004	161.7848
2023	0.9543	2.9173	3.3931	7.6500e-003	0.2059	0.1192	0.3251	0.0502	0.1139	0.1641	0.0000	679.1365	679.1365	0.0940	0.0204	687.5695
2024	0.6595	0.3601	0.5248	1.0400e-003	0.0124	0.0165	0.0289	3.3000e-003	0.0156	0.0189	0.0000	90.8792	90.8792	0.0185	2.6000e-004	91.4193
Maximum	0.9543	2.9173	3.3931	7.6500e-003	0.2059	0.1192	0.3251	0.0502	0.1139	0.1641	0.0000	679.1365	679.1365	0.0940	0.0204	687.5695

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0939	0.9390	0.9454	1.8300e-003	0.0430	0.0405	0.0835	6.5200e-003	0.0381	0.0446	0.0000	160.7209	160.7209	0.0390	3.0000e-004	161.7846
2023	0.9543	2.9173	3.3931	7.6500e-003	0.1870	0.1192	0.3061	0.0481	0.1139	0.1621	0.0000	679.1360	679.1360	0.0940	0.0204	687.5690
2024	0.6595	0.3601	0.5248	1.0400e-003	0.0124	0.0165	0.0289	3.3000e-003	0.0156	0.0189	0.0000	90.8791	90.8791	0.0185	2.6000e-004	91.4192
Maximum	0.9543	2.9173	3.3931	7.6500e-003	0.1870	0.1192	0.3061	0.0481	0.1139	0.1621	0.0000	679.1360	679.1360	0.0940	0.0204	687.5690

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	19.01	0.00	11.96	9.59	0.00	2.65	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2022	12-31-2022	1.0448	1.0448
2	1-1-2023	3-31-2023	1.0054	1.0054
3	4-1-2023	6-30-2023	0.6029	0.6029
4	7-1-2023	9-30-2023	0.6096	0.6096
5	10-1-2023	12-31-2023	1.6690	1.6690
6	1-1-2024	3-31-2024	1.0201	1.0201
		Highest	1.6690	1.6690

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003
Energy	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	151.0496	151.0496	5.1300e-003	9.0000e-004	151.4449
Mobile	0.4613	0.6265	4.3994	9.3400e-003	0.9652	7.3700e-003	0.9726	0.2581	6.8900e-003	0.2649	0.0000	864.6381	864.6381	0.0578	0.0425	878.7569
Offroad	0.0757	1.1189	9.5484	3.1000e-003		0.0339	0.0339		0.0319	0.0319	0.0000	310.0708	310.0708	0.1003	0.0000	312.5779
Waste						0.0000	0.0000		0.0000	0.0000	50.6970	0.0000	50.6970	2.9961	0.0000	125.5997
Water						0.0000	0.0000		0.0000	0.0000	21.7379	52.0505	73.7883	0.0766	0.0476	89.8740
Total	1.6988	1.7518	13.9565	0.0125	0.9652	0.0418	1.0069	0.2581	0.0393	0.2973	72.4349	1,377.8155	1,450.2503	3.2360	0.0910	1,558.2604

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003
Energy	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	151.0496	151.0496	5.1300e-003	9.0000e-004	151.4449
Mobile	0.4613	0.6265	4.3994	9.3400e-003	0.9652	7.3700e-003	0.9726	0.2581	6.8900e-003	0.2649	0.0000	864.6381	864.6381	0.0578	0.0425	878.7569
Offroad	0.0757	1.1189	9.5484	3.1000e-003		0.0339	0.0339		0.0319	0.0319	0.0000	310.0708	310.0708	0.1003	0.0000	312.5779
Waste						0.0000	0.0000		0.0000	0.0000	50.6970	0.0000	50.6970	2.9961	0.0000	125.5997
Water						0.0000	0.0000		0.0000	0.0000	21.7379	52.0505	73.7883	0.0766	0.0476	89.8740
Total	1.6988	1.7518	13.9565	0.0125	0.9652	0.0418	1.0069	0.2581	0.0393	0.2973	72.4349	1,377.8155	1,450.2503	3.2360	0.0910	1,558.2604

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2022	12/31/2022	5	65	
2	Grading	Grading	10/1/2022	3/31/2023	5	130	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3	Building Construction	Building Construction	1/1/2023	12/31/2023	5	260
4	Paving	Paving	10/1/2023	3/31/2024	5	130
5	Architectural Coating	Architectural Coating	10/1/2023	3/31/2024	5	130

Acres of Grading (Site Preparation Phase): 65**Acres of Grading (Grading Phase): 65****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 398,529; Non-Residential Outdoor: 132,843; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Site Preparation	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	8.00	231	0.29
Site Preparation	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Grading	Generator Sets	1	8.00	84	0.74
Paving	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Site Preparation	Skid Steer Loaders	1	8.00	65	0.37
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Rollers	1	8.00	80	0.38
Paving	Surfacing Equipment	1	8.00	263	0.30

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	5	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	120.00	49.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0345	0.0000	0.0345	3.7200e-003	0.0000	3.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0517	0.5298	0.5517	1.0500e-003		0.0230	0.0230		0.0216	0.0216	0.0000	91.5172	91.5172	0.0245	0.0000	92.1304
Total	0.0517	0.5298	0.5517	1.0500e-003	0.0345	0.0230	0.0575	3.7200e-003	0.0216	0.0253	0.0000	91.5172	91.5172	0.0245	0.0000	92.1304

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.3000e-003	0.0164	4.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.9058	3.9058	1.3000e-004	1.2000e-004	3.9444
Total	2.0000e-003	1.3000e-003	0.0164	4.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.9058	3.9058	1.3000e-004	1.2000e-004	3.9444

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0155	0.0000	0.0155	1.6700e-003	0.0000	1.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0517	0.5298	0.5517	1.0500e-003		0.0230	0.0230		0.0216	0.0216	0.0000	91.5171	91.5171	0.0245	0.0000	92.1303
Total	0.0517	0.5298	0.5517	1.0500e-003	0.0155	0.0230	0.0385	1.6700e-003	0.0216	0.0232	0.0000	91.5171	91.5171	0.0245	0.0000	92.1303

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-003	1.3000e-003	0.0164	4.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.9058	3.9058	1.3000e-004	1.2000e-004	3.9444
Total	2.0000e-003	1.3000e-003	0.0164	4.0000e-005	4.7700e-003	3.0000e-005	4.8000e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.9058	3.9058	1.3000e-004	1.2000e-004	3.9444

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0345	0.0000	0.0345	3.7200e-003	0.0000	3.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.4059	0.3528	6.8000e-004		0.0175	0.0175		0.0164	0.0164	0.0000	59.4395	59.4395	0.0142	0.0000	59.7934
Total	0.0372	0.4059	0.3528	6.8000e-004	0.0345	0.0175	0.0519	3.7200e-003	0.0164	0.0202	0.0000	59.4395	59.4395	0.0142	0.0000	59.7934

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-003	1.9600e-003	0.0246	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.8587	5.8587	2.0000e-004	1.8000e-004	5.9166
Total	3.0000e-003	1.9600e-003	0.0246	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.8587	5.8587	2.0000e-004	1.8000e-004	5.9166

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0155	0.0000	0.0155	1.6700e-003	0.0000	1.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.4059	0.3528	6.8000e-004		0.0175	0.0175		0.0164	0.0164	0.0000	59.4394	59.4394	0.0142	0.0000	59.7933
Total	0.0372	0.4059	0.3528	6.8000e-004	0.0155	0.0175	0.0330	1.6700e-003	0.0164	0.0181	0.0000	59.4394	59.4394	0.0142	0.0000	59.7933

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-003	1.9600e-003	0.0246	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.8587	5.8587	2.0000e-004	1.8000e-004	5.9166
Total	3.0000e-003	1.9600e-003	0.0246	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.8587	5.8587	2.0000e-004	1.8000e-004	5.9166

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0345	0.0000	0.0345	3.7200e-003	0.0000	3.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0344	0.3691	0.3511	6.8000e-004		0.0153	0.0153		0.0144	0.0144	0.0000	59.4399	59.4399	0.0141	0.0000	59.7921
Total	0.0344	0.3691	0.3511	6.8000e-004	0.0345	0.0153	0.0498	3.7200e-003	0.0144	0.0182	0.0000	59.4399	59.4399	0.0141	0.0000	59.7921

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269
Total	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0155	0.0000	0.0155	1.6700e-003	0.0000	1.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0344	0.3690	0.3511	6.8000e-004		0.0153	0.0153		0.0144	0.0144	0.0000	59.4398	59.4398	0.0141	0.0000	59.7921
Total	0.0344	0.3690	0.3511	6.8000e-004	0.0155	0.0153	0.0308	1.6700e-003	0.0144	0.0161	0.0000	59.4398	59.4398	0.0141	0.0000	59.7921

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269
Total	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2026	1.8279	2.0362	3.6600e-003		0.0834	0.0834		0.0801	0.0801	0.0000	313.8987	313.8987	0.0553	0.0000	315.2823
Total	0.2026	1.8279	2.0362	3.6600e-003		0.0834	0.0834		0.0801	0.0801	0.0000	313.8987	313.8987	0.0553	0.0000	315.2823

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3000e-003	0.3105	0.0936	1.2100e-003	0.0373	1.6500e-003	0.0390	0.0108	1.5800e-003	0.0124	0.0000	118.1439	118.1439	2.9100e-003	0.0173	123.3827
Worker	0.0447	0.0277	0.3627	9.9000e-004	0.1146	6.1000e-004	0.1152	0.0305	5.6000e-004	0.0310	0.0000	90.7747	90.7747	2.9100e-003	2.6300e-003	91.6302
Total	0.0530	0.3382	0.4563	2.2000e-003	0.1519	2.2600e-003	0.1541	0.0413	2.1400e-003	0.0434	0.0000	208.9186	208.9186	5.8200e-003	0.0200	215.0129

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2026	1.8279	2.0362	3.6600e-003		0.0834	0.0834		0.0801	0.0801	0.0000	313.8983	313.8983	0.0553	0.0000	315.2819
Total	0.2026	1.8279	2.0362	3.6600e-003		0.0834	0.0834		0.0801	0.0801	0.0000	313.8983	313.8983	0.0553	0.0000	315.2819

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.3000e-003	0.3105	0.0936	1.2100e-003	0.0373	1.6500e-003	0.0390	0.0108	1.5800e-003	0.0124	0.0000	118.1439	118.1439	2.9100e-003	0.0173	123.3827
Worker	0.0447	0.0277	0.3627	9.9000e-004	0.1146	6.1000e-004	0.1152	0.0305	5.6000e-004	0.0310	0.0000	90.7747	90.7747	2.9100e-003	2.6300e-003	91.6302
Total	0.0530	0.3382	0.4563	2.2000e-003	0.1519	2.2600e-003	0.1541	0.0413	2.1400e-003	0.0434	0.0000	208.9186	208.9186	5.8200e-003	0.0200	215.0129

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0327	0.3209	0.4091	8.1000e-004		0.0150	0.0150		0.0141	0.0141	0.0000	70.3079	70.3079	0.0176	0.0000	70.7481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0327	0.3209	0.4091	8.1000e-004		0.0150	0.0150		0.0141	0.0141	0.0000	70.3079	70.3079	0.0176	0.0000	70.7481

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269
Total	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0327	0.3209	0.4091	8.1000e-004		0.0150	0.0150		0.0141	0.0141	0.0000	70.3078	70.3078	0.0176	0.0000	70.7480
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0327	0.3209	0.4091	8.1000e-004		0.0150	0.0150		0.0141	0.0141	0.0000	70.3078	70.3078	0.0176	0.0000	70.7480

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269
Total	2.8000e-003	1.7300e-003	0.0227	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	4.0000e-005	1.9400e-003	0.0000	5.6734	5.6734	1.8000e-004	1.6000e-004	5.7269

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0314	0.3046	0.4098	8.1000e-004		0.0138	0.0138		0.0129	0.0129	0.0000	70.3023	70.3023	0.0175	0.0000	70.7408
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0314	0.3046	0.4098	8.1000e-004		0.0138	0.0138		0.0129	0.0129	0.0000	70.3023	70.3023	0.0175	0.0000	70.7408

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	1.5400e-003	0.0211	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	3.0000e-005	1.9400e-003	0.0000	5.4882	5.4882	1.6000e-004	1.5000e-004	5.5378
Total	2.6100e-003	1.5400e-003	0.0211	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	3.0000e-005	1.9400e-003	0.0000	5.4882	5.4882	1.6000e-004	1.5000e-004	5.5378

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0314	0.3046	0.4098	8.1000e-004		0.0138	0.0138		0.0129	0.0129	0.0000	70.3022	70.3022	0.0175	0.0000	70.7407
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0314	0.3046	0.4098	8.1000e-004		0.0138	0.0138		0.0129	0.0129	0.0000	70.3022	70.3022	0.0175	0.0000	70.7407

