

300 Richards Blvd., 3rd Floor Sacramento, CA 95811

Help Line: 916-264-5011 CityofSacramento.org/dsd

# **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:

**University of the Pacific Rezone Project (P21-040):** The project site is comprised of nine separate parcels totaling 11.82 acres, located at 3200 5<sup>th</sup> Avenue in the Fruitridge Broadway Community Plan area in the City of Sacramento, California (Assessor's Parcel Numbers [APNs] 013-0133-020, -021, -022, -025, and -027; 013-0136-001 and -015; 013-0142-039; and 013-0243-043). The parcels are currently occupied by the University of the Pacific, Sacramento Campus. The City of Sacramento General Plan designates Site #1 as Traditional Neighborhood Medium; Sites #2, #3, and #5 through #9 are designated Public/Quasi-Public; and Site #4 is designated Public/Quasi-Public and Traditional Neighborhood Low. Site #1 is zoned Multi-Unit Dwelling (R-2B); Sites #2, #3, and #6 are zoned Multi-Unit Dwelling (R-4); Sites #4 and #5 are zoned Single-Unit or Duplex Dwelling (R-1B); Sites #7 and #8 are zoned Single-Unit Dwelling (R-4).

The University of the Pacific Rezone Project (proposed project) would require approval to Rezone each parcel included as part of the overall project site. The requested Rezones would allow future development of Sites #1 and #2 with college campus uses, such as student housing, and administration offices. The requested Rezones would also bring the existing uses for Sites #3 through #9 into alignment with the most accurate City of Sacramento zoning designation.

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, with mitigation measures 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. This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code [PRC] 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), and the Sacramento City Code.

Due to concerns over COVID-19, the City of Sacramento, Community Development Department's Public Counter, at 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 is closed until further notice. A copy of this document and all supportive documentation may be reviewed through the City's website at <a href="https://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports">https://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports</a>.

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

By: <u>Scott</u> Johnson March 23, 2023



# UNIVERSITY OF THE PACIFIC REZONE PROJECT (P21-040)

# 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 (PRC 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.

**APPENDICES:** Appends technical information that was referenced as attached in the preparation of the Initial Study.

# SECTION I - BACKGROUND

Project Name and File Number:	University of Pacific Rezone Project (P21-040)
Project Location:	3200 5 <sup>th</sup> Avenue Sacramento, CA 95817 Assessor's Parcel Numbers (APNs) 013-0133-020, -021, -022, - 025, and -027; 013-0136-001 and -015; 013-0142-039; and 013- 0243-043
Project Applicant:	University of the Pacific 1050 Brookside Road Stockton, CA 95211
Project Planner:	Angel Anquiano, Associate Planner (916) 808-5519 <u>aanguiano@cityofsacramento.org</u>
Environmental Planner:	Ron Bess, Associate Planner (916) 808-8272 <u>Rbess@cityofsacramento.org</u>
Date Initial Study Completed:	March 2023

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (PRC 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:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx.

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

The City is soliciting views of interested persons 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 20-day review period ending April 19, 2023.

Please send written responses to:

Ron Bess, Associate Planner Community Development Department City of Sacramento 300 Richards Boulevard, 3rd Floor Sacramento, CA 95811 Direct Line: (916) 808-8272 <u>Rbess@cityofsacramento.org</u>

# SECTION II - PROJECT DESCRIPTION

#### INTRODUCTION

The Project Description section of the Initial Study provides a description of the University of the Pacific Rezone Project (proposed project) location, existing conditions, surrounding land uses, and project components.

#### PROJECT LOCATION, EXISTING CONDITIONS, AND SURROUNDING LAND USES

The project site is comprised of nine parcels totaling 11.82-acres, located at 3200 5<sup>th</sup> Avenue in the Fruitridge Broadway Community Plan area in the City of Sacramento, California (APNs 013-0133-020, - 021, -022, -025, and -027; 013-0136-001 and -015; 013-0142-039; and 013-0243-043) (see Figure 1). The nine sites are described in further detail below. The overall project site is generally bound by Marshall Way to the north, 33<sup>rd</sup> and 35<sup>th</sup> Street to the east, Montgomery Way to the south, and 32<sup>nd</sup> Street and State Route (SR) 99 to the west. Surrounding land uses include McClatchy Park and single-family residences to the east, a Bambino Bakeries facility to the south, single-family residences to the north, and single-family residences to the west beyond SR 99 (see Figure 2). Regional access is provided by SR 99 to the west and U.S. Route (US) 50 to the north. In addition, the project site is approximately two miles east of the Sacramento River.

The project site is located within the Fruitridge Broadway Community Plan area and is currently occupied by the University of the Pacific, Sacramento Campus. The University of Pacific, Sacramento Campus is comprised of Benerd College, McGeorge School of Law, and School of Health Sciences and has an enrollment of approximately 909 students as of fall 2021.<sup>1</sup> Table 1 presents a summary of each of the nine parcels comprising the project site. A discussion of the nine project sites is provided below.

Site #1

Site #1 is located northeast of the intersection of 33<sup>rd</sup> Street and 5<sup>th</sup> Avenue. Site #1 consists of 0.36 acres (APN 013-0142-039) and is developed with a surface parking lot.

#### Site #2

Site #2 is located southwest of the intersection of 33<sup>rd</sup> Street and Marshall Way. Site #2 consists of 0.41 acres (APN 013-0133-027) and is developed with a surface parking lot and the 1,200-square foot (sf) Marshal Way House. The Marshal Way House was constructed in 1910 and is used for administrative services.

#### Sites #3, #4, #5, and# 6

Sites #3 through #6 are adjacent to one another and are located northwest of the intersection of 32<sup>nd</sup> Street and 5<sup>th</sup> Avenue.

- Site #3 consists of 1.63 acres (APN 013-0133-025) and is developed with the 1,102-sf Halbert Hall and the 2,522-sf IAJ Annex 1/Blue Victorian, which are used for administrative services. Site #3 is also developed with Classrooms C, D, and E, which total 7,216 sf of building space and are used for academic instruction.
- Site #4 consists of 0.05 acres (APN 013-0133-022) and is developed with the 900-sf Buildings Ground Grey House.

<sup>&</sup>lt;sup>1</sup> University of the Pacific. *Fast Facts.* Available at: https://www.pacific.edu/about-pacific/fast-facts. Accessed March 2022.



Figure 1 Regional Project Location



Figure 2 Project Vicinity Map

Table 1 Project Sites Summary				
Site #	Land Use Designation	Zoning Designation	Parcel Size (Acres)	Current Land Use
Site #1 (APN 013- 0142-039)	Traditional Neighborhood Medium	Multi-Unit Dwelling (R-2B)	0.36	Surface Parking Lot
Site #2 (APN 013- 0133-027)	Public/Quasi Public	Multi-Unit Dwelling (R-4)	0.41	Surface Parking Lot and Marshall Way House
Site #3 (APN 013- 0133-025)	Public/Quasi Public	Multi-Unit Dwelling (R-4)	1.63	Halbert Hall; IAJ Annex 1/Blue Victorian; and Classrooms C, D, and E
Site #4 (APN 013- 0133-022)	Public/Quasi-Public and Traditional Neighborhood Low	Single-Unit or Duplex Dwelling (R-1B)	0.05	Buildings Ground Grey House
Site #5 (APN 013- 0133-021)	Public/Quasi Public	Single-Unit or Duplex Dwelling (R-1B)	0.06	Facilities Administration/Public Safety Building
Site #6 (APN 013- 0133-020)	Public/Quasi Public	Multi-Unit Dwelling (R-4)	0.09	Terra Cotta Financial Administration Building
Site #7 (APN 013- 0136-001)	Public/Quasi Public	Single-Unit Dwelling (R-1)	0.08	North West Hall
Site #8 (APN 013- 0136-015)	Public/Quasi Public	Single-Unit Dwelling (R-1)	4.84	A portion of North West Hall; several academic instruction and administration services buildings; a student center, the Black Acre student dormitory, and a gazebo.
Site #9 (APN 013- 0243-043)	Public/Quasi Public	Single-Unit Dwelling (R-1)	4.3	South Acre and Silver Acre student dormitories; a student recreation center; administrative offices; and a childcare center.

• Site #5 consists of 0.06 acres (APN 013-0133-021) and is developed with the 1,077-sf Facilities Administration/Public Safety building.

• Site #6 consists of 0.09 acres (APN 013-0133-020) and is developed with the 2,328-sf Terra Cotta financial administration building.

# Sites #7 and #8

Sites #7 and #8 are adjacent to one another and are located southwest of the intersection of 32<sup>nd</sup> Street and 5<sup>th</sup> Avenue.

- Site #7 consists of 0.08 acres (APN 013-0136-001) and is partially developed with the 13,596-sf North West Hall, which is used for academic instruction.
- Site #8 consists of 4.84 acres (APN 013-0136-015) and is developed with a portion of North West Hall and six structures totaling 111,728 sf, which are used for academic instruction and administration services, including McGeorge House, a courtroom, law library, faculty offices and Classrooms G and H, the Dean's Building/HR Student Life, and the Administrative Wing and Classroom. Site #8 is also developed with a 26,871-sf student center, the 28,716-sf Black Acre student dormitory, and a gazebo.

# <u>Site #9</u>

Site #9 is located southwest of the intersection of 32<sup>nd</sup> Street and Donner Way. Site #9 consists of 4.3 acres (APN 013-0243-043) and is developed with six structures, including the 29,277-sf South Acre and the 18,560-sf Silver Acre student dormitories, a student recreation center, the Donner House administrative office, administrative offices, and a childcare center, which is used for child care services and administrative offices.

#### **PROJECT DESCRIPTION**

The proposed project includes a request to Rezone the parcels which comprise the project site as follows:

- Site #1 Rezone from R-2B to General Commercial (C-2);
- Sites #2, #3, and #6 Rezone from R-4 to C-2;
- Sites #4 and #5 Rezone from R-1B to R-4;
- Sites #7 and #8 Rezone from R-1 to R-4; and
- Site #9 Rezone from R-1 to Multi-Unit Dwelling (R-4A).

The requested Rezones would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. The requested Rezones would also bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designation (see Figure 3).

Future development of Sites #1 and #2 would include demolition of the Marshal Way House on Site #2, removal of on-site trees, and construction of a mixed-used development with student housing and administrative offices on Sites #1 and #2. It should be noted that additional City review and approval will be required for any future site redevelopment and removal of any trees.

The University of the Pacific, Sacramento Campus operates four on-campus student housing complexes with a total of 138 student housing units:<sup>2</sup>

- 1. Silver Acre a two-story building which features 50 single-tenant, furnished studio units;
- 2. Black Acre a three-story building which contains 36 units with a mix of unfurnished one-bedroom and two-bedroom units;
- 3. South Acre a three-story building which contains 42 unfurnished one-bedroom units; and
- 4. White Acre two buildings on either side of the Student Center which consist of seven studio units and 10 two-bedroom townhomes total. All of the White Acre units are furnished.

Given the acreage of Sites #1 and #2, it is anticipated that future development would align closely with either the Black Acre or South Acre student housing complexes and would include administrative offices and up to 38 student housing units with a mix of one-bedroom and two-bedrooms. Future development of Sites #1 and #2 would provide up to 76 student housing units and increase the number of existing student housing units from 145 to 221.

#### Utility Infrastructure

The following discussion relates to the water, wastewater, and stormwater drainage infrastructure that is currently provided on-site, as well as the utility infrastructure that would be required for future development facilitated by the proposed Rezones.

#### Water

Municipal water for the existing use on-site is currently supplied by the City of Sacramento Department of Utilities (DOU).

<sup>&</sup>lt;sup>2</sup> University of the Pacific. *Sacramento Campus Housing*. Available at: https://www.pacific.edu/student-life/housingdining/residential-life-and-housing/sacramento-housing. Accessed March 2022.



Figure 3 Current and Proposed Zoning Designations

The City uses surface water from the American and Sacramento rivers as well as groundwater north of the American River to meet the City's demands. The City would continue to supply water to the proposed project.

#### Wastewater

Wastewater collection for the existing use on-site is currently provided by the City DOU's Combined Sewer System (CSS). Wastewater generated in the project area is collected in the City's CSS system through a series of sewer pipes and pump stations. Once collected in the CSS system, wastewater flows into the SRCSD interceptor system, where the wastewater is conveyed to the Sacramento Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is owned and operated by the SRCSD and provides sewage treatment for the entire City. City requires each building with a wastewater source on each lot to have a separate connection to City's CSS. Future development of Sites #1 and #2 would connect to existing combined sewer mains through a network of combined sewer lines.

#### Stormwater Drainage

The City's DOU provides storm drainage service throughout the City by using drain inlets, pumps, and canals. The City provides stormwater drainage with either the City's CSS or into individual drainage sumps located throughout the City. Stormwater collected by the CSS is transported to the SRCSD's SRWWTP, where runoff is then treated prior to discharge into the Sacramento River. The project sites are located within the City's CSS area. Existing stormwater drainage infrastructure would continue to serve the proposed project. Future development of Sites #1 and #2 would require connection to existing storm drains through a new network of stormwater lines. Future development of Sites #1 and #2 would require the preparation of a project specific drainage study, which would meet the criteria in the current Department of Utilities Onsite Design Manual for review and approval by the DOU.

#### Project Entitlements

The proposed project would require approval of the following entitlements:

- Approval of the Initial Study and Mitigation and Monitoring Plan; and
- Rezones.

# SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

# LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES

#### Introduction

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 agricultural resources and wildfire, and the effect of the project on these resources.

#### Discussion

#### Land Use

The City of Sacramento General Plan designates Site #1 as Traditional Neighborhood Medium; Sites #2, #3, and #5 through #9 as Public/Quasi-Public; and Site #4 as Public/Quasi-Public and Traditional Neighborhood Low. The Traditional Neighborhood Low and Traditional Neighborhood Medium designations provide for moderate-intensity housing and higher-intensity medium-density housing, respectively. Both designations also provide for neighborhood-support uses including, but not limited to, small-lot single-family dwellings, multifamily dwellings, limited neighborhood-serving commercial, and compatible public, quasipublic, and special uses. The Public/Quasi-Public designation describes areas with unique uses and typically unique urban forms. Public/Quasi-Public areas host community services and/or educational, cultural, administrative, and recreational facilities often located within a well-landscaped setting.

The project site is located in an urbanized portion of the community. Surrounding land uses include McClatchy Park and single-family residences to the east, a Bambino Bakeries facility to the south, single-family residences to the north, and single-family residences to the west beyond SR 99. The proposed project would Rezone the entire project site as follows:

- Site #1 Rezone from R-2B to General Commercial (C-2);
- Sites #2, #3, and #6 Rezone from R-4 to C-2;
- Sites #4 and #5 Rezone from R-1B to R-4;
- Sites #7 and #8 Rezone from R-1 to R-4; and
- Site #9 Rezone from R-1 to Multi-Unit Dwelling (R-4A).

The proposed Rezones do not include any specific development proposals or new uses. However, approval of the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Future redevelopment would be consistent with the current on-site uses as well as the surrounding land uses. Therefore, implementation of the project would not physically divide an established community.

The proposed Rezones would also bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designations for the sites. Any future development facilitated by the proposed Rezones would be associated with the University of the Pacific campus, and, therefore, would be consistent with the Public/Quasi-Public General Plan land use designation, as well as the Traditional Neighborhood Medium and Traditional Neighborhood Low General Plan land use designations, which, as discussed above, allow for compatible public, and quasi-public uses. If the proposed project is approved, the new zoning designations of the site will be reflected on the City's Zoning Map. As a result, the proposed project would be consistent with the General Plan land use and zoning designations. The proposed project would be subject to all applicable General Plan goals and policies.

Based on the above, the proposed project would not result in impacts related to land use.

#### Population and Housing

The proposed Rezones do not include any specific development proposals or new uses. The approval of the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, which could include up to 76 units of student housing. However, the provision of additional student housing for the University students and would not induce substantial population growth or housing demand. Rather, the project's provision of additional student housing would have a beneficial impact of accommodating students in new residence halls next to the campus, who otherwise might be seeking housing within the City.

In addition, the proposed project is consistent with the project site's current General Plan land use designations, and the proposed Rezones would bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designations and General Plan land use designations. For example, Sites #8 and #9 are currently zoned R-1, which is intended to accommodate low-density residential uses composed of single-unit detached residences and duplex dwellings on corner lots. However, Sites #8 and #9 are currently developed with existing administrative, academic instruction, multipurpose, and student housing uses. The sites are proposed to be rezoned as R-4 and R-4A, which are intended to accommodate higher-density development in areas near major institutions; and permit dwellings, institutions, and limited commercial goods and services serving the surrounding neighborhood. Therefore, the proposed Rezone of Sites #8 and #9 from R-1 to R-4 and R-4A, respectively, would ensure that the existing on-site uses are represented by the zoning designation of the sites.

Based on the above, the project would not be considered to induce substantial population growth within the City. Implementation of the proposed project would not displace any existing housing units or people. Construction or replacement of housing elsewhere would not be required for the project.

# Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources (see Master EIR, Chapter 4.1). In addition to evaluating the effect of the General Plan on sites within the City, the Master EIR noted that to the extent the Sacramento General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized (Master EIR, page 4.1-3). The Master EIR concluded that the impact of the General Plan on agricultural resources within the City was less than significant.