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	1.5400e-003	0.0211	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	3.0000e-005	1.9400e-003	0.0000	5.4882	5.4882	1.6000e-004	1.5000e-004	5.5378
Total	2.6100e-003	1.5400e-003	0.0211	6.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9000e-003	3.0000e-005	1.9400e-003	0.0000	5.4882	5.4882	1.6000e-004	1.5000e-004	5.5378

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3100e-003	0.0565	0.0785	1.3000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	11.0641	11.0641	6.6000e-004	0.0000	11.0807
Total	0.6240	0.0565	0.0785	1.3000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	11.0641	11.0641	6.6000e-004	0.0000	11.0807

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	1.2700e-003	0.0166	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.1605	4.1605	1.3000e-004	1.2000e-004	4.1997
Total	2.0500e-003	1.2700e-003	0.0166	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.1605	4.1605	1.3000e-004	1.2000e-004	4.1997

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3100e-003	0.0565	0.0785	1.3000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	11.0641	11.0641	6.6000e-004	0.0000	11.0806
Total	0.6240	0.0565	0.0785	1.3000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	11.0641	11.0641	6.6000e-004	0.0000	11.0806

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	1.2700e-003	0.0166	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.1605	4.1605	1.3000e-004	1.2000e-004	4.1997
Total	2.0500e-003	1.2700e-003	0.0166	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.1605	4.1605	1.3000e-004	1.2000e-004	4.1997

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8300e-003	0.0528	0.0784	1.3000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	11.0641	11.0641	6.2000e-004	0.0000	11.0797
Total	0.6236	0.0528	0.0784	1.3000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	11.0641	11.0641	6.2000e-004	0.0000	11.0797

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9200e-003	1.1300e-003	0.0155	4.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	4.0246	4.0246	1.2000e-004	1.1000e-004	4.0610
Total	1.9200e-003	1.1300e-003	0.0155	4.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	4.0246	4.0246	1.2000e-004	1.1000e-004	4.0610

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8300e-003	0.0528	0.0784	1.3000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	11.0641	11.0641	6.2000e-004	0.0000	11.0797
Total	0.6236	0.0528	0.0784	1.3000e-004		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003	0.0000	11.0641	11.0641	6.2000e-004	0.0000	11.0797

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9200e-003	1.1300e-003	0.0155	4.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	4.0246	4.0246	1.2000e-004	1.1000e-004	4.0610
Total	1.9200e-003	1.1300e-003	0.0155	4.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	4.0246	4.0246	1.2000e-004	1.1000e-004	4.0610

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4613	0.6265	4.3994	9.3400e-003	0.9652	7.3700e-003	0.9726	0.2581	6.8900e-003	0.2649	0.0000	864.6381	864.6381	0.0578	0.0425	878.7569
Unmitigated	0.4613	0.6265	4.3994	9.3400e-003	0.9652	7.3700e-003	0.9726	0.2581	6.8900e-003	0.2649	0.0000	864.6381	864.6381	0.0578	0.0425	878.7569

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	895.36	895.36	895.36	2,603,990	2,603,990
Total	895.36	895.36	895.36	2,603,990	2,603,990

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	10.00	5.00	6.50	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.1023	144.1023	5.0000e-003	7.7000e-004	144.4564
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.1023	144.1023	5.0000e-003	7.7000e-004	144.4564
NaturalGas Mitigated	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885
NaturalGas Unmitigated	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	130186	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885
Total		7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	130186	7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885
Total		7.0000e-004	6.3800e-003	5.3600e-003	4.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	6.9472	6.9472	1.3000e-004	1.3000e-004	6.9885

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	847538	144.1023	5.0000e-003	7.7000e-004	144.4564
Total		144.1023	5.0000e-003	7.7000e-004	144.4564

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	847538	144.1023	5.0000e-003	7.7000e-004	144.4564
Total		144.1023	5.0000e-003	7.7000e-004	144.4564

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003
Unmitigated	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1232					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0376					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e-004	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003
Total	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1232					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0376					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e-004	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003
Total	1.1611	3.0000e-005	3.3900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.5900e-003	6.5900e-003	2.0000e-005	0.0000	7.0200e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	73.7883	0.0766	0.0476	89.8740
Unmitigated	73.7883	0.0766	0.0476	89.8740

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	61.4408 / 0	73.7883	0.0766	0.0476	89.8740
Total		73.7883	0.0766	0.0476	89.8740

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	61.4408 / 0	73.7883	0.0766	0.0476	89.8740
Total		73.7883	0.0766	0.0476	89.8740

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	50.6970	2.9961	0.0000	125.5997
Unmitigated	50.6970	2.9961	0.0000	125.5997

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	249.75	50.6970	2.9961	0.0000	125.5997
Total		50.6970	2.9961	0.0000	125.5997

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	249.75	50.6970	2.9961	0.0000	125.5997
Total		50.6970	2.9961	0.0000	125.5997

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	5	8.00	365	89	0.20	CNG

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Off-Highway Tractors	2	8.00	365	124	0.44	Diesel
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UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0123	0.5989	8.4593	1.4000e-003		9.0300e-003	9.0300e-003		9.0300e-003	9.0300e-003	0.0000	160.8696	160.8696	0.0520	0.0000	162.1703
Off-Highway Tractors	0.0635	0.5200	1.0891	1.7000e-003		0.0249	0.0249		0.0229	0.0229	0.0000	149.2012	149.2012	0.0483	0.0000	150.4076
Total	0.0757	1.1189	9.5484	3.1000e-003		0.0339	0.0339		0.0319	0.0319	0.0000	310.0708	310.0708	0.1003	0.0000	312.5779

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Northgate Industrial - Proposed****Sacramento County, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	265.69	1000sqft	17.55	265,686.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	374.84	CH4 Intensity (lb/MWhr)	0.013	N2O Intensity (lb/MWhr)	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From PD

Construction Phase - Project data. Added Architectural Coatings phase conservatively assumed to be concurrent with paving

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Project data

Off-road Equipment - Assumed

Grading -

Trips and VMT - Project specific workers trips available, vendor trip default for building construction adjusted to include concrete delivery

Vehicle Trips - From project traffic study

Operational Off-Road Equipment - Equipment assumed based on a similar project

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	300.00	260.00
tblConstructionPhase	NumDays	30.00	130.00
tblConstructionPhase	NumDays	20.00	130.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	PhaseEndDate	4/12/2024	3/31/2024
tblConstructionPhase	PhaseEndDate	2/16/2024	12/31/2023
tblConstructionPhase	PhaseEndDate	12/23/2022	3/31/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	3/31/2024
tblConstructionPhase	PhaseEndDate	11/11/2022	12/31/2022
tblConstructionPhase	PhaseStartDate	3/16/2024	10/1/2023
tblConstructionPhase	PhaseStartDate	12/24/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	11/12/2022	10/1/2022
tblConstructionPhase	PhaseStartDate	2/17/2024	10/1/2023
tblConstructionPhase	PhaseStartDate	10/29/2022	10/1/2022
tblLandUse	LotAcreage	6.10	17.55
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.44
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	44.00	49.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	112.00	120.00

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblVehicleTrips	ST_TR	1.74	3.37
tblVehicleTrips	SU_TR	1.74	3.37
tblVehicleTrips	WD_TR	1.74	3.37

2.0 Emissions Summary

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.9151	28.8847	29.3053	0.0568	1.9711	1.2475	3.2186	0.2727	1.1712	1.4438	0.0000	5,483.065 8	5,483.065 8	1.3230	9.4500e- 003	5,518.953 7
2023	22.4102	28.2205	36.0473	0.0782	1.9665	1.2168	3.0983	0.4449	1.1632	1.5952	0.0000	7,632.010 2	7,632.010 2	1.1472	0.1769	7,713.396 4
2024	20.3162	11.0734	16.3330	0.0322	0.3956	0.5063	0.9019	0.1049	0.4812	0.5861	0.0000	3,113.198 7	3,113.198 7	0.6252	8.4600e- 003	3,131.348 2
Maximum	22.4102	28.8847	36.0473	0.0782	1.9711	1.2475	3.2186	0.4449	1.1712	1.5952	0.0000	7,632.010 2	7,632.010 2	1.3230	0.1769	7,713.396 4

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.9151	28.8847	29.3053	0.0568	1.0962	1.2475	2.3437	0.1782	1.1712	1.3494	0.0000	5,483.065 8	5,483.065 8	1.3230	9.4500e- 003	5,518.953 7
2023	22.4102	28.2205	36.0473	0.0782	1.6749	1.2168	2.8204	0.4320	1.1632	1.5952	0.0000	7,632.010 2	7,632.010 2	1.1472	0.1769	7,713.396 4
2024	20.3162	11.0734	16.3330	0.0322	0.3956	0.5063	0.9019	0.1049	0.4812	0.5861	0.0000	3,113.198 7	3,113.198 7	0.6252	8.4600e- 003	3,131.348 2
Maximum	22.4102	28.8847	36.0473	0.0782	1.6749	1.2475	2.8204	0.4320	1.1712	1.5952	0.0000	7,632.010 2	7,632.010 2	1.3230	0.1769	7,713.396 4

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	26.92	0.00	15.97	13.05	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619
Energy	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111
Mobile	3.0828	3.1667	26.2711	0.0552	5.4911	0.0406	5.5317	1.4640	0.0379	1.5019		5,626.0583	5,626.0583	0.3355	0.2472	5,708.1152
Offroad	0.4150	6.1309	52.3199	0.0170		0.1856	0.1856		0.1747	0.1747	0.0000	1,872.8490	1,872.8490	0.6057		1,887.9920
Total	9.8646	9.3328	78.6474	0.0724	5.4911	0.2290	5.7201	1.4640	0.2154	1.6794	0.0000	7,540.9272	7,540.9272	0.9422	0.2480	7,638.3802

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619
Energy	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111
Mobile	3.0828	3.1667	26.2711	0.0552	5.4911	0.0406	5.5317	1.4640	0.0379	1.5019		5,626.0583	5,626.0583	0.3355	0.2472	5,708.1152
Offroad	0.4150	6.1309	52.3199	0.0170		0.1856	0.1856		0.1747	0.1747	0.0000	1,872.8490	1,872.8490	0.6057		1,887.9920
Total	9.8646	9.3328	78.6474	0.0724	5.4911	0.2290	5.7201	1.4640	0.2154	1.6794	0.0000	7,540.9272	7,540.9272	0.9422	0.2480	7,638.3802

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2022	12/31/2022	5	65	
2	Grading	Grading	10/1/2022	3/31/2023	5	130	
3	Building Construction	Building Construction	1/1/2023	12/31/2023	5	260	
4	Paving	Paving	10/1/2023	3/31/2024	5	130	

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	10/1/2023	3/31/2024	5	130
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Acres of Grading (Site Preparation Phase): 65**Acres of Grading (Grading Phase): 65****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 398,529; Non-Residential Outdoor: 132,843; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Site Preparation	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	8.00	231	0.29
Site Preparation	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Grading	Generator Sets	1	8.00	84	0.74
Paving	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Skid Steer Loaders	1	8.00	65	0.37
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Rollers	1	8.00	80	0.38
Paving	Surfacing Equipment	1	8.00	263	0.30

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	5	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	120.00	49.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	30.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	1.5908	16.3028	16.9746	0.0322		0.7086	0.7086		0.6637	0.6637		3,104.013 1	3,104.013 1	0.8320		3,124.813 1
Total	1.5908	16.3028	16.9746	0.0322	1.0605	0.7086	1.7691	0.1145	0.6637	0.7782		3,104.013 1	3,104.013 1	0.8320		3,124.813 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0724	0.0366	0.5907	1.4400e-003	0.1521	8.2000e-004	0.1530	0.0404	7.6000e-004	0.0411		145.2109	145.2109	4.3400e-003	3.7800e-003	146.4449
Total	0.0724	0.0366	0.5907	1.4400e-003	0.1521	8.2000e-004	0.1530	0.0404	7.6000e-004	0.0411		145.2109	145.2109	4.3400e-003	3.7800e-003	146.4449

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Site Preparation - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	1.5908	16.3028	16.9746	0.0322		0.7086	0.7086		0.6637	0.6637	0.0000	3,104.013 1	3,104.013 1	0.8320		3,124.813 1
Total	1.5908	16.3028	16.9746	0.0322	0.4772	0.7086	1.1858	0.0515	0.6637	0.7152	0.0000	3,104.013 1	3,104.013 1	0.8320		3,124.813 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0724	0.0366	0.5907	1.4400e-003	0.1521	8.2000e-004	0.1530	0.0404	7.6000e-004	0.0411		145.2109	145.2109	4.3400e-003	3.7800e-003	146.4449
Total	0.0724	0.0366	0.5907	1.4400e-003	0.1521	8.2000e-004	0.1530	0.0404	7.6000e-004	0.0411		145.2109	145.2109	4.3400e-003	3.7800e-003	146.4449

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.1432	12.4904	10.8541	0.0210		0.5368	0.5368		0.5056	0.5056		2,016.025 4	2,016.025 4	0.4801		2,028.028 5
Total	1.1432	12.4904	10.8541	0.0210	0.5303	0.5368	1.0671	0.0573	0.5056	0.5629		2,016.025 4	2,016.025 4	0.4801		2,028.028 5

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1087	0.0549	0.8860	2.1600e-003	0.2282	1.2400e-003	0.2295	0.0605	1.1400e-003	0.0617		217.8164	217.8164	6.5100e-003	5.6700e-003	219.6673
Total	0.1087	0.0549	0.8860	2.1600e-003	0.2282	1.2400e-003	0.2295	0.0605	1.1400e-003	0.0617		217.8164	217.8164	6.5100e-003	5.6700e-003	219.6673

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.1432	12.4904	10.8541	0.0210		0.5368	0.5368		0.5056	0.5056	0.0000	2,016.025 4	2,016.025 4	0.4801		2,028.028 4
Total	1.1432	12.4904	10.8541	0.0210	0.2386	0.5368	0.7754	0.0258	0.5056	0.5314	0.0000	2,016.025 4	2,016.025 4	0.4801		2,028.028 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1087	0.0549	0.8860	2.1600e-003	0.2282	1.2400e-003	0.2295	0.0605	1.1400e-003	0.0617		217.8164	217.8164	6.5100e-003	5.6700e-003	219.6673
Total	0.1087	0.0549	0.8860	2.1600e-003	0.2282	1.2400e-003	0.2295	0.0605	1.1400e-003	0.0617		217.8164	217.8164	6.5100e-003	5.6700e-003	219.6673

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.0573	11.3552	10.8019	0.0210		0.4714	0.4714		0.4440	0.4440		2,016.0376	2,016.0376	0.4779		2,027.9859
Total	1.0573	11.3552	10.8019	0.0210	0.5303	0.4714	1.0017	0.0573	0.4440	0.5012		2,016.0376	2,016.0376	0.4779		2,027.9859

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748
Total	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	1.0573	11.3552	10.8019	0.0210		0.4714	0.4714		0.4440	0.4440	0.0000	2,016.0376	2,016.0376	0.4779		2,027.9859
Total	1.0573	11.3552	10.8019	0.0210	0.2386	0.4714	0.7101	0.0258	0.4440	0.4697	0.0000	2,016.0376	2,016.0376	0.4779		2,027.9859

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748
Total	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5583	14.0610	15.6629	0.0282		0.6418	0.6418		0.6159	0.6159		2,661.646 9	2,661.646 9	0.4693		2,673.378 7
Total	1.5583	14.0610	15.6629	0.0282		0.6418	0.6418		0.6159	0.6159		2,661.646 9	2,661.646 9	0.4693		2,673.378 7

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0656	2.2689	0.7063	9.3400e-003	0.2952	0.0127	0.3079	0.0850	0.0121	0.0971		1,001.482 7	1,001.482 7	0.0248	0.1468	1,045.848 8
Worker	0.4041	0.1942	3.2616	8.3400e-003	0.9128	4.6900e-003	0.9175	0.2421	4.3200e-003	0.2465		843.4631	843.4631	0.0234	0.0210	850.2991
Total	0.4697	2.4630	3.9679	0.0177	1.2081	0.0174	1.2254	0.3271	0.0164	0.3436		1,844.945 7	1,844.945 7	0.0482	0.1678	1,896.147 8

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5583	14.0610	15.6629	0.0282		0.6418	0.6418		0.6159	0.6159	0.0000	2,661.646 9	2,661.646 9	0.4693		2,673.378 7
Total	1.5583	14.0610	15.6629	0.0282		0.6418	0.6418		0.6159	0.6159	0.0000	2,661.646 9	2,661.646 9	0.4693		2,673.378 7

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0656	2.2689	0.7063	9.3400e-003	0.2952	0.0127	0.3079	0.0850	0.0121	0.0971		1,001.482 7	1,001.482 7	0.0248	0.1468	1,045.848 8
Worker	0.4041	0.1942	3.2616	8.3400e-003	0.9128	4.6900e-003	0.9175	0.2421	4.3200e-003	0.2465		843.4631	843.4631	0.0234	0.0210	850.2991
Total	0.4697	2.4630	3.9679	0.0177	1.2081	0.0174	1.2254	0.3271	0.0164	0.3436		1,844.945 7	1,844.945 7	0.0482	0.1678	1,896.147 8

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0061	9.8750	12.5883	0.0248		0.4612	0.4612		0.4345	0.4345		2,384.6528	2,384.6528	0.5972		2,399.5816
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0061	9.8750	12.5883	0.0248		0.4612	0.4612		0.4345	0.4345		2,384.6528	2,384.6528	0.5972		2,399.5816

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748
Total	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0061	9.8750	12.5883	0.0248		0.4612	0.4612		0.4345	0.4345	0.0000	2,384.6528	2,384.6528	0.5972		2,399.5816
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0061	9.8750	12.5883	0.0248		0.4612	0.4612		0.4345	0.4345	0.0000	2,384.6528	2,384.6528	0.5972		2,399.5816

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748
Total	0.1010	0.0485	0.8154	2.0900e-003	0.2282	1.1700e-003	0.2294	0.0605	1.0800e-003	0.0616		210.8658	210.8658	5.8600e-003	5.2400e-003	212.5748

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9662	9.3734	12.6098	0.0248		0.4232	0.4232		0.3982	0.3982		2,384.4630	2,384.4630	0.5949		2,399.3355
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9662	9.3734	12.6098	0.0248		0.4232	0.4232		0.3982	0.3982		2,384.4630	2,384.4630	0.5949		2,399.3355

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0943	0.0432	0.7556	2.0200e-003	0.2282	1.1100e-003	0.2293	0.0605	1.0300e-003	0.0616		203.9259	203.9259	5.2900e-003	4.8800e-003	205.5118
Total	0.0943	0.0432	0.7556	2.0200e-003	0.2282	1.1100e-003	0.2293	0.0605	1.0300e-003	0.0616		203.9259	203.9259	5.2900e-003	4.8800e-003	205.5118

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9662	9.3734	12.6098	0.0248		0.4232	0.4232		0.3982	0.3982	0.0000	2,384.463 0	2,384.463 0	0.5949		2,399.335 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9662	9.3734	12.6098	0.0248		0.4232	0.4232		0.3982	0.3982	0.0000	2,384.463 0	2,384.463 0	0.5949		2,399.335 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0943	0.0432	0.7556	2.0200e-003	0.2282	1.1100e-003	0.2293	0.0605	1.0300e-003	0.0616		203.9259	203.9259	5.2900e-003	4.8800e-003	205.5118
Total	0.0943	0.0432	0.7556	2.0200e-003	0.2282	1.1100e-003	0.2293	0.0605	1.0300e-003	0.0616		203.9259	203.9259	5.2900e-003	4.8800e-003	205.5118

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.9455					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	19.2010	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.0356	0.5980	1.5300e-003	0.1674	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		154.6349	154.6349	4.3000e-003	3.8500e-003	155.8882
Total	0.0741	0.0356	0.5980	1.5300e-003	0.1674	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		154.6349	154.6349	4.3000e-003	3.8500e-003	155.8882

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.9455					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	19.2010	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0741	0.0356	0.5980	1.5300e-003	0.1674	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		154.6349	154.6349	4.3000e-003	3.8500e-003	155.8882
Total	0.0741	0.0356	0.5980	1.5300e-003	0.1674	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		154.6349	154.6349	4.3000e-003	3.8500e-003	155.8882

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.9455					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
Total	19.1865	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0692	0.0317	0.5541	1.4800e-003	0.1674	8.2000e-004	0.1682	0.0444	7.5000e-004	0.0451		149.5457	149.5457	3.8800e-003	3.5800e-003	150.7087
Total	0.0692	0.0317	0.5541	1.4800e-003	0.1674	8.2000e-004	0.1682	0.0444	7.5000e-004	0.0451		149.5457	149.5457	3.8800e-003	3.5800e-003	150.7087

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	18.9455					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
Total	19.1865	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0692	0.0317	0.5541	1.4800e-003	0.1674	8.2000e-004	0.1682	0.0444	7.5000e-004	0.0451		149.5457	149.5457	3.8800e-003	3.5800e-003	150.7087
Total	0.0692	0.0317	0.5541	1.4800e-003	0.1674	8.2000e-004	0.1682	0.0444	7.5000e-004	0.0451		149.5457	149.5457	3.8800e-003	3.5800e-003	150.7087

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0828	3.1667	26.2711	0.0552	5.4911	0.0406	5.5317	1.4640	0.0379	1.5019		5,626.058 3	5,626.058 3	0.3355	0.2472	5,708.115 2
Unmitigated	3.0828	3.1667	26.2711	0.0552	5.4911	0.0406	5.5317	1.4640	0.0379	1.5019		5,626.058 3	5,626.058 3	0.3355	0.2472	5,708.115 2

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	895.36	895.36	895.36	2,603,990	2,603,990
Total	895.36	895.36	895.36	2,603,990	2,603,990

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	10.00	5.00	6.50	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111
NaturalGas Unmitigated	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	356.674	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111
Total		3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.356674	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111
Total		3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003		41.9617	41.9617	8.0000e-004	7.7000e-004	42.2111

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619
Unmitigated	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619
Total	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619
Total	6.3630	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0619

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	5	8.00	365	89	0.20	CNG
Off-Highway Tractors	2	8.00	365	124	0.44	Diesel

Northgate Industrial - Proposed - Sacramento County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0672	3.2816	46.3523	7.6800e-003		0.0495	0.0495		0.0495	0.0495	0.0000	971.6634	971.6634	0.3143		979.5198
Off-Highway Tractors	0.3478	2.8493	5.9676	9.3100e-003		0.1362	0.1362		0.1253	0.1253	0.0000	901.1857	901.1857	0.2915		908.4722
Total	0.4150	6.1309	52.3199	0.0170		0.1856	0.1856		0.1747	0.1747	0.0000	1,872.8490	1,872.8490	0.6057		1,887.9920

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

Appendix B

Biological Resources

APPENDIX B – TABLE 1
SPECIAL-STATUS SPECIES IN THE VICINITY OF THE PROJECT SITE

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
Fish			
Sacramento perch <i>Archoplites interruptus</i>	–/CSC	Inhabits freshwater sloughs, slow-moving rivers, lakes, reservoirs, and farm ponds. Often found near submerged or emergent vegetation. Tolerates variable conditions, including a wide range of turbidity, temperature, salinity, and pH. Occurs mainly in inshore areas of larger lakes.	None. The project site does not provide habitat for this species. Species could occur in adjacent Steelhead Creek; however, the project would not impact this area.
Delta smelt <i>Hypomesus transpacificus</i>	CH, FT/SE	Inhabits open surface waters in the Delta. Seasonally in Suisun Bay, the Carquinez Strait, and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators. May be affected by downstream sedimentation.	None. The project site occurs outside of the known extant geographic range and does not provide habitat for this species.
California Central Valley DPS steelhead <i>Oncorhynchus mykiss</i>	FT/–	Inhabits rivers and streams tributary to the Sacramento and San Joaquin Rivers and Delta ecosystems.	None. The project site does not provide habitat for this species. Species occurs in adjacent Steelhead Creek; however, the project would not impact this area.
Central Valley ESU spring-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FT/ST	Inhabits rivers and streams tributary to the Sacramento and San Joaquin Rivers and Delta ecosystems.	None. The project site does not provide habitat for this species. Species could occur in adjacent Steelhead Creek; however, the project would not impact this area.
Sacramento River ESU winter-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FE/SE	Inhabits rivers and streams tributary to the Sacramento and San Joaquin Rivers and Delta ecosystems.	None. The project site does not provide habitat for this species. Species could occur in adjacent Steelhead Creek; however, the project would not impact this area.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	–/CSC	Inhabits aquatic, estuary, freshwater marsh, and Sacramento/San Joaquin River flowing waters.	None. The project site does not provide habitat for this species. Species could occur in adjacent Steelhead Creek; however, the project would not impact this area.
Longfin smelt <i>Spirinchus thaleichthys</i>	–/ST	Spawns from November to June in freshwater over sandy-gravel substrates, rocks, or aquatic plants. After hatching, larvae move up into surface waters and are transported downstream into brackish-water nursery areas. In the San Francisco estuary, longfin smelt are usually found downstream of Rio Vista on the Sacramento River and from the vicinity of Medford Island downstream on the San Joaquin River. They are occasionally found upstream of these locations.	None. The project site does not provide habitat for this species. Species could occur in adjacent Steelhead Creek; however, the project would not impact this area.
Invertebrates			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/–	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None. The project site does not provide habitat for this species.