The project site has already been developed and the project site is located in an urbanized area surrounding by residential and commercial development. According to the California Department of Conservation Important Farmland Map, the project site is 100 percent Urban and Built-Up Land.<sup>3</sup> As such, the project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Sitewide Importance). The site is not zoned for agricultural uses and is not under a Williamson Act contract. In addition, the project site is not utilized for agricultural or timber-harvest operations.

<sup>&</sup>lt;sup>3</sup> California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 2022.

# Wildfire

The Master EIR does not identify any significant impacts related to wildfire risk. Per the CAL FIRE Fire and Resources Assessment Program (FRAP), the City of Sacramento is located within a Local Responsibility Area (LRA). The City is not located within or adjacent to a State Responsibility Area (SRA) or a designated Very High Fire Hazard Severity Zone (VHFHSZ). Furthermore, the project site is located within a developed area where a substantial wildland-urban interface does not exist. Thus, the risk of wildfire at the project site is minimal. Based on the above, the proposed project would not create a substantial fire risk for existing development in the project vicinity.

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

#### **ENVIRONMENTAL SETTING**

The project site is located on a total of 11.82 acres that are currently occupied by the University of the Pacific, Sacramento Campus. The University of Pacific, Sacramento Campus is comprised of Benerd College, McGeorge School of Law, and School of Health Sciences. The overall project site is generally bound by Marshall Way to the north, 33<sup>rd</sup> and 35<sup>th</sup> Street to the east, Montgomery Way to the south, and 32<sup>nd</sup> Street and SR 99 to the west. The site is generally within an area of the City featuring single and multi-family residential developments as well as commercial development. Surrounding land uses include McClatchy Park and single-family residences to the east, a Bambino Bakeries facility to the south, single-family residences to the north, and single-family residences to the west beyond SR 99. Public views of the project site include views from motorists, bicyclists, and pedestrians travelling on the roadways in the project vicinity, as well as views from McClatchy Park.

Existing scenic resources in the City include major natural open space features such as the American River and Sacramento River, including associated parkways. In addition, the State Capitol is a scenic resource within the City defined by the Capitol View Protection Ordinance. The project site does not contain scenic resources or within an area designated as a scenic resource or vista. The California Department of Transportation (Caltrans) manages the State Scenic Highway System which provides guidance and assists local government agencies with the process to officially designate scenic highways. According to Caltrans, designated scenic highways are not located in proximity to the project site and the project site is not visible from any State-designated scenic highways.<sup>4</sup>

#### STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the 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.

<sup>&</sup>lt;sup>4</sup> California Department of Transportation. *California Scenic Highway Mapping System, Sacramento County.* Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e80571 16f1aacaa. Accessed March 2022.

# 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 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 ambient light from urban uses already exists. New development under the Sacramento General Plan could add sources of light that are similar to the existing urban light sources from one 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. The nearest sensitive residential uses to the project site are located directly north of Site #1 and directly west of Site #2.

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Future development of Sites #1 and #2 with college campus uses could introduce new sources of light and glare within the project vicinity. Nonetheless, potential new sources of light associated with development and operation of future college campus uses on Sites #1 and #2 would be similar to the existing campus uses located on Sites #3 through #9, which are located directly west and south of Sites #1 and #2.

Because the City of Sacramento is mostly built-out with a level of ambient light that is typical of and consistent with the urban character of a large city and new development allowed under the 2035 General Plan would be subject to the General Plan policies, building codes, and (for larger projects) design review, the introduction of substantially greater intensity or dispersal of light would not occur. For example, Policy ER 7.1.3. Lighting requires that misdirected, excessive, or unnecessary outdoor lighting be minimized. 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.

Any future on-site development facilitated by the proposed Rezones would be required to comply with the aforementioned General Plan policies, which would be ensured through the Site Plan and Design Review process. Additionally, it is noted that the project site currently includes several sources of light and glare associated with the University of the Pacific, Sacramento Campus. As such, the proposed project would not result in substantially more light and glare than what already exists on-site.

Based on the above, the proposed project would not introduce new sources of light and glare to the project site that are different from what currently exists. In addition, the type and intensity of light and glare generated by any subsequent on-site development facilitated by the Rezones would be similar to that of the surrounding developments and would be consistent with the existing land use. 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 effect** beyond what was previously evaluated in the Master EIR.

# Question C

New development associated with the 2035 General Plan could result in changes to important scenic resources as seen from visually sensitive locations. As described above under "Thresholds of Significance" important existing scenic resources include major natural open space features such as the American River and Sacramento River, including associated parkways. Another important scenic resource is the State Capitol (as defined by the Capitol View Protection Ordinance). Other potential important scenic resources include important historic structures listed on the Sacramento Register of Historic and Cultural Resources, California and/or National Registers.

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 (e.g., Capitol View Protection Corridor). The proposed project is not located near significant visual resources such as the Sacramento River, American River, or the State Capitol.

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices, and would also bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designation.

The 2035 General Plan designates Site #1 as Traditional Neighborhood Medium; Sites #2, #3, and #5 through #9 as Public/Quasi-Public; and Site #4 as Public/Quasi-Public and Traditional Neighborhood Low. Any future on-site development facilitated by the proposed Rezones would be consistent with the project site's current General Plan land use designations. Because the proposed project is consistent with the General Plan, impacts related to aesthetics have been analyzed and anticipated within the General Plan EIR. According to the General Plan EIR, with adherence to polices pursuant to aesthetics, buildout of the General Plan would not substantially alter the existing visual character.

Furthermore, City staff would conduct Site Plan and Design Review prior to implementation of any development on Sites #1 and #2. 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 future development of the site would ensure that substantial degradation of the existing visual character of the project site would not occur. Finally, future development of Sites #1 and #2 with college campus uses would be visually consistent with the existing development within Sites #3 through #9.

Therefore, potential impacts to the visual character of the project site and its surroundings associated with development of the site have been previously analyzed in the Master EIR, and the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

# **MITIGATION MEASURES**

None required.

# FINDINGS

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

Issues	:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. <u>AIR</u>	QUALITY			
Would	the project:			х
A)	Result in construction emissions of NO <sub>x</sub> above 85 pounds per day?			
B)	Result in operational emissions of NO <sub>x</sub> or ROG above 65 pounds per day?			Х
C)	Violate any air quality standard or have a cumulatively considerable contribution to an existing or projected air quality violation?			х
D)	Result in PM <sub>10</sub> and PM <sub>2.5</sub> concentrations that exceed SAMQMD requirements?			Х
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)?			х
F)	Result in exposure of sensitive receptors to substantial pollutant concentrations?			Х
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?			Х

# **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. The City, including the project site, is located within the jurisdiction of the Sacramento Air Quality Management District (SMAQMD).

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 (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable and fine particulate matter ( $PM_{10}$  and  $PM_{2.5}$ ), and lead. The sources of criteria air pollutants and their respective acute and chronic health impacts are described in Table 2.

Table 2 Sources and Health Effects of Criteria Air Pollutants					
Pollutant	Sources	Acute <sup>1</sup> Health Effects	Chronic <sup>2</sup> Health Effects		
Ozone	Secondary pollutant resulting from reaction of ROG and NO <sub>X</sub> in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO <sub>X</sub> 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 <sub>2</sub> )	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 <sub>2</sub> )	Coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO2 exposure to chronic health impacts		
Respirable particulate matter (PM <sub>10</sub> ), Fine particulate matter (PM <sub>2.5</sub> )	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 SO2 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 <sub>X</sub> = oxides of nitrogen; ROG = reactive organic gases. <sup>1.</sup> "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.					

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

Source: EPA 2018.

# **Existing Air Quality**

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, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, 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, and the above-mentioned criteria air pollutants. 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  $O_3$  standard. The SVAB is also currently designated as nonattainment for both NAAQS and CAAQS 24-hour  $PM_{10}$  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**

According to the California Almanac of Emissions and Air Quality (CARB 2013), the majority of the estimated health risks from toxic air contaminants (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. The closest sensitive receptors to the project site include the residential uses located directly north of Site #1 and directly west of Site #2.

# STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts 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 2035 General Plan policies:

- Construction emissions of NO<sub>x</sub> above 85 pounds per day;
- Operational emissions of NO<sub>X</sub> 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 PM<sub>10</sub> 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 toxic air contaminants (TAC). 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 unhealthful pollutant concentrations. See Master EIR, Chapter 4.2.

Policies in the 2035 General Plan Environmental Resources Element 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 CARB and the 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 and design elements that provide proper filtering, ventilation, and exhaust of vehicle air emissions from buildings.