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
Monarch butterfly – California overwintering population <i>Danaus plexippus</i> pop. 1	FC/–	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	None. Minimal suitable overwintering habitat in mature trees within the project site. No overwintering sites are known in Sacramento County. ¹
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT/–	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>). Prefers to lay eggs in elderberry shrubs 2–8 inches in diameter; some preference shown for "stressed" elderberry shrubs.	None. The project site does not provide habitat for this species. No elderberry shrubs are present within the project site.
Western ridged mussel <i>Gonidea angulata</i>	–/–	Primarily creeks and rivers and less often lakes. Originally in most of state, now extirpated from Central and Southern California.	None. The project site does not provide habitat for this species.
California linderiella <i>Linderiella occidentalis</i>	–/–	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	None. The project site does not provide habitat for this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE/–	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	None. The project site does not provide habitat for this species.
Amphibians/Reptiles			
California tiger salamander <i>Ambystoma californiense</i>	FT/CT	Found in vernal pools, ephemeral wetlands, and seasonal ponds, including constructed stock ponds, in grassland and oak savanna plant communities from 10 to 3,450 feet.	None. The project site does not provide habitat for this species.
Western pond turtle <i>Actinemys marmorata</i>	–/CSC	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low-gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Low. The project site does not provide suitable aquatic or upland aestivation habitat for this species. The adjacent Steelhead Creek provides potential habitat for this species; however, the project site is separated from the creek by a levee and cyclone fencing. The nearest occurrence record is located approximately 3.25 miles northeast of the project site (Occurrence No. 2, site date 1995).
Giant garter snake <i>Thamnophis gigas</i>	FT/CT	Found in permanent waterways including agricultural wetlands, irrigation and drainage canals, low-gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November–mid-March).	Low. The project site does not provide suitable habitat for this species. The portion of Steelhead Creek within the vicinity of the project site provides marginally suitable habitat for this species; however, the project site is separated from the creek by a levee and cyclone fencing and would not be impacted by project activities. A 2010 occurrence is recorded in Steelhead Creek approximately 5.5 miles north of the project site. Multiple

¹ Pelton, E., S. Jepsen, C. Schultz, C. Fallon, and S.H. Black. 2016. State of the Monarch Butterfly Overwintering Sites in California. 40+vi pp. Portland, OR. The Xerxes Society for Invertebrate Conservation.

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
			CNDDDB records are located approximately 1.6 miles west of the project site in the East Drainage Canal; however, these records are reported to be likely extirpated.
Birds			
Cooper's hawk <i>Accipiter cooperii</i>	–/WL	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.	High. The mature trees in the vicinity of the project site provide suitable nesting habitat. The nearest CNDDDB record located approximately 2.5 miles south of the project site (Occurrence No. 61). This nest was located along Steelhead Creek and was observed on July 17, 1996.
Tricolored blackbird <i>Agelaius tricolor</i>	–/CT (nesting colony)	Nests in dense blackberry, cattail, tules, bulrushes, sedges, willow, or wild rose in freshwater marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals).	None. The project site does not provide suitable nesting habitat for this species. Suitable nesting habitat may be available in adjacent Steelhead Creek; however, project activities are not expected to impact this area or cause direct or indirect impact to any potential nesting tricolored blackbirds.
Great egret (nesting colony) <i>Ardea alba</i>	–/–	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Low. While trees are present on the project site, minimal suitable nesting habitat is available and no roosting colonies have been reported in this area.
Great blue heron (nesting colony) <i>Ardea herodias</i>	–/–	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Low. While trees are present on the project site, minimal suitable nesting habitat is available and no roosting colonies have been reported in this area.
Burrowing owl <i>Athene cunicularia</i>	–/CSC	Yearlong resident of open, dry grassland and desert habitat, and in grass, forb, and open shrub stages of pinyon-juniper and Ponderosa pine habitats, from sea level to 5,300 feet. Uses small mammal burrows, often those of ground squirrels, for roosting and nesting cover. Nest boxes, pipes, and culverts may be used if burrows are scarce. Occurs throughout CA except the high mountains and northwestern coastal forests.	High. Project site does not provide suitable nesting habitat. However, suitable nesting habitat present on levee that runs adjacent to the east border of the project site. The nearest CNDDDB record is just west of the project site on this Steelhead Creek levee, just west of East Levee Road (Occurrence No. 841). Two owls and a burrow were observed in this area on July 1, 2006; two adults with two juveniles were observed on June 9, 2007. Four juveniles were observed on June 28, 2007.
Swainson's hawk <i>Buteo swainsoni</i>	–/CT	Nests peripherally to valley riparian systems in lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley.	High. The mature trees in the vicinity of the project site provide suitable nesting habitat. No foraging habitat occurs on site. A Swainson's hawk was observed carrying nesting material during the May 6, 2022 reconnaissance survey. The nearest CNDDDB record for this species is located approximately 1.2 miles north of the project site along Dry Creek, just west of Steelhead Creek (Occurrence No. 1018). This nest was observed in 2002.

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT/CE/–	Found in riparian forest (willow-cottonwood dominated).	Low. The project site does not provide suitable nesting habitat for this species. Suitable nesting habitat may be available in adjacent Steelhead Creek; however, project activities are not expected to impact this area or cause direct or indirect impact to any potential nesting cuckoos in riparian habitat. This species' population has declined within the Sacramento Valley and recent surveys on the Sacramento River had extremely low detection numbers. ²
Snowy egret (nesting colony) <i>Egretta thula</i>	–/–	Colonial nester, with nest sites often situated in protected beds of dense tules. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	Low. While trees are present on the project site, minimal suitable nesting habitat is available and no roosting colonies have been reported in this area.
White-tailed kite <i>Elanus leucurus</i>	–/CFP	Yearlong resident in coastal and valley lowlands and is rarely found away from agricultural areas. Nests in trees near open foraging areas in lowland grasslands, agricultural areas, wetlands, oak-woodland and savannah habitats, and riparian areas associated with open areas.	Moderate. The trees within and in the vicinity of the project site provide suitable nesting habitat for this species; however, project site is not immediately adjacent to open foraging habitat. The nearest CNDDDB record is located approximately 0.8-mile north of the project site (Occurrence No. 69). The nest tree was an ornamental tree on a vacant lot; surrounded by residential to the north, Steelhead Creek to the east, and vacant land to the south and west.
California black rail <i>Laterallus jamaicensis coturniculus</i>	–/CT	Found in saltwater, brackish, and freshwater marshes. Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	None. The project site does not provide suitable nesting habitat for this species.
Song sparrow ("Modesto" population) <i>Melospiza melodia</i> pop. 1	–/CSC	Central lower basin of Great Valley, from Colusa County south to Stanislaus County and east of Suisun Marshes. Breeds chiefly below 200 feet elevation. Freshwater marshes, riparian thickets, sparsely vegetated irrigation canals, and Valley Oak restoration sites. Cover consists of willow and nettle thickets, growths of tules and cattails, and riparian oak forests with sufficient understory of blackberry.	Low. Shrubs within the project site provide poor quality nesting habitat. Suitable nesting habitat may be available in adjacent Steelhead Creek; however, project activities are not expected to impact this area or cause direct or indirect impact to any potential nesting cuckoos in riparian habitat. The nearest CNDDDB record is from 1900 and is located south of the project site in an undetermined location (Occurrence No. 83).
Black-crowned night heron (nesting colony) <i>Nycticorax nycticorax</i>	–/–	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Low. While trees are present on the project site, minimal suitable nesting habitat is available and no roosting colonies have been reported in this area.
Purple martin <i>Progne subis</i>	–/CSC	In the western U.S.- occurs in the Rocky Mountains, Sonoran Desert, Central Mexico, and Pacific Coast states. Breeding occurs from April into August. Inhabits open areas with an	Moderate. The mature trees in the vicinity of the project site provide suitable nesting habitat. The nearest CNDDDB record for this species is from

² Dettling, M.D., Seavy, N.E., Howell, C.A. and Gardali, T., 2015. Current status of Western Yellow-billed Cuckoo along the Sacramento and Feather rivers, California. *PLoS one*, 10(4), p.e0125198.

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
		open water source nearby. Purple martins nest colonially or singly in cavities both natural and human-made in a variety of open and partly open situations, frequently near water or around town.	2003 and is located approximately 3 miles southeast of the project site (Occurrence No. 17). These birds were nesting in weep holes in freeway and street overpasses.
Bank swallow <i>Riparia riparia</i>	–/CT	Nests in riverbanks and forages over riparian areas and adjacent uplands.	None. The project site does not provide nesting habitat for this species. Species could occur along adjacent Steelhead Creek; however, the project would not impact this area and no indirect or direct impacts to potential bank swallows are expected.
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE/CE	Inhabits willow thickets and other dense riparian habitat below ± 2,000 feet. Considered extirpated from the Central Valley (rare recent nesting in the San Joaquin Valley) (USFWS 2006), and most nesting occurs in southwestern California, from Santa Barbara County southward (mainly in San Diego and Riverside counties), and from northwestern Baja California south to at least Cataviña.	None. The project site occurs outside of the extant geographical range for this species.

Mammals

Hoary bat <i>Lasiurus cinereus</i>	–/– /WBWG: M	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Moderate. Trees within the project site provide potential roosting habitat. The adjacent Steelhead Creek provides potential foraging habitat. The nearest CNDDDB record for this species is located approximately 4 miles southwest from the project site, sited 1991 (Occurrence No. 137).
American badger <i>Taxidea taxus</i>	–/CSC	Found throughout most of California except the northern North Coast. Abundant in drier open stages of many shrub, forest, and herbaceous habitats with friable soils. Feeds on fossorial rodents, some reptiles, insects, earthworms, bird eggs, and carrion. Friable soils are required to dig burrows for refugia and rearing young.	None. The project site does not provide suitable habitat for this species. While adjacent Steelhead Creek may provide a migratory corridor for this species, the project site is separated from this feature by a levee and cyclone fence.

Plants

Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	–/–/1B.1	Annual herb found in vernal mesic meadows and subalkaline flats from 5 to 250 feet. Known from the Sacramento Valley. Blooms April through May.	None. The project site does not provide suitable habitat for this species.
Valley brodiaea <i>Brodiaea rosea</i> ssp. <i>vallicola</i>	–/–/4.2	Valley and foothill grassland (swales), Vernal pools. Old alluvial terraces; silty, sandy, and gravelly loam. Blooms April through May (June).	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey. No CNDDDB or CNPS occurrence records within 5 miles of the project site.
Parry's rough tarplant <i>Centromadia parryi</i> ssp. <i>rudis</i>	–/–/4.2	Valley and foothill grassland, vernal pools. Alkaline, vernal mesic, seeps, sometimes roadsides. Blooms May–October.	Low. The project site provides very poor quality habitat and this species was not observed during the May 6, 2022 biological survey. No CNDDDB or CNPS occurrence records within 5 miles of the project site.
Dwarf downingia <i>Downingia pusilla</i>	–/–/ 2B.2	Annual herb found in mesic valley and foothill grassland and vernal pools from 3 to 1,500 feet. Known from the north Coast Ranges,	None. The project site does not provide suitable habitat and this species was

Common Name Scientific Name	Status (Federal/ State)	Habitat Requirements	Potential to Occur
		Central Valley, and Bay Area. Blooms March through May	not observed during the May 6, 2022 biological survey.
Stinkbells <i>Fritillaria agrestis</i>	—/—/ 4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland. Clay, sometimes serpentinite. Blooms March through June.	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	—/CE/ 1B.2	Annual herb found in clay soils in vernal pools and along lake margins from 30 to 7,800 feet. Blooms April through August.	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> ssp. <i>occidentalis</i>	—/—/1B.2	Perennial rhizomatous herb found in freshwater marshes and swamps, often in riprap on the sides of levees, from 0 to 400 feet. Known from the Central Valley and Cascade Range foothills. Blooms June through September.	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey.
Legenere <i>Legenere limosa</i>	—/—/1B.1	Annual herb found in vernal pools and similar mesic areas from 3 to 2,900 feet. Blooms April through June.	None. The project site does not provide suitable habitat for this species. This species was not observed during the April 14, 2021 biological survey that was conducted within the evident and identifiable period.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	—/—/1B.2	Emergent perennial rhizomatous herb found in freshwater marshes, swamps, ponds, and ditches from 0 to 2,200 feet. Blooms May through October, and sometimes into November.	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey.
Suisun Marsh aster <i>Symphyotrichum lentum</i>	—/—/1B.2	Perennial rhizomatous herb found in freshwater or brackish marshes and swamps from 0 to 10 feet. Known from the Sacramento Valley, Bay Area, and central coast. Blooms from May to November, and sometimes as early as April.	None. The project site does not provide suitable habitat and this species was not observed during the May 6, 2022 biological survey.

NOTES:

Delta = Sacramento–San Joaquin Delta; DPS = distinct population segment; ESU = evolutionarily significant unit

STATUS CODES:

Federal:

FE = federal endangered
FEET = federal threatened
FC = candidate
PT = proposed threatened
FPD = proposed for delisting
FD = delisted
EFH = essential fish habitat
CH = critical habitat

California:

CE = State endangered
CT = State threatened
CR = State rare
CSC = California species of special concern
CCT = State threatened candidate
CFP = California fully protected

Other:

Western Bat Working Group (WBGW) Ranks: L = Low; M = Medium; H = High.

California Native Plant Society (CNPS) California Rare Plant Rank (CRPR)

1A = Presumed extirpated in California; rare or extinct in other parts of its range.

1B = Rare, threatened, or endangered throughout range; most species in this rank are endemic to California.

2A = Extirpated in California, but common in other parts of its range.

2B = Rare, threatened, or endangered in California but common in other parts of its range.

An extension reflecting the level of threat to each species is appended to each rarity category as follows:

.1 = Seriously endangered in California

.2 = Fairly endangered in California



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:
Project Code: 2022-0043798
Project Name: CA

May 17, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Project Code: 2022-0043798

Event Code: None

Project Name: CA

Project Type: Commercial Development

Project Description: The project applicant (LTFS Investors, LLC) proposes to develop the Northgate Industrial Park, which would include the renovation of one structure and the development of a new structure to create an approximately 266,000 square feet warehouse/light industrial use in North Natomas area of the City of Sacramento.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.643112349999996,-121.47557934161773,14z>



Counties: Sacramento County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Sacramento city
Name: Sharon Dulava
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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Rio Linda (3812164) OR Taylor Monument (3812165) OR Sacramento West (3812155) OR Sacramento East (3812154))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Archoplites interruptus</i> Sacramento perch	AFCQB07010	None	None	G1	S1	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener var. ferrisiae</i> Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2T3	S3	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elderberry Savanna</i> Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Fritillaria agrestis</i> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S1S2	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<i>Great Valley Cottonwood Riparian Forest</i> Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
<i>Hibiscus lasiocarpus var. occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G3G4	S4	
<i>Lateralus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3T1	S1	FP
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia pop. 1</i> song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Oncorhynchus tshawytscha pop. 11</i> chinook salmon - Central Valley spring-run ESU	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
<i>Oncorhynchus tshawytscha pop. 7</i> chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	G5T1Q	S1	
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
<i>Progne subis</i> purple martin	ABPAU01010	None	None	G5	S3	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
<i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 43




CNPS Rare Plant Inventory





Search Results

10 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3812164:3812165:3812155:3812154]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<i>Astragalus tener</i> <i>var. ferrisiae</i>	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	
<i>Brodiaea rosea</i> <i>ssp. vallicola</i>	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May (Jun)	None	None	G5T3	S3	4.2	 <p>© 2011 Steven Perry</p>
<i>Centromadia parryi</i> <i>ssp. rudis</i>	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	No Photo Available
<i>Downingia pusilla</i>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2	No Photo Available
<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	<p>© 2016 Aaron Schusteff</p>
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2	 <p>©2004 Carol W. Witham</p>
<i>Hibiscus lasiocarpus</i> <i>var. occidentalis</i>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	 <p>© 2020 Steven Perry</p>

<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	
										©2000 John Game
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct (Nov)	None	None	G3	S3	1B.2	
										©2013 Debra L. Cook
<u>Symphytotrichum lentum</u>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	No Photo Available

Showing 1 to 10 of 10 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org> [accessed 17 May 2022].

CONTACT US

Send questions and comments to rareplants@cnps.org.

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CONTRIBUTORS

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[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)



Developed by
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Appendix C

Confidential Cultural Resources Technical Report

**On file with Community Development
Department**

Appendix D

Vehicle Miles Traveled Analysis



May 9, 2022

Jonathan Braun
LaTerra Development, LLC
1880 Centura Park East, Suite 1017
Los Angeles, CA 90067

LLG Reference: 3-22-3563

Subject: **Northgate Industrial Park Project Vehicle Miles Traveled
Assessment**
City of Sacramento

Dear Mr. Braun:

Linscott, Law & Greenspan, Engineers (LLG) has prepared this letter report for the proposed Northgate Industrial Park Project to be located at 4100 Northgate Boulevard in the City of Sacramento. The Project proposes repurposing a currently vacant 156,013 square-foot Fry's Electronics building into an industrial warehouse and constructing an additional 109,673 square-foot industrial warehouse. The Project would therefore develop approximately 265,686 square feet for warehouse industrial use. **Figure 1** shows the Project Area and **Figure 2** shows the Site Plan. The letter report aims to present the Vehicles Miles Traveled (VMT) assessment for the Project.

Included in this letter report are the following:

1. VMT Background
2. VMT Assessment
3. Conclusion

1. VMT BACKGROUND

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. These changes include eliminating auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The justification for this paradigm shift is that Auto Delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions. The VMT standard for evaluating transportation impacts under CEQA became mandatory statewide on July 1, 2020.

VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is a measure of the use and efficiency of the transportation network. VMT is calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip)

Engineers & Planners

Traffic
Transportation
Parking

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Philip M. Linscott, PE (1924-2000)
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Dave Roseman, PE
An LG2WB Company Founded 1966

travel and is estimated for a typical weekday to measure transportation impacts. The City of Sacramento's draft transportation impact guidelines is consistent with the technical advisory published by the Governor's Office of Planning and Research (OPR).

2. VMT ASSESSMENT

According to OPR's technical advisory, if a project that replaces existing VMT-generating land uses leads to an overall net decrease in VMT, the project would lead to a less-than-significant transportation impact.

To assess if the proposed Project leads to an overall net decrease in the VMT, the VMT was calculated utilizing the average daily traffic and the trip length (i.e., VMT = Project Trips x Trip Length).

The trip generation rates for the existing land use and proposed Project are based on the average trip rates in the 11th Edition of the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). The Electronic Superstore land use was utilized for the currently vacant Fry's Electronics building and the Industrial Park land use was utilized for the proposed Project. **Attachment A** contains the ITE land use informational sheets. **Table 1** tabulates the trip generation calculations. As shown in **Table 1**, the proposed Project is calculated to generate 896 ADT, which would replace the 6,405 ADT the existing land use was generating.

Table 1
Project Trip Generation

Land Use	Quantity	Daily Trip Ends (ADT)	
		Rate ^a	Volume
Existing: Electronic Superstore (ITE 863)	156.013 KSF	41.05 / KSF	(6,405)
Proposed: Industrial Park (ITE 130)	265.686 KSF	3.37 / KSF	896
Delta			(5,509)

Footnotes:

- a. Trip rates obtained from ITE's *Trip Generation Manual* (11th Editions)

The trip length for the existing and proposed land uses is based on SANDAG's (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (see **Attachment B**). For the existing Fry's Electronics, the trip length of 5.2 miles associated with a regional shopping center land use was utilized to be conservative. For the proposed Project, the trip length of 9.0 miles associated with an Industrial/Business Park land use was utilized. Based on the above, **Table 2** tabulates the VMT calculations. As shown in **Table 2**, the proposed Project VMT is 8,064, which is substantially less than the VMT of the existing land use. Therefore, the Proposed project that is replacing the existing VMT-generating land use would lead to an overall net decrease in VMT.

Table 2
Vehicle Miles Traveled

Land Use	Daily Trip Ends (ADT)	Trip Length (miles) ^a	Vehicle Miles Traveled (VMT)
Existing: Electronic Superstore (ITE 863)	(6,405)	5.2	(33,306)
Proposed: Industrial Park (ITE 130)	896	9.0	8,064
Delta			(25,242)

Footnotes:

- a. Trip lengths obtained from SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*.

It should be noted that other sources for trip lengths were also reviewed. **Attachment C** contains a comparison of the VMT calculations using the different sources. As shown, the other sources yield similar results.

3. CONCLUSION

Based on the VMT assessment presented in this letter report, the proposed Project that is replacing the existing VMT-generating land use would lead to an overall net decrease in VMT. In conclusion, the proposed Project would have a less-than-significant VMT transportation impact.

Please call if you have any questions.