# **ANSWERS TO CHECKLIST QUESTIONS**

# Questions A through D

The proposed project consists of multiple Rezones and does not include specific development proposals or new uses. As such, implementation of the proposed project would not contribute to local emissions in the area. However, the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Therefore, future development of Sites #1 and #2 could contribute to local emissions in the area during both construction and operations.

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, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for ozone. The SMAQMD's recommended thresholds of significance for the ozone precursors reactive organic gases (ROG) and nitrous oxides (NO<sub>X</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>, which are expressed in pounds per day (lbs/day), are presented in Table 3.

Because construction equipment emits relatively low levels of ROG, and ROG emissions from other construction processes (e.g., asphalt paving, architectural coatings) are typically regulated by SMAQMD, SMAQMD has not adopted a construction emissions threshold for ROG. SMAQMD has, however, adopted a construction emissions threshold for NO<sub>X</sub>, as shown in Table 3, below.

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Table 3 SMAQMD Thresholds of Significance (Ibs/day)					
Pollutant Construction Thresholds Operational Thresholds					
NOx	85	65			
ROG	-	65			
PM10	80	80			
PM <sub>2.5</sub>	82	82			
Source: Sacramento Metropolitan Air Quality Management District. SMAQMD Thresholds of Significance Table. Available at: http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf.					

In order to determine whether future redevelopment of Sites #1 and #2 would result in criteria pollutant emissions in excess of the applicable thresholds of significance presented above, emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (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. However, where project-specific data is available, such data should be input into the model. Accordingly, the proposed project's modeling assumed the following:

- Construction would begin in June 2023;
- Construction would occur over an approximately six-month period;
- The 1,200 sf Marshall Way House would be demolished as part of project construction;
- Buildout of the site would occur at maximum density and would include both student housing and administrative office uses on both sites; and
- The proposed project would comply with all relevant provisions of the Model Water Efficient Landscape Ordinance (MWELO).

The results of the proposed project's emissions estimates were compared to the thresholds of significance above in order to determine the associated level of impact. All CalEEMod modeling results are included as Appendix A to this Initial Study.

# Construction Emissions

During construction of the future development on Sites #1 and #2, which includes demolition of the existing Marshall Way House, various types of equipment and vehicles would operate on the project site. Construction exhaust emissions would be generated from construction equipment, any earth-moving activities, construction workers' commute, and material hauling for the entire construction period. Construction activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants.

According to the CalEEMod results, future development of Sites #1 and #2 is estimated to result in maximum daily construction emissions as shown in Table 4.

Table 4   Maximum Unmitigated Project Construction Emissions				
Project Emissions SMAQMD Threshold of Significance (lbs/dav) (lbs/dav)				
NOx	10.19	85		
PM10	5.79	80		
PM <sub>2.5</sub> 2.97 82				
Source: CalEEMod, July 2	022 (see Appendix A).			

As shown in the table, the maximum unmitigated construction-related emissions from future development on Sites #1 and #2 would be below the applicable thresholds of significance. Therefore, because the proposed project does not include specific development proposals or new uses, and, thus, would not contribute to local emissions in the area; and because emissions from future development of Sites #1 and #2 would be below SMAQMD thresholds, impacts related to the proposed project's construction emissions would be less than significant.

In addition, all projects under the jurisdiction of SMAQMD are required to comply with all applicable SMAQMD rules and regulations (a complete list of current rules is available at www.airquality.org/rules). Rules and regulations related to construction include, but not limited to, Rule 201 (General Permit Requirements), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), Rule 414 (Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 British Thermal Units per Hour), Rule 417 (Wood Burning Appliances), Rule 442 (Architectural Coatings), Rule 453 (Cutback and Emulsified Asphalt Paving Materials), Rule 460 (Adhesives and Sealants), Rule 902 (Asbestos) and California Code of Regulations (CCR) requirements related to the registration of portable equipment and anti-idling. Furthermore, all projects are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules, regulations, and BCECP would ensure that construction emissions are minimized to the extent practicable, and would reduce emissions below the level presented in Table 4.

# **Operational Emissions**

As discussed above, the proposed project would involve Rezoning the nine parcels which comprise the project site, and the project does not include specific development proposals or new uses. As such, implementation of the proposed Rezones would not contribute to local emissions in the area. However, future development facilitated by the Rezones of Sites #1 and #2 could result in various sources of emissions including emissions related to natural gas combustion for heating mechanisms, landscape maintenance equipment exhaust, consumer products (e.g., cleaning products, spray paint), and mobile sources. Emissions from mobile sources, such as future employee and resident vehicle trips to and from the project site, would make up the majority of the emissions related to project operations. The proposed project's estimated operational emissions are presented in Table 4.

Table 5   Maximum Unmitigated Project Operational Emissions				
	Project Emissions	SMAQMD Threshold of Significance		
Pollutant	(Ibs/day)	(lbs/day)		
NOx	3.51	65		
ROG	6.18	65		
PM10	4.47	80		
PM <sub>2.5</sub> 1.26 82				
Source: CalEEMod July 2	022 (see Appendix A)	1		

As shown in the table, the maximum unmitigated operational emissions or criteria pollutants generated from future development on Sites #1 and #2 would be below the applicable thresholds of significance and, as a result, the proposed project's impacts related to operational emissions would be considered less than significant.

# Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The non-attainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD 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. Consequently, the SMAQMD Guide states that SMAQMD's approach to thresholds of significance is key to determining whether a project's individual emissions would result in a cumulatively considerable adverse contribution to the SVAB's existing air quality conditions. If a project's emissions are estimated to be less than the thresholds, the project would not be expected to result in a cumulatively considerable contribution to the significant cumulative impact.

As discussed above and below, the future development on Sites #1 and #2 would result in construction and operational emissions below all applicable SMAQMD thresholds of significance. Therefore, the proposed project would not be considered to contribute to the region's nonattainment status for ozone or PM emissions and would not conflict with or obstruct implementation of the SMAQMD's air quality planning efforts. Accordingly, the proposed project would not be considered to result in a new cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment beyond what has been previously anticipated for the project site by the County.

# Conclusion

As discussed above, the proposed project would not result in construction or operational emissions in excess of the applicable thresholds of significance. Thus, the proposed project would not violate any AAQS, contribute substantially to an existing or projected air quality violation, or result in PM concentrations greater than the applicable thresholds. Therefore, the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

# Question E

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Per the SMAQMD Guide, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years.<sup>5</sup> The use of construction equipment during redevelopment of Sites #1 and #2 would result in limited generation of CO; however, the total amount of CO emitted by construction equipment would be minimal and would not have the potential to result in health risks to any nearby receptors. Similarly, while redevelopment of Sites #1 and #2 could result in an increase in vehicle trips and truck trips travelling to and from the project site, the amount of CO emitted by such vehicles and trucks would be limited, and, thus, would not be anticipated to result in health risks to any nearby receptors. Consequently, the proposed project would have **no additional significant environmental effects** related to localized CO emissions beyond what was previously evaluated in the Master EIR.

# Question F and G

Surrounding land uses include McClatchy Park and single-family residences to the east, a Bambino Bakeries facility to the south, single-family residences to the north, and single-family residences to the west beyond SR 99. The existing single-family residences would be considered sensitive receptors, with the closest located approximately seven feet north of Site #1.

# TAC Emissions

Another category of environmental concern is TACs. The CARB *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, gasoline dispensing facilities, chrome plating operations, distribution centers, and rail yards. The CARB has identified diesel PM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from diesel PM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of

<sup>&</sup>lt;sup>5</sup> Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions.* June 2020.

time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. Stationary sources of TACs (i.e., diesel generators) are not proposed to be included as part of the project.

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. In addition, if future development of Sites #1 and #2 were to occur as a result of the proposed project, only portions of the site would be disturbed at a time, with operation of construction equipment regulated by federal, State, and local regulations, including SMAQMD rules and regulations, and occurring intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy diesel truck traffic or idling. The CARB's Handbook includes facilities (distribution centers) with associated diesel truck trips of more than 100 trucks per day as a source of substantial TAC emissions. The proposed Rezones would not allow for any land uses that would involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs. Therefore, the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions.

Based on the above, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, or substantially increase the risk of exposure to TACs from mobile sources. Therefore, the proposed project would have **no additional significant environmental effects** beyond what was previously evaluated in the Master EIR.

# MITIGATION MEASURES

None Required.

# FINDINGS

The proposed project would not result in any new project-specific significant environmental effects related to Air Quality.

Issues	:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environment al effect
3. <u>BIO</u>	LOGICAL RESOURCES			
Would	the project:			
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?			Х
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?			х
C)	Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?			х

# **ENVIRONMENTAL SETTING**

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 the loss or alteration of much of the natural habitat within the City limits. Non-native annual grasses have replaced the native perennial grasslands, many of the natural streams have been channelized, much of the riparian and oak woodlands have been cleared, and most of the marshes have been drained and converted to agricultural or urban uses.