Sincerely,

Linscott, Law & Greenspan, Engineers

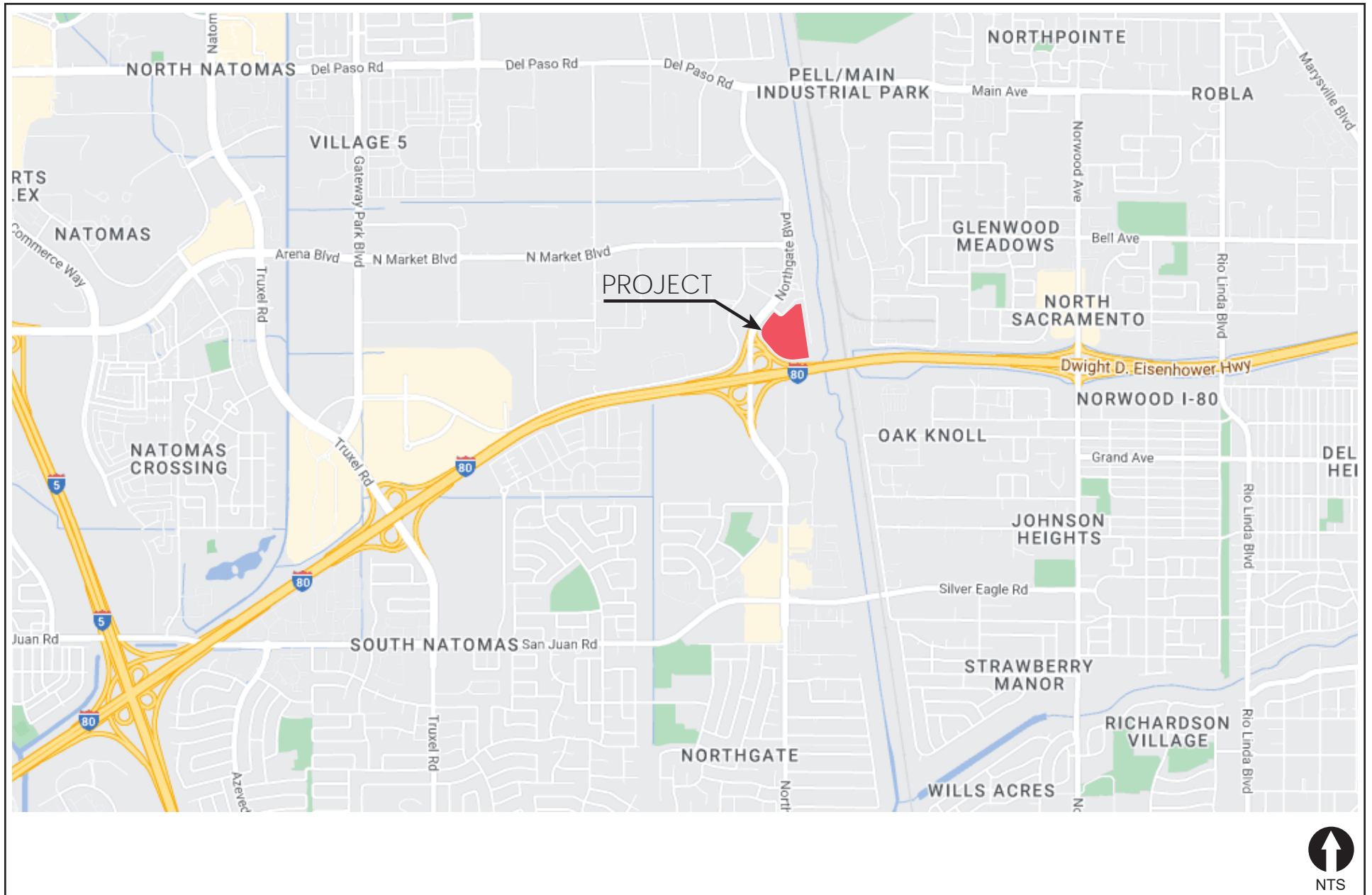


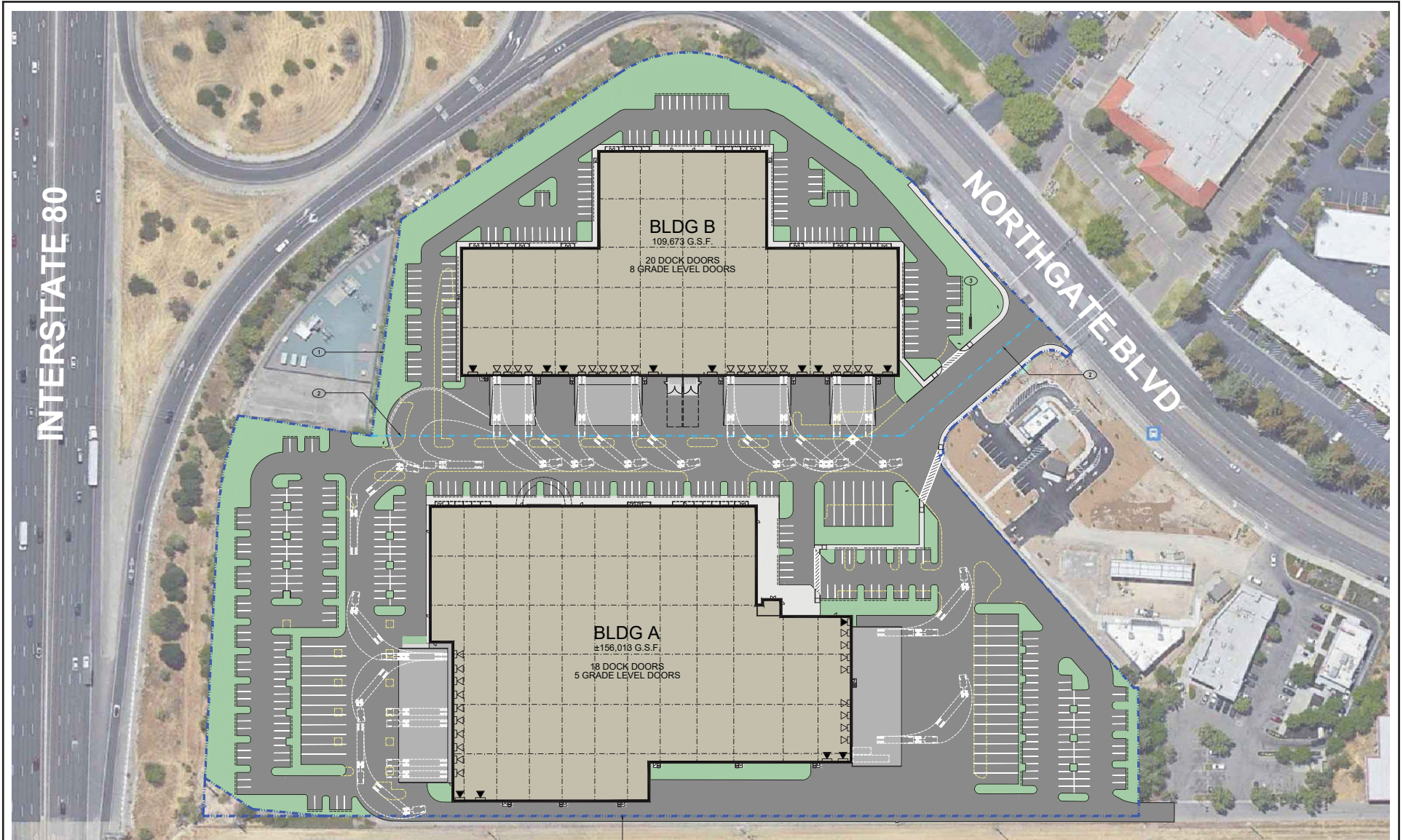
K.C. Yellapu, PE, TE, PTOE
Principal



Erika Carino, PE, RSP
Transportation Engineer III

cc: File





ATTACHMENT A

Electronics Superstore (863)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

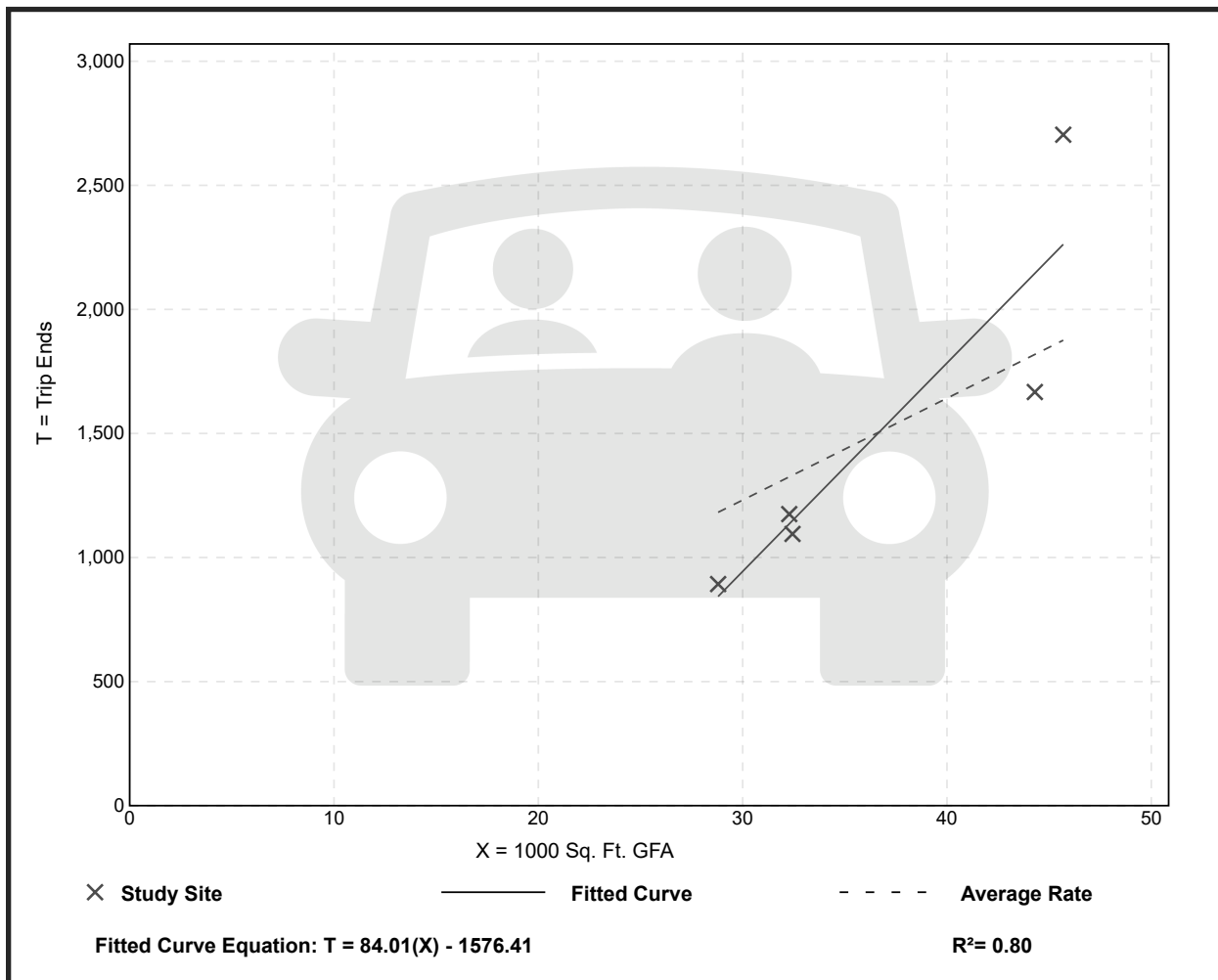
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. 1000 Sq. Ft. GFA: 37
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
41.05	31.01 - 59.18	11.92

Data Plot and Equation

Caution – Small Sample Size



Electronics Superstore (863)

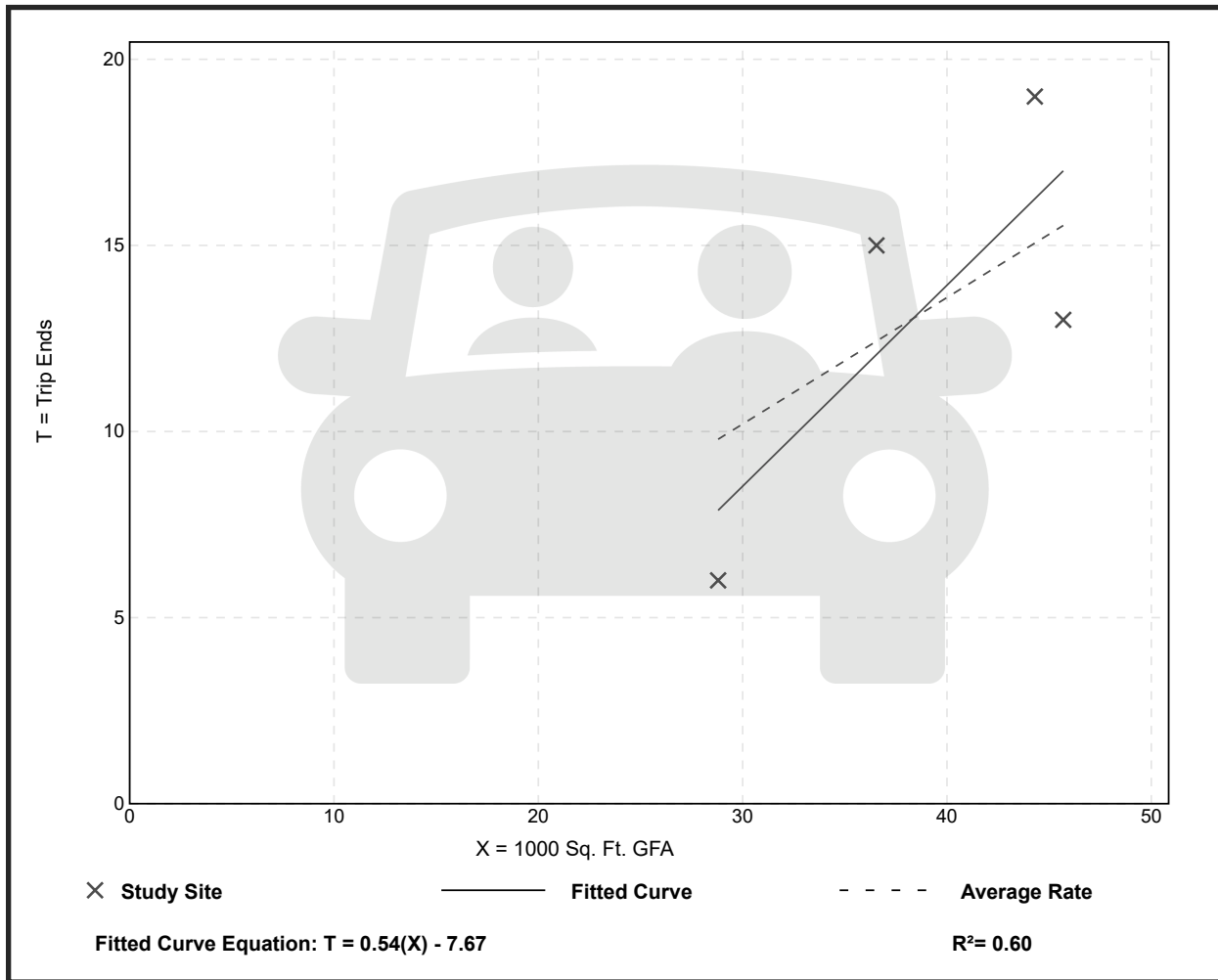
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 39
Directional Distribution: 73% entering, 27% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.34	0.21 - 0.43	0.10

Data Plot and Equation

Caution – Small Sample Size



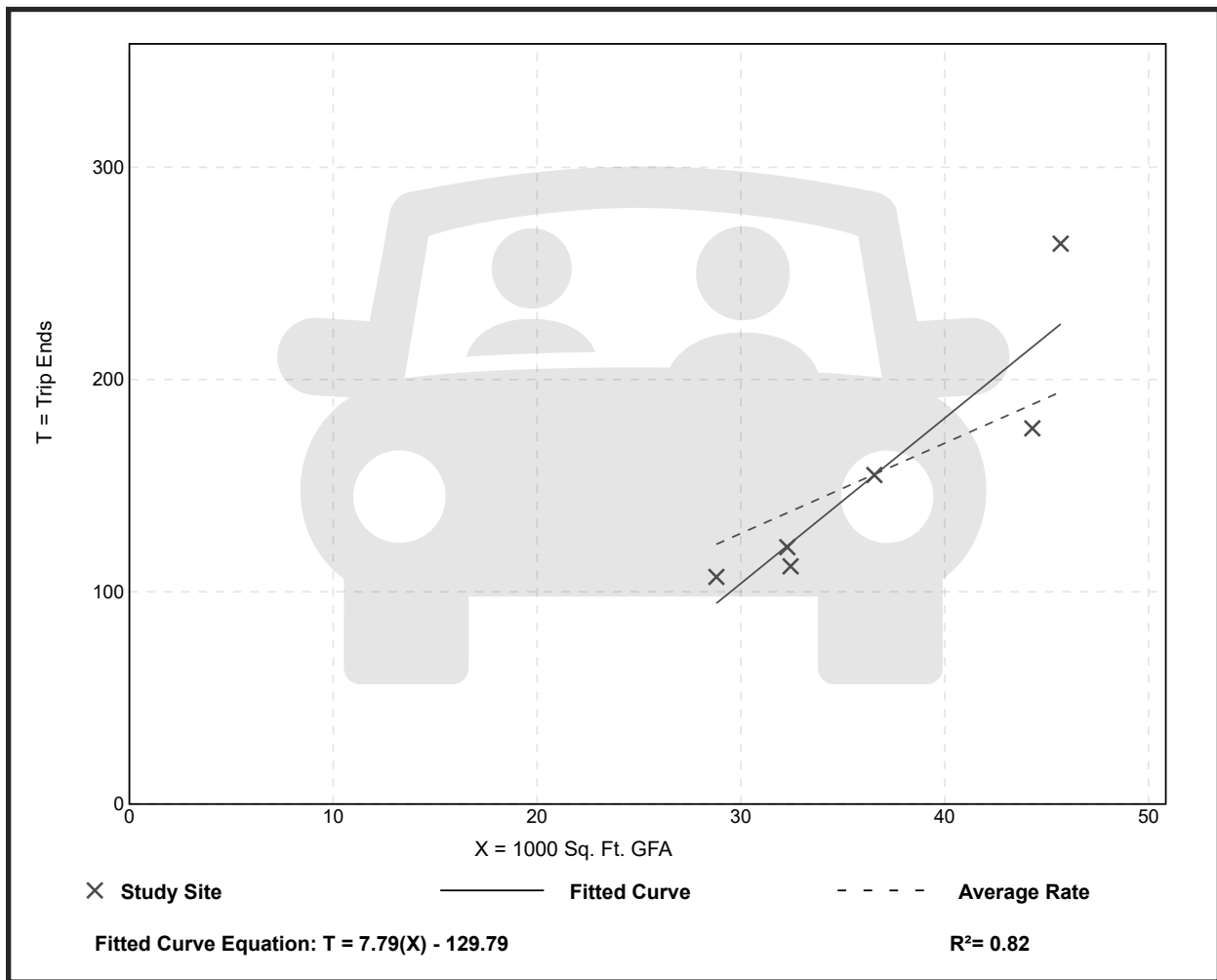
Electronics Superstore (863)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. 1000 Sq. Ft. GFA: 37
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.25	3.45 - 5.78	0.89

Data Plot and Equation



Industrial Park (130)

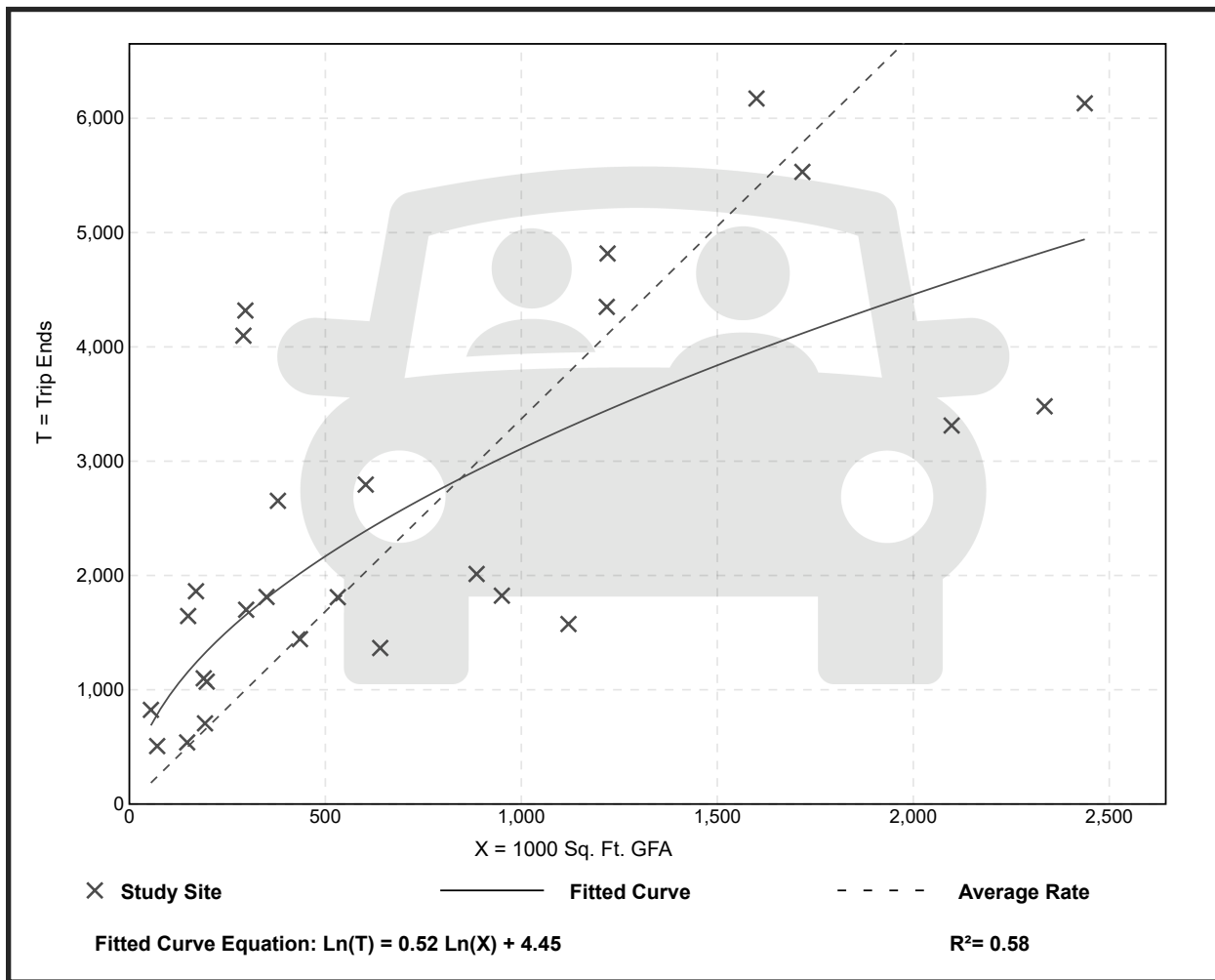
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 762
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.37	1.41 - 14.98	2.60

Data Plot and Equation



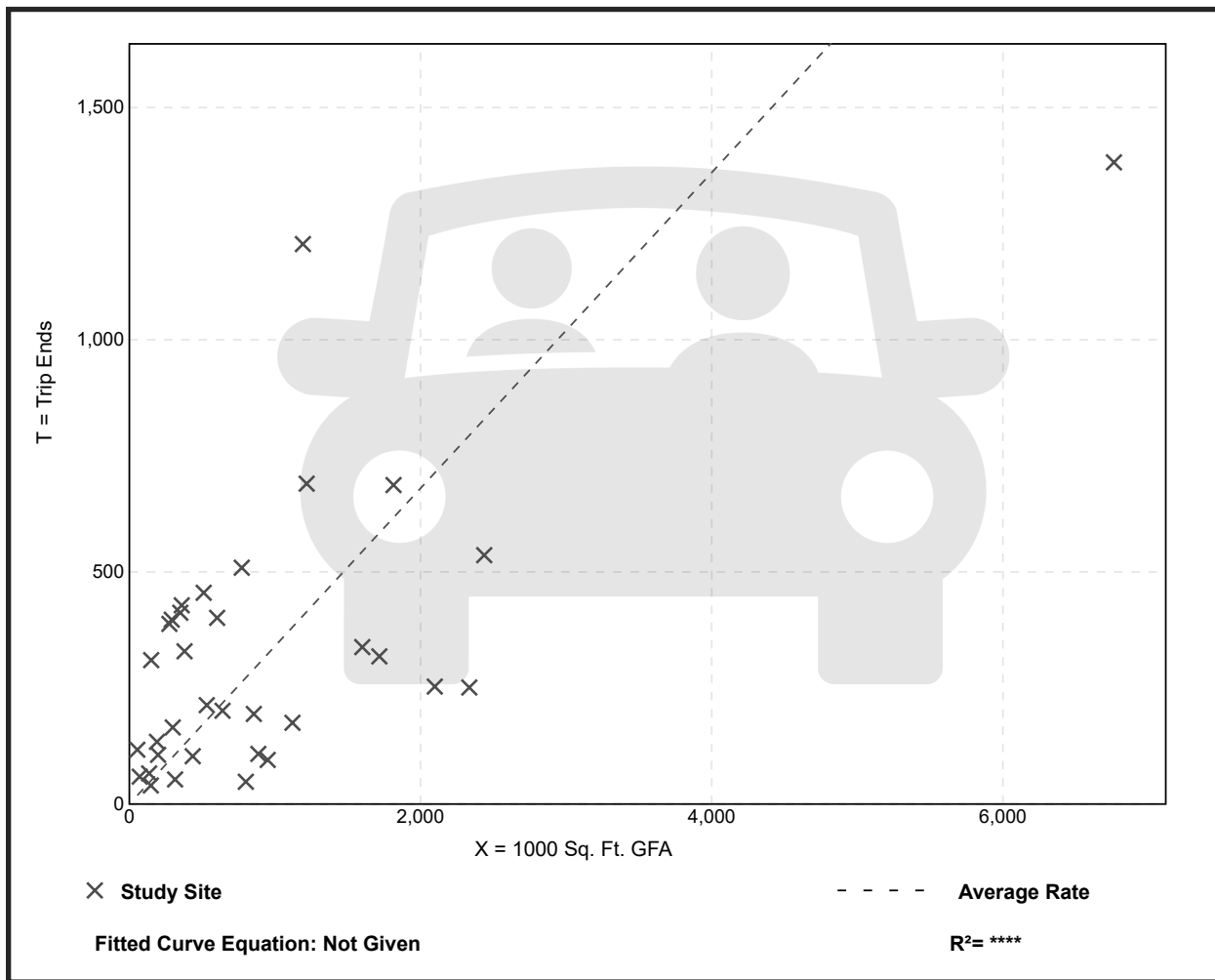
Industrial Park (130)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 34
Avg. 1000 Sq. Ft. GFA: 956
Directional Distribution: 81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.34	0.06 - 2.13	0.33

Data Plot and Equation



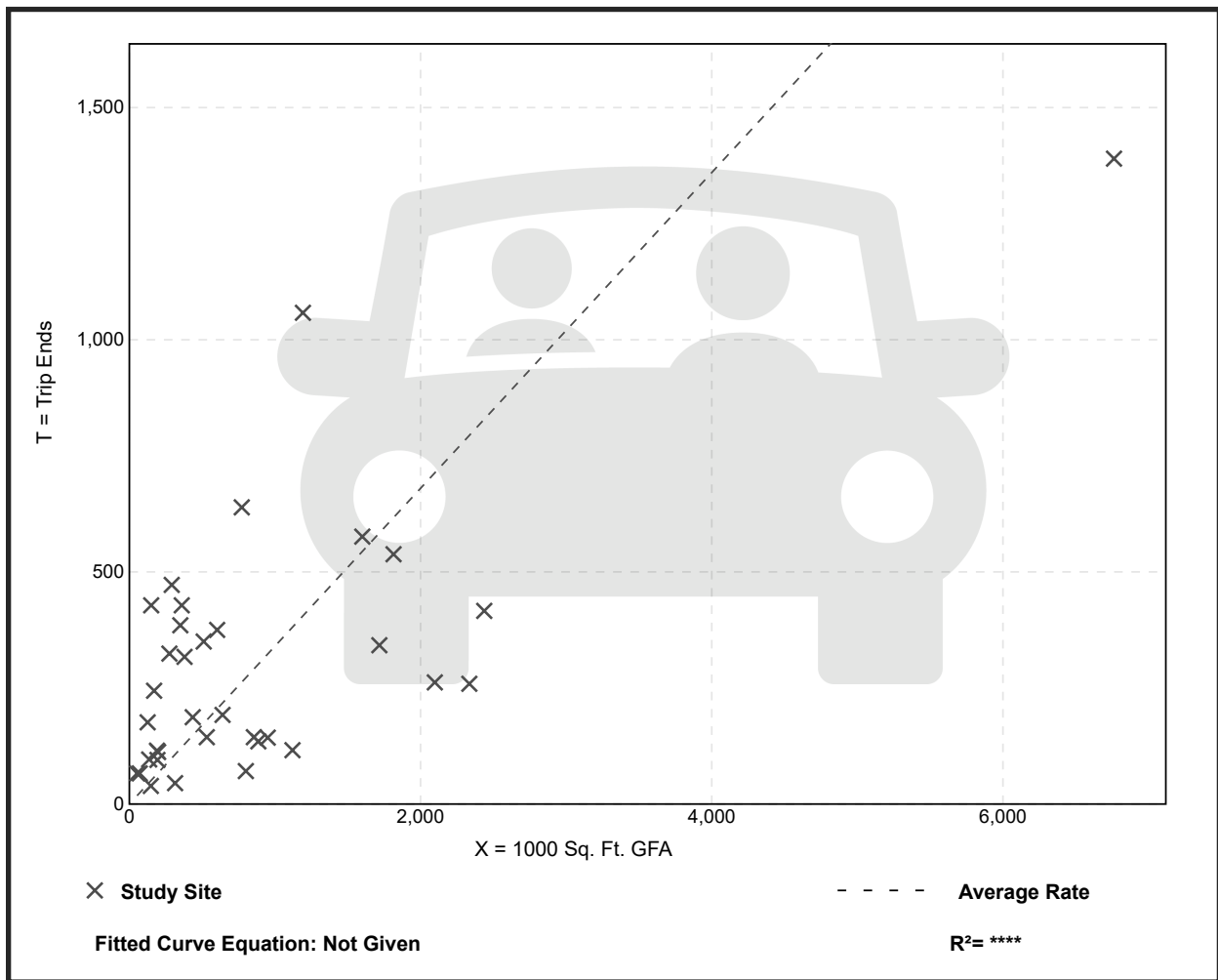
Industrial Park (130)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 35
Avg. 1000 Sq. Ft. GFA: 899
Directional Distribution: 22% entering, 78% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.34	0.09 - 2.85	0.36