Though the majority of the City is developed with residential, commercial, and other urban development, valuable plant and wildlife habitat still exists. The natural habitats are located primarily outside the City boundaries in the northern, southern and eastern portions of the City, but also occur along river and stream corridors and on a number of undeveloped parcels. Habitats that are present in the City include annual grasslands, riparian woodlands, oak woodlands, riverine, ponds, freshwater marshes, seasonal wetlands, and vernal pools.

# Vegetation

The project site is currently developed with the University of the Pacific, Sacramento Campus. Development on-site includes, but is not limited to, surface parking lots, administrative buildings, classrooms, and student housing. Trees and shrubs occur along the borders of the project site, as well as scattered throughout portions of the site.

# Wildlife

Due to the disturbed nature of the project site, the potential for a diversified amount of wildlife is anticipated to be very low; however, several trees on and in the immediate vicinity of the project site could potentially provide nesting habitat for bird species and other raptors.

# Trees

Chapter 12.56, Tree Planting, Maintenance, and Conservation, of the Sacramento City Code establishes guidelines for the conversation, protection, removal, and replacement of both City trees and private protected trees. Per Section 12.56.020, a private protected tree meets at least one of the following criteria:

- A. A tree that is designated by City Council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
- B. Any native Valley Oak (Quercus lobata), Blue Oak (Quercus douglasii), Interior Live Oak (Quercus wislizenii), Coast Live Oak (Quercus agrifolia), California Buckeye (Aesculus californica), or California Sycamore (Platanus racemosa), that has a diameter at standard height (DSH) of 12 inches or more, and is located on private property;
- C. A tree that has a DSH of 24 inches or more located on private property that:
  - a. Is an undeveloped lot; or
  - b. Does not include any single unit or duplex dwellings; or
- D. A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

When circumstances do not allow for retention of trees, permits are required to remove City trees or private protected trees that are within the City's jurisdiction. In addition, City Code Section 12.56.050, Tree Permits, states that no person shall perform regulated work without a tree permit. The Tree Permit application requires a statement detailing the nature and necessity for the proposed regulated work and the location of the proposed work for evaluation and approval by the City Council.

# Jurisdictional Waters

The U.S. Army Corps of Engineers (USACE) has regulatory authority of "waters of the United States," which include wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Waters of the U.S. includes navigable waters, interstate waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Aquatic resources do not exist on the project site.

# 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 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 CDFW, USFWS, 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 Habitat Conservation Plan (NBHCP) (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).

Given the prevalence of rivers and streams in the incorporated area, impacts to riparian habitat is a common concern. Riparian habitats are known to exist throughout the City, especially along the Sacramento and American rivers and their tributaries. The Master EIR discussed impacts of development adjacent to riparian habitat that could disturb wildlife species that rely on these areas for shelter and food, and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. The CDFW regulates potential impacts on lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of Lake or Streambed Alteration Agreements (SAA) (per Fish and Game Code Section 1602), and provides guidance to the City as a resource agency. While there are no federal regulations that specifically mandate the protection of riparian vegetation, federal regulations set forth in Section 404 of the CWA address areas that potentially contain riparian-type vegetation, such as wetlands.

The General Plan calls for the City to preserve the ecological integrity of creek corridors, canals and drainage ditches that support riparian resources (Policy ER 2.1.5) and wetlands (Policy ER 2.1.6) and requires habitat assessments and impact compensation for projects (Policy ER 2.1.10). The City has adopted a standard that requires coordination with State and federal agencies if a project has the potential to affect other species of special concern or habitats (including regulatory waters and wetlands) protected by agencies or natural resource organizations (Policy ER 2.1.11).

Implementation of 2035 General Plan Policy ER 2.1.5 would reduce the magnitude of potential impacts by requiring a 1:1 replacement of riparian habitat lost to development. While this would help mitigate impacts on riparian habitat, large open areas of riparian habitat used by wildlife could be lost and/or degraded directly and indirectly through development under the 2035 General Plan. Given the extent of urban development designated in the general plan, the preservation and/or restoration of riparian habitat would likely occur outside of the City limits. The Master EIR concluded that the permanent loss of riparian habitat would be a less-than-significant impact. (Impact 4.3-7)

# ANSWERS TO CHECKLIST QUESTIONS

# Question A

The use, handling, and storage of hazardous materials is regulated by both the Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA is responsible for developing and enforcing workplace safety regulations. At the local level, the Sacramento County Environmental Management Department regulates hazardous materials

within Sacramento County, including chemical storage containers, businesses that use hazardous materials, and hazardous waste management.

The use and storage of hazardous materials is regulated by Section 8.64 of the Sacramento Municipal Code. Section 8.64.040 establishes regulation related to the designation of hazardous materials and requires that a hazardous material disclosure form be submitted within 15 days by any person using or handling a hazardous material. In addition, the routine transport, use, and disposal of hazardous materials are regulated by existing federal, State, and local regulations. For instance, the Sacramento County Environmental Management Department requires businesses handling sufficient quantities of hazardous materials to submit a Hazardous Materials Business Plan and obtain permitting.

Furthermore, the proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. College campus uses are not typically associated with the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Any hazardous materials associated with the on-site uses would consist primarily of typical cleaning products and fertilizers, which would be utilized in small quantities and in accordance with label instructions, which are based on federal and/or State health and safety regulations. Therefore, the proposed project would have **no additional significant environmental effect** related to creating a potential health significant hazard to plant or animal populations in the area beyond what was previously evaluated in the Master EIR.

# Question B

As previously discussed, the project site is currently developed with the University of the Pacific, Sacramento Campus. Existing development on-site includes, but is not limited to, surface parking lots, administrative buildings, classrooms, and student housing. Therefore, sensitive habitats and potential habitat for special-status plant and wildlife species are unlikely to exist on-site. Trees and shrubs that occur within the project site may provide suitable nesting habitat for special-status bird species, including migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and Section 3503 of the California Fish and Game Code. However, the proposed project consists of multiple Rezones and does not include any specific development proposals. Therefore, the proposed project would not include the removal of any on-site trees or any construction activities which would disturb migratory birds and raptors at this time.

The proposed Rezones could allow for the development of college campus uses on Sites #1 and #2, including administrative buildings and student housing. However, future development on Sites #1 and #2 would be required to be consistent with all applicable policies, regulations, and standards related to the preservation of biological resources, including those set forth in the City's General Plan and Municipal Code, as well as those required by the federal government and the State. For example, if tree removal is proposed as part of future development facilitated by the proposed Rezones, all removal activities would be subject to the guidelines set forth in Chapter 12.56, Tree Planting, Maintenance, and Conservation, of the Sacramento City Code, which requires the acquisition of a Tree Removal Permit prior to the removal of any tree. In addition, future development facilitated by the proposed Rezones would be subject to Site Plan and Design Review approval, a process by which the City Planning and Design Commission would review applications to ensure projects are consistent with applicable criteria set forth in the Municipal Code. As future development within Sites #1 and #2 would be required to be consistent with all applicable policies set forth by the General Plan, the proposed project would not result in new significant impacts beyond what were previously identified in the Master EIR.

Based on the above, the proposed project would have **no additional significant environmental effect** on threatened or endangered species of plants or animals beyond what was previously evaluated in the Master EIR.

# Question C

Currently, the project site is developed with existing structures, parking areas, and associated improvements. Residential and commercial development surrounds the project site. Existing water bodies or features, such as rivers, creeks, or natural ditches do not exist on the project site, or within the project vicinity.

Because the project site does not contain existing water body features such as rivers, creeks, or natural ditches, the proposed project would not have a substantially adverse effect on any sensitive protected wetlands. Therefore, the proposed project would have *no additional significant environmental effect* beyond what was previously evaluated in the Master EIR.

#### **MITIGATION MEASURES**

None Required.

# FINDINGS

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

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

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

#### **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. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for archaeological resources, as identified in the 2035 General Plan Background Report, are located within close proximity to the Sacramento and American rivers and other watercourses.

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 prehistoric 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 prehistoric-period archaeological 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.

Currently, the majority of the project site is developed with existing structures, parking areas, and associated improvement's affiliated with the University of the Pacific, Sacramento Campus. The entirety of the project site has been subject to extensive ground disturbances as a result of prior grading activities and existing development. However, due to the age of the buildings, some of the existing on-site structures could be considered historic.

#### STANDARDS OF SIGNIFICANCE

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

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5; or
- 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 archeological resources. (Impacts 4.4-1,2)

#### ANSWERS TO CHECKLIST QUESTIONS

#### Question A through C

The project site includes existing development, parking areas, and associated improvements related to the University of the Pacific, Sacramento Campus. The proposed project consists of multiple Rezones and does not include any specific development proposals. However, the proposed Rezones could allow for the development of college campus uses on Sites #1 and #2, including administrative buildings and student housing, which would result in ground disturbing activities during construction. In addition, several buildings located on-site, including one building located on Site #2, were constructed more than 50 years ago, and, therefore, could be considered historic.

Nonetheless, the project site does not include any structures that are currently listed as historic resources under the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or the Sacramento Register of Historic and Cultural Resources. In addition, pursuant to Section 17.604.600 of the Sacramento City Code, within 45 days of receipt of an application to demolish or relocate a building or structure that was constructed at least 50 years prior to the date of application, the preservation director shall make a preliminary determination of whether the building or structure is eligible for listing on the Sacramento register. Furthermore, according to Section 17.808.180 of the City Code, during Site Plan and Design Review (which would be required for future development on Site #1 and #2) for projects that involve demolition or relocation of a historical resource, the City's decision makers would determine if the project meets the required criteria to allow for the demolition or relocation of a potential historic resource. Therefore, if redevelopment of the project site were to occur in the future, City standard requirements would ensure that a substantial adverse change in the significance of a historical resource would not occur.

Given the disturbed nature of the project site, surface cultural resources are not likely to be found on-site during grading and construction activities. However, due to the predominant historic theme of the region as a whole, which includes thousands of years of occupation by Native American groups prior to non-Native peoples settling in the region, the possibility exists that previously unknown resources could be encountered during ground-disturbing activities associated with development of the project. Therefore, the proposed project would have a potentially significant impact related to damaging or destroying prehistoric cultural resources. However, with implementation of Mitigation Measures 4-1 through 4-3, the *effect can be mitigated to less than significant*.

#### **MITIGATION MEASURES**

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

#### 4-1 In the Event that Cultural Resources are Discovered During Construction, Implement Procedures to Evaluate Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Impact.

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 c 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.

# 4-2 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.

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

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?			х
B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			Х

# **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 associated with the project site includes 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 routine maintenance activities.

# Energy Policy and Conservation Act, and Corporate Average Fuel Economy (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 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct 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 EPAct. 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.

# 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.

# 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 Senate Bill [SB] 350), expand energy efficiency in low-income and disadvantaged communities, and reduce GHG 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 Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11) is a portion of the California Building Standards Code (CBSC), which became effective on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of electric vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' MWELO, or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

# California Energy Code

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 the California Energy Commission (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 zeronet 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 (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 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. 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 vehicle miles traveled (VMT) (CEC and CARB 2003).

AB 1007 (Chapter 371, Statues 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 CO<sub>2</sub> 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 CCR, 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.

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 Climate Action Plan (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

## Questions A and B

The proposed project consists of multiple Rezones and does not include any specific development proposals. While the proposed project would not directly result in increased energy use relative to existing conditions, approval of the proposed Rezones could result in future development of Site #1 and Site #2 with college campus uses such as such as student housing, and administration offices. As such, additional on-site energy use may occur in the future. However, energy use associated with operation of the potential administrative buildings and student housing be typical of residential and office uses, requiring electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), refrigeration, appliances, security systems, and more.

Any future on-site development would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and Building Energy Efficiency Standards would ensure that future development within Site #1 and Site #2 would consume energy efficiently. As such, required compliance with the CBSC would ensure that the building energy use associated with future development on-site would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to buildings within the project area would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Thus, a portion of the energy consumed during operations would originate from renewable sources.

Based on the above, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, implementation of the proposed project would have **no additional significant environmental effect** related to energy beyond what was previously evaluated in the Master EIR.

## MITIGATION MEASURES

None required.

#### FINDINGS

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

## UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<ul> <li>6. <u>GEOLOGY AND SOILS</u> Would the project:</li> <li>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?</li> </ul>			х

## **ENVIRONMENTAL SETTING**

## Seismicity

The City of Sacramento is not located within an Alquist-Priolo Earthquake Fault Zone, and known faults do not exist within the Policy Area. Therefore, fault rupture within the Policy Area is highly unlikely and, consequently, implementation of buildout of the General Plan, would not expose people or structures to the possibility of fault rupture.

Nonetheless, the City may be subject to seismic hazards caused by major seismic events outside the City. Per the Master EIR, the greatest earthquake threat to the City comes from earthquakes along Northern California's major faults, including the San Andreas, Calaveras, and Hayward faults. Ground shaking on any of the aforementioned faults could cause shaking within the City to an intensity of 5 to 6 moment magnitude (Mw). However, as noted above, the City is not within an Alquist-Priolo Earthquake Fault Zone and does not include any known active faults. As such, the City's seismic ground-shaking hazard is low, ranking among the lowest in the State. Additionally, the City is in Seismic Zone 3. Accordingly, any future development, rehabilitation, reuse, or possible change of use of a structure would be required to comply with all design standards applicable to Seismic Zone 3.

# Topography

Terrain in the City of Sacramento features very little relief and the potential for slope instability within the City is minor due to the relatively flat topography of the area. The topography of the project site is relatively level, and is not a risk of seismically-induced landslides. Therefore, the potential for slope instability at the project site is minor.

# **Regional Geology**

The City of Sacramento is located in the Great Valley Geomorphic Province. The Great Valley Geomorphic Province consists of a deep, northwest-trending sedimentary basin that borders the east of the Coast Ranges. The Great Valley Geomorphic Province is a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California. The northern portion of the Great Valley Geomorphic Province is the Sacramento Valley drained by the Sacramento River, and the southern part is the San Joaquin Valley drained by the San Joaquin River. The valley is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, Coastal Range to the west, and Cascade Range to the north.

# 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

The City of Sacramento's topography is relatively flat, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and the City is not located in the immediate vicinity of an active fault. However, Sacramento is located in a moderate seismically-active region. The 2035 General Plan indicates that ground shaking would occur periodically in Sacramento as a result of distant earthquakes. The 2035 General Plan further states that the earthquake resistance of any building is dependent on an interaction of seismic frequency, intensity, and duration with the structure's height, condition, and construction materials. Although the project site is not located near any active or potentially active faults, strong ground shaking could occur at the project site during a major earthquake on any of the major regional faults.

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. Therefore, the proposed project would not include the demolition of existing structures, the construction of new structures, or any physical improvements to the project site.

Approval of the proposed Rezones could allow demolition and future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. However, due to the seismic activity in the State, all future construction would be required to comply with Title 24 of the Uniform Building Code (UBC). Chapter 15.20 of the Sacramento City Code adopts the UBC and mandates compliance; therefore, all new construction and modifications to existing structures within the City are subject to the requirements of the UBC. The UBC contains standards to ensure that all structures and infrastructure are constructed to minimize the impacts from seismic activity, to the extent feasible, including exposure of people or structures to substantial, adverse effects as a result of strong groundshaking, seismic-related ground failure, liquefaction, lateral spreading, landslides, or lurch cracking. As a result, seismic activity in the area of the project site would not expose people or structures to substantial, adverse effects as a result of strong groundshaking and seismic-related ground failure.

In addition, issues related to fault rupture, seismic groundshaking, and seismically induced ground failures are addressed in the City's adopted Standard Specifications for Public Works Construction (2007), which requires construction contractors to build to City standards related to structural integrity, thus, ensuring that erosion and unstable soil conditions do not occur as a result of construction. The construction specification document contains provisions that require contractors to be responsible for damage caused during construction and to be responsible for the repair of such damages (e.g., settling of adjacent land and structures). As such, individual components used in the construction of any future development on the project site would be constructed to industry-provided design specifications and requirements, including the American Society for Testing and Materials (ASTM) standards. Furthermore, the Master EIR recommends using site-specific geotechnical studies to determine if a specific location may be subject to liquefaction hazards. Therefore, prior to the construction of any campus uses on Sites #1 and #2, a site-specific geotechnical study would be required to determine if the sites are subject to liquification hazards.

Based on the above, implementation of the proposed project would have **no additional significant environmental effect** related to geology and soils beyond what was previously evaluated in the Master EIR.

# **MITIGATION MEASURES**

None required.

# FINDINGS

The project would have no additional project-specific environmental effects relating to Geology & Soils.

## UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

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

# Environmental Setting

The City of Sacramento is located within the 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.

# Greenhouse Gases

Certain gases in the earth's atmosphere, classified as 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 (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed 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 offroad 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 CO<sub>2</sub> 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.

Several regulations currently exist related to GHG emissions, predominantly AB 32, Executive Order S-3-05, and SB 32. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. 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 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. 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

# STANDARDS OF SIGNIFICANCE

• A project is considered to have a significant effect relating to GHG emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

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

The Master EIR found that GHG 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 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 GHG 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 GHG 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

#### Questions A and B

The proposed project consists of multiple Rezones and does not include specific development proposals or new uses. As such, implementation of the proposed project would not contribute to GHG emissions in the area. However, the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Therefore, future development of Sites #1 and #2 could contribute to GHG emissions in the area during both construction and operations.

Maximum annual GHG emissions from construction and operations of future development facilitated by the proposed Rezones were quantified and would equal approximately 114.13 metric tons of CO<sub>2</sub> equivalent units per year (MTCO<sub>2</sub>e/yr) and 916.12 MTCO<sub>2</sub>e/yr, respectively. For construction-related GHG emissions, SMAQMD has adopted a threshold of significance of 1,100 MTCO<sub>2</sub>e/yr. Construction of the proposed project would not exceed this threshold. For evaluating operational GHG emissions, SMAQMD has prepared a two-tiered framework of analysis for new projects, as explained further below. In addition, the City of Sacramento has integrated a CAP into the City's General Plan. Thus, potential impacts related to climate change from development within the City are also assessed based on the project's compliance with the City's adopted General Plan CAP Policies and Programs set forth in Appendix B of the General Plan Update. The majority of the policies and programs set forth in Appendix B are citywide efforts in support of reducing overall citywide emissions of GHG. However, various policies related to new development within the City would directly apply to the proposed project.

The project's compliance with SMAQMD thresholds, as well as the project's general consistency with City policies that would reduce GHG emissions from buildout of the City's General Plan are discussed below.

#### SMAQMD Threshold Compliance

The proposed project would be required to meet the following BMPs, regardless of emissions:

- **BMP 1:** No natural gas: Projects shall be designed and constructed without natural gas infrastructure.
- **BMP 2:** Electric vehicle (EV) ready: Projects shall meet the current CALGreen Tier 2 standards, except all EV Capable spaces shall instead be EV Ready.

In addition, projects with operational emissions that exceed 1,100 MTCO<sub>2</sub>e/yr after implementation of BMP 1 and BMP 2, are required to implement Tier 2 measures (BMP 3) as follows:

• **BMP 3:** Residential projects shall achieve a 15 percent reduction in VMT per resident as compared to the existing average VMT for the County.

As discussed above, maximum annual GHG emissions from operations of the proposed project were quantified and would equal approximately 916.12 MTCO<sub>2</sub>e/yr. Therefore, even without the implementation of BMP 1 and BMP 2, emissions would be below 1,100 MTCO<sub>2</sub>e/yr, and implementation of BMP 3 would not be required.

In order to be consistent with BMP 1, the proposed project is required to include all electric appliances and plumbing. Regarding BMP 2, future development would be subject to the multi-family residential requirements set forth in the CALGreen standards as well as the non-residential requirements for the administrative office portion of the future development. However, given that specific development proposals do not exist for the potential development of Sites #1 and #2, compliance with BMP 1 and BMP 2 cannot be ensured. Therefore, Mitigation Measure 7-1 would be required to ensure compliance with the applicable SMAQMD BMPs.

# CAP Consistency

Goal LU 1.1 and Policy LU 1.1.5 encourage infill development within existing urbanized areas. Given that the proposed Rezone would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices, which would result in the extension of the University of the Pacific campus, the project would be consistent with Goal LU 1.1 and Policy LU 1.1.5. Future development on-site would be constructed in compliance with the CBSC, which includes the California Building Energy Efficiency Standards and the California Green Building Code. The CBSC, and the foregoing standards and codes, increase the sustainability of new development through requiring energy efficiency and sustainable design practices (Policy ER 6.1.7). Such sustainable design would support the City's Policy U 6.1.5, which states that energy consumption per capita should be reduced as compared to the year 2005.

Goal LU 2.5, Policy LU 2.5.1, and Policy LU 2.7.6 require that new urban developments should be wellconnected, minimize barriers between uses, and create pedestrian-scaled, walkable areas. As discussed above, the proposed Rezone would allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Thus, the proposed project would provide the opportunity for more students to live on-campus, which would minimize barriers between campus and student housing uses, and create a pedestrian-scaled, walkable campus. Therefore, the proposed project would comply with the aforementioned goals and policies.

The Master EIR concluded that buildout of the City's General Plan, including the project site, would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The proposed project would be consistent with the City's General Plan land use designations for the site as well as the policies discussed above that are intended to reduce GHG emissions from buildout of the City's General Plan. Thus, GHG emissions from operation of the proposed project were previously analyzed in the Master EIR, and would be consistent with the CAP.

# Conclusion

Based on the above, the project would be consistent with the City's CAP, and generally consistent with the City's General Plan policies intended to reduce GHG emissions. However, compliance with SMAQMD BMP 1 and BMP 2 cannot be ensured for the future development facilitated by the proposed project. Therefore, Mitigation Measure 7-1 would be required to ensure compliance with the applicable SMAQMD BMPs. Compliance with Mitigation Measure 7-1 would ensure that *the effect can be mitigated to less than significant.* 

# **MITIGATION MEASURES**

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

- **7-1** The following requirements shall be noted on project improvement plans, subject to review and approval by the City of Sacramento Community Development Department:
  - The proposed project shall be designed such that the project is built all-electric, and natural gas infrastructure shall be prohibited on-site; and
  - Future development on the project sites shall be constructed to include electric vehicle (EV) ready parking spaces, consistent with the current CALGreen Tier 2 standards and SMAQMD BMP 2 Standards per to the thresholds and guidance provided by SMAQMD.

# FINDINGS

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

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

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

## **ENVIRONMENTAL AND REGULATORY SETTING**

Federal regulations and regulations adopted by the 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.

#### 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 consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not include the demolition of existing structures, the construction of new structures, or any physical improvements to the project site, and, therefore, would not expose people to existing contaminated soil during construction activities.

However, approval of the proposed Rezones could allow future demolition and development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Per the Master EIR, grading, excavation, and dewatering of sites for new development may expose construction workers and the public to known or previously unreported hazardous substances present in the soil or groundwater. If new development is proposed at or near a documented or suspected hazardous materials site, investigation, remediation, and cleanup of the site would be required before construction could begin. The project site is not located on a hazardous waste facility or site with known contamination within the EnviroStor Database.<sup>6</sup> The closest listed hazardous site is the Curtis Park Union Pacific Railroad (UPRR) Rail Yard, located approximately 0.8 miles southwest of the project site. Therefore, the proposed project does not contain contaminated soils, and, due to distance, the off-site hazardous sites would not likely impact the project site.

Based on the above, impacts related to exposing people to existing contaminated soils or groundwater during construction activities would be less-than-significant. Thus, implementation of the proposed project would have **no additional significant environmental effect** related to exposing people to existing contaminated soil during construction activities beyond what was previously evaluated in the Master EIR.

# Question B

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be "fibrous" and, through processing, can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. They are also long, thin and flexible, so they can even be woven into cloth. Because of these qualities, asbestos was considered an ideal product and has been used in thousands of consumer, industrial, maritime, automotive, scientific and building products. However, later discoveries found that, when inhaled, the material caused serious illness. The project site is not located in an area identified as likely to contain naturally occurring asbestos (NOA). Thus, sensitive receptors would not be exposed to NOA as a result of the proposed project.

<sup>&</sup>lt;sup>6</sup> Department of Toxic Substances Control. *EnviroStor.* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed March 2022.

For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as "presumed asbestos-containing material" unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. Asbestos-containing materials could include, but are not limited to, plaster, ceiling tiles, thermal systems insulation, floor tiles, vinyl sheet flooring, adhesives, and roofing materials.

Lead-based paint (LBP) is defined as any paint, varnish, stain, or other applied coating that has one milligram per cubic centimeter or greater (5,000 micrograms per gram or 5,000 parts per million) of lead by federal guidelines. Lead is a highly toxic material that may cause a range of serious illnesses and, in some cases, death. In buildings constructed after 1978, LBP is unlikely to be present. Structures built prior to 1978 and especially prior to the 1960s should be expected to contain LBP.

As discussed previously, while the proposed project consists of multiple Rezones and, therefore, would not include the demolition of existing structures, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Site #1 is currently developed with an existing surface level parking lot, and, therefore, development of Site #1 would not include the demolition of any existing structures. However, the 1,200-sf Marshal Way House, which was constructed in 1910 and is used for administrative services, currently exists within Site #2.

Based on the age of the Marshall Way House, asbestos-containing materials and LBP are presumed to be present within the building. If demolition were to occur as part of the future development of Site #2, without implementation of the appropriate safety measures, construction workers could potentially be exposed to LBP and asbestos-containing materials during demolition activities. Therefore, mitigation would be required to ensure that future development of Site #2 does not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, particularly associated with asbestos-containing materials and LBP. Nonetheless, with implementation of Mitigation Measure 8-1, the *effect can be mitigated to less than significant*.

# Question C

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. Therefore, construction activities would not occur as a result of the proposed project. Approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. However, all future construction would be constructed to industry-provided design specifications and requirements, including the CBSC, the UBC, and ASTM standards. Furthermore, as discussed in Section 6, Geology and Soils, of this Initial Study, a site-specific geotechnical study would be completed prior to the future development of Sites #1 and #2. Nonetheless, given that the project site is currently developed with existing college campus uses, any future construction activities are not expected to involve excavation to groundwater depths. Additionally, groundwater dewatering is not anticipated to be required during development of the proposed project. Furthermore, as discussed previously, the project site is not located on a hazardous waste facility or site with known contamination. Therefore, impacts related to exposing people to existing contaminated groundwater during dewatering activities would be less than significant, and construction of the proposed project would have **no additional significant environmental effect** related to groundwater contamination beyond what was previously evaluated in the Master EIR.

# **MITIGATION MEASURES**

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

8-1 Prior to issuance of a demolition permit for any on-site buildings constructed prior to 1980, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Building Department an asbestos and lead survey.

If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead-containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the City of Sacramento for review and approval. The City has the right to defer the work plan to the Sacramento County Environmental Health Division for additional review. Materials containing more than one (1) percent asbestos that is friable are also subject to SMAQMD regulations. Removal of materials containing asbestos shall be completed in accordance with SMAQMD Rule 1403.

# FINDINGS

All additional significant environmental effects of the project relating to Hazards can be mitigated to a lessthan-significant level.

Issues:		Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<ul> <li>9. <u>HYDROLOGY AND</u></li> <li>Would the project:</li> <li>A) Substantially any water que water Resonant water Resonant increases in signmented by of the project?</li> </ul>	WATER QUALITY degrade water quality and violate ality objectives set by the State urces Control Board, due to ediments and other contaminants construction and/or development			Х
B) Substantially and/or propert in the event of	ncrease the exposure of people y to the risk of injury and damage a 100-year flood?			Х

## ENVIRONMENTAL SETTING

The project site is located in the highly developed Oak Park area of Sacramento. Currently, the majority of the project site is developed with impervious surfaces, including buildings, parking areas, and sidewalks. The site already contains storm drainage infrastructure, which diverts runoff from the impervious surfaces on the site and into the City's storm drain main in 5<sup>th</sup> Avenue.

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 City's Stormwater Management Program is based on the National Pollutant Discharge Elimination System (NPDES) municipal stormwater discharge permit. The comprehensive Stormwater Management 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.

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 06067C0190H <sup>7</sup> as being located within Zone X, an area of minimal flood hazard. FEMA does not have building regulations for development in areas designated Zone X and would not require mandatory flood insurance for structures in Zone X.

Section 13.08.145 of the Sacramento City Municipal Code (Mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities) requires that when a property contributes drainage to the storm drain system or combined sewer system, all stormwater and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or

Federal Emergency Management Agency. *Flood Insurance Rate Map Community Panel Number 06067C0190H*.
 Available at: https://msc.fema.gov/portal/home. Accessed March 2022.

combined sewer system, and that an increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property does not occur. The project is within the service area of the SASD fees, which are used to recover a share of SASD's cost for any new system facilities necessary to service new connections.<sup>8</sup> In addition to sewer service provided by SASD, the project would also be within the SRCSD. In order to connect with the SRCSD wastewater conveyance and treatment system, developers must pay impact fees based on development type and location.<sup>9</sup>

# 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 2035 General Plan Master EIR:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board (SWRCB), due to increases in sediments and other contaminants generated by construction and/or development of the proposed project; 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 2.1.23), 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

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not include construction or operations that would result in adverse impacts related to water quality. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Therefore, the following sections provide an analysis of potential impacts to water quality that could occur during construction and operation of future development facilitated by the rezoning of Sites #1 and #2.

# Construction

Construction activities associated with the future development of Sites #1 and #2 would have the potential to degrade water quality from increased sedimentation and increased discharge (increased flow and volume of runoff) associated with storm water runoff. Because future development of Sites #1 and #2 would result in a land disturbance of less than one acre (approximately 0.77-acre), the project applicant would not be required by the State to prepare a Stormwater Pollution Prevention Plan (SWPPP). However, the proposed project would be required to comply with all of the requirements from the California Stormwater Quality Association Stormwater Best Management Practice Handbook for New Development and Redevelopment. As such, temporary construction-phase BMPs would be used for the full duration of construction and would

<sup>&</sup>lt;sup>8</sup> Sacramento Area Sewer District. Sewer Ordinance SDI-0072. Effective May 27, 2016.

<sup>&</sup>lt;sup>9</sup> Regional San. *Impact Fees.* Available at: https://www.regionalsan.com/impact-fees-businesses. Accessed March 2022.

include fiber rolls, tree protection, construction entrance, designated staging/storage areas, construction fencing, dust control measures, and other miscellaneous provisions, as necessary. In addition, City staff would inspect and enforce all erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control Ordinance).

Conformance with City regulations along with implementation of BMPs would ensure that construction activities associated with redevelopment of Sites #1 and #2 would result in a less-than-significant impact related to water quality.

# Operations

As discussed above, the majority of the project site is currently developed with impervious surfaces, and site already contains storm drainage infrastructure which diverts runoff from the impervious surfaces onsite and into the City's storm drain system. Therefore, the future development of Sites #1 and #2 would not be anticipated to increase impervious surfaces on-site to a level that would impact the amount of surface runoff in a manner that would result in flooding, or exceed the capacity of stormwater drainage systems in the project area. As such, consistent with Chapter 13.16 of the Municipal Code, the post-development stormwater flows from the Sites #1 and #2 are anticipated to be equal to or less than predevelopment conditions.

In addition, future on-site development would be required to comply with Section 13.08.145, Mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities, of the Municipal Code, which requires the following:

"When property that contributes drainage to the storm drain system or combined sewer system is improved or developed, all stormwater and surface runoff drainage impacts resulting from the improvement or development shall be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property."

Compliance with all applicable regulations regarding stormwater quality would ensure that future on-site development facilitated by the proposed Rezones would not result in adverse impacts related to water quality during operations.

# Conclusion

Based on the above, the proposed project would not include any construction or operations that would result in adverse impacts related to water quality. In addition, conformance with City and State regulations would ensure that a substantial degradation to water quality or violation of any water quality objectives during construction or operation of the potential future development of Sites #1 and #2 would not occur. As such, implementation of proposed project would have **no additional significant environmental effect** related to drainage and runoff beyond what was previously evaluated in the Master EIR.

# Question B

A floodplain is an area that is inundated during a flood event and is often physically discernable as a broad, flat area created by historical floods. According to FEMA, the project site is located within an Area of Minimal Flood Hazard (Zone X). The site is not classified as a Special Flood Hazard Area or otherwise located within a 100-year or 500-year floodplain. Therefore, development of the proposed project would not impede or redirect flood flows and no impact would result, and the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

# **MITIGATION MEASURES**

None required.

# FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

Issues	:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
10. <u>NC</u>	DISE			
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 <sub>dn</sub> or greater caused by noise level increases due to the project?			х
C)	Result in construction noise levels that exceed the standards in the City of Sacramento general plan or Noise Ordinance?			х
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?		х	
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?		х	
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?		х	

# **ENVIRONMENTAL SETTING**

The following section presents basic information related to noise and vibration, as well as the existing noise environment at the project site.

# Noise

Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz). Discussing sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel (dB) scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference defined as 0 dB. Other sound pressures are compared to the reference pressure and the logarithm is taken to keep the numbers in practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. A strong correlation exists between the way humans perceive sound and A-weighted sound levels. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment for community exposures. All sound levels expressed as dB in this section are A-weighted sound levels, unless noted otherwise.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the allencompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ), over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptors, day-night average level ( $L_{dn}$ ) and the community noise equivalent level (CNEL), and shows very good correlation with community response to noise for the average person. The median noise level descriptor, denoted  $L_{50}$ , represents the noise level which is exceed 50 percent of the hour. In other words, half of the hour ambient conditions are higher than the  $L_{50}$  and the other half are lower than the  $L_{50}$ .

The  $L_{dn}$  is based upon the average noise level over a 24-hour day, with a +10 dB weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because  $L_{dn}$  represents a 24-hour average,  $L_{dn}$  tends to disguise short-term variation in the noise environment. Where short-term noise sources are an issue, noise impacts maybe assessed in terms of maximum noise levels, hourly averages, or other statistical descriptors