Data Plot and Equation



ATTACHMENT B

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES
FOR THE SAN DIEGO REGION

APRIL 2002



401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a *guide* of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. *Always check with local jurisdictions for their preferred or applicable rates.*

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY] ^p	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M. Between 3:00-6:30 P.M.				TRIP LENGTH (Miles) ^l
AGRICULTURE (Open Space)	[80:18:2]	2/acre**					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft. * **	5%	(6:4)	6%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft * **	9%	(7:3)	15%	(5:5)	
Heliports		100/acre**					
AUTOMOBILE ^s							
Car Wash							
Automatic		900/site, 600/acre**	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall**	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space**	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall * **	5%	(7:3)	8%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft. **	4%		10%		
Quick Lube		40/service stall**	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre*					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL ^s							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)		35/1000 sq. ft., ^c 400/acre*	4%	(7:3)	10%	(5:5)	
Regional Shopping Center	[54:35:11]	50/1000 sq. ft., ^c 500/acre*	4%	(7:3)	9%	(5:5)	5.2
(40-80acres, 400,000-800,000 sq. ft., w/usually 2+ major stores)							
Community Shopping Center	[47:31:22]	80/1000 sq. ft., 700/acre* **	4%	(6:4)	10%	(5:5)	3.6
(15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)							
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)		120/1000 sq. ft., 1200/acre* **	4%	(6:4)	10%	(5:5)	
Commercial Shops	[45:40:15]						
Specialty Retail/Strip Commercial		40/1000 sq. ft., 400/acre*	3%	(6:4)	9%	(5:5)	4.3
Electronics Superstore		50/1000 sq. ft**			10%	(5:5)	
Factory Outlet		40/1000 sq. ft.**	3%	(7:3)	9%	(5:5)	
Supermarket		150/1000 sq. ft., 2000/acre* **	4%	(7:3)	10%	(5:5)	
Drugstore		90/1000 sq. ft.**	4%	(6:4)	10%	(5:5)	
Convenience Market (15-16 hours)		500/1000 sq. ft.**	8%	(5:5)	8%	(5:5)	
Convenience Market (24 hours)		700/1000 sq. ft.**	9%	(5:5)	7%	(5:5)	
Convenience Market (w/gasoline pumps)		850/1000 sq. ft., 550/vehicle fueling space**	6%	(5:5)	7%	(5:5)	
Discount Club		60/1000 sq. ft., 600/acre* **	7%	(7:3)	9%	(5:5)	
Discount Store		60/1000 sq. ft., 600/acre**	3%	(6:4)	8%	(5:5)	
Furniture Store		6/1000 sq. ft., 100/acre**	4%	(7:3)	9%	(5:5)	
Lumber Store		30/1000 sq. ft., 150/acre**	7%	(6:4)	9%	(5:5)	
Home Improvement Superstore		40/1000 sq. ft.**	5%	(6:4)	8%	(5:5)	
Hardware/Paint Store		60/1000 sq. ft., 600/acre**	2%	(6:4)	9%	(5:5)	
Garden Nursery		40/1000 sq. ft., 90/acre**	3%	(6:4)	10%	(5:5)	
Mixed Use: Commercial (w/supermarket)/Residential		110/1000 sq. ft., 2000/acre* (commercial only) 5/dwelling unit, 200/acre* (residential only)	3%	(6:4)	9%	(5:5)	
			9%	(3:7)	13%	(6:4)	
EDUCATION							
University (4 years)	[91:9:0]	2.4/student, 100 acre*	10%	(8:2)	9%	(3:7)	8.9
Junior College (2 years)	[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acre* **	12%	(8:2)	9%	(6:4)	9.0
High School	[75:19:6]	1.3/student, 15/1000 sq. ft., 60/acre* **	20%	(7:3)	10%	(4:6)	4.8
Middle/Junior High	[63:25:12]	1.4/student, 12/1000 sq. ft. 50/acre**	30%	(6:4)	9%	(4:6)	5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/acre* **	32%	(6:4)	9%	(4:6)	3.4
Day Care	[28:58:14]	5/child, 80/1000 sq. ft.**	17%	(5:5)	18%	(5:5)	3.7
FINANCIAL ^s	[35:42:23]						3.4
Bank (Walk-In only)		150/1000 sq. ft., 1000/acre* **	4%	(7:3)	8%	(4:6)	
with Drive-Through		200/1000 sq. ft., 1500/acre*	5%	(6:4)	10%	(5:5)	
Drive-Through only		250 (125 one-way)/lane*	3%	(5:5)	13%	(5:5)	
Savings & Loan		60/1000 sq. ft., 600/acre**	2%		9%		
Drive-Through only		100 (50 one-way)/lane**	4%		15%		
HOSPITAL	[73:25:2]						8.3
General		20/bed, 25/1000 sq. ft., 250/acre*	8%	(7:3)	10%	(4:6)	
Convalescent/Nursing		3/bed**	7%	(6:4)	7%	(4:6)	
INDUSTRIAL							
Industrial/Business Park (commercial included)	[79:19:2]	16/1000 sq. ft., 200/acre* **	12%	(8:2)	12%	(2:8)	9.0
Industrial Park (no commercial)		8/1000 sq. ft., 90/acre**	11%	(9:1)	12%	(2:8)	
Industrial Plant (multiple shifts)	[92:5:3]	10/1000 sq. ft., 120/acre*	14%	(8:2)	15%	(3:7)	11.7
Manufacturing/Assembly		4/1000 sq. ft., 50/acre**	19%	(9:1)	20%	(2:8)	
Warehousing		5/1000 sq. ft., 60/acre**	13%	(7:3)	15%	(4:6)	
Storage		2/1000 sq. ft., 0.2/vault, 30/acre*	6%	(5:5)	9%	(5:5)	
Science Research & Development		8/1000 sq. ft., 80/acre*	16%	(9:1)	14%	(1:9)	
Landfill & Recycling Center		6/acre	11%	(5:5)	10%	(4:6)	

(OVER)

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista and County of San Diego.

ADVISORY/LIAISON MEMBERS: California Department of Transportation, County Water Authority, U.S. Department of Defense, S.D. Unified Port District and Tijuana/Baja California.

ATTACHMENT C

Table A Vehicle Miles Traveled (SANDAG Source ^a)			
Land Use	Daily Trip Ends (ADT)	Trip Length (miles)	Vehicle Miles Traveled (VMT)
Existing: Electronic Superstore (ITE 863)	(6405)	5.2	(33306)
Proposed: Industrial Park (ITE 130)	896	9.0	8064
Delta			(25242)

Footnotes:

a. SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region .

Table B Vehicle Miles Traveled (CalEEmod Source ^a)			
Land Use	Daily Trip Ends (ADT)	Trip Length (miles)	Vehicle Miles Traveled (VMT)
Existing: Electronic Superstore (ITE 863)	(6405)	5.0	(32025)
Proposed: Industrial Park (ITE 130)	896	10.0	8960
Delta			(23065)

Footnotes:

a. Appendix D of the CalEEmod Version 2020.4.0 User Guide

Table C NHTS Vehicle Miles Traveled (NHTS Source ^a)			
Land Use	Daily Trip Ends (ADT)	Trip Length (miles)	Vehicle Miles Traveled (VMT)
Existing: Electronic Superstore (ITE 863)	(6405)	7.9	(50599.5)
Proposed: Industrial Park (ITE 130)	896	12.8	11468.8
Delta			(39130.7)

Footnotes:

a. FHWA's Summary of Travel Trends: 2017 National Household Travel Survey

Table 4.2 Mobile Trip Characteristics Dependent on Location

Location Type	Name	Rural Trip Length (miles)						Urban Trip Length (miles)						Residential Trip Type Percentage		
		C-C	C-NW	C-W	H-O	H-S	H-W	C-C	C-NW	C-W	H-O	H-S	H-W	H-W	H-S	H-O
Air Basin	Great Basin Valleys	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Lake County	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Lake Tahoe	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Mojave Desert	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	40.2	19.2	40.6
	Mountain Counties	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.3	20.7	42
	North Central Coast	6.6	6.6	14.7	13.6	9.8	17.1	7.3	7.3	9.5	7.2	6.2	12.3	23	15	62
	North Coast	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Northeast Plateau	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Sacramento Valley	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	32.9	18	49.1
	Salton Sea	6.2	6.2	13.8	8.1	6.9	14.6	4.2	5.4	12.5	4.5	3.5	11	40.2	19.2	40.6
	San Diego	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	41.6	18.8	39.6
	San Francisco Bay Area	6.6	6.6	14.7	5.7	4.8	10.8	7.3	7.3	9.5	5.7	4.8	10.8	31	15	54
	San Joaquin Valley	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	45.6	19	35.4
	South Central Coast	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.5	15	47.5
Air District	South Coast	10.1	7.9	18.5	12.9	9.6	19.8	8.4	6.9	16.6	8.7	5.9	14.7	40.2	19.2	40.6
	Amador County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.3	20.7	42
	Antelope Valley APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	40.2	19.2	40.6
	Bay Area AQMD	6.6	6.6	14.7	5.7	4.8	10.8	7.3	7.3	9.5	5.7	4.8	10.8	31	15	54
	Butte County AQMD	10.5	10.5	10.5	8	4.9	11.1	6	6	6	7.9	3	7.3	35	17	48
	Calaveras County AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.3	20.7	42
	Colusa County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	El Dorado County AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.6	21	36.4
	Feather River AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.6	21	36.4
	Glenn County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Great Basin UAPCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Imperial County APCD	9.5	11.9	16.4	8.1	11.7	10.2	5	8.9	6.7	3.7	3.9	7.3	40.2	19.2	40.6
	Kern County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	46.4	16.4	37.2
	Lake County AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Lassen County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Mariposa County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.3	20.7	42
	Mendocino County AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Modoc County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Mojave Desert AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	40.2	19.2	40.6
	Monterey Bay Unified APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	44	18.8	37.2
	North Coast Unified APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.3	19.6	38.1
	Northern Sierra AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	37.3	20.7	42
	Northern Sonoma County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.9	19.5	37.6
	Placer County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	42.6	21	36.4
	Sacramento Metropolitan AQMD	7.5	8.5	15	8.5	7.5	15	5	6.5	10	6.5	5	10	46.5	12.5	41
	San Diego County APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	41.6	18.8	39.6
	San Joaquin Valley Unified APCD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	45.6	19	35.4
	San Luis Obispo County APCD	13	13	13	13	13	13	5	5	13	5	5	13	35.8	21	43.2
	Santa Barbara County APCD	5.5	6.4	6.6	4.9	4.5	8.3	5.5	6.4	6.6	4.9	4.5	8.3	25.6	9.9	64.5
	Shasta County AQMD	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	41	21.2	37.8



Table 6b. Trends in the Average Trip Length by Selected Trip Purposes

Trip Purpose:	Average Vehicle Trip Length (miles)				
	All Purposes	To / From Work	Shopping	Other Family / Personal Errands	Social / Recreation
1969	8.9	9.4	4.4	6.5	13.1
1977	8.4	9.0	5.0	6.7	10.3
1983	7.9	8.6	5.3	6.7	10.6
1990	8.9	11.0	5.1	7.4	11.8
1995	9.1	11.8	5.6	6.9	11.2
2001	9.9	12.1	6.7	7.5	11.9
2009	9.7	12.2	6.4	7.1	11.2
2009 MOE	0.2	0.3	0.2	0.2	0.6
2017 Original	9.6	12.0	7.0	6.9	10.6
2017 Orig. MOE	0.4	0.4	0.8	0.4	0.4
2017 Adjusted	10.5	12.8	7.9	7.7	11.8
2017 Adj. MOE	0.4	0.4	0.8	0.4	0.4

Note:

- Totals in all tables can include cases that were not included in any table subcategory, for instance people who did not report their age are included in the total persons, but not in any age category.
- “Other Family/Personal Errands” includes trips such as to the post office, dry cleaners, or library
- 1990 NPTS data were adjusted to make them more comparable with later surveys.
- In 1995, VMT and vehicle trips with "To or From Work" as a trip purpose are believed to be overstated.
- 2001 NHTS sample included children 0 to 4 in the survey. The data shown here exclude them to be comparable with other survey years.
- 2009 NHTS sample did not include households without landlines telephones (CPO households).
- 2017 NHTS sample was address-based and included more urban and CPO households. This and other methods changes in the data series are outlined in Appendix B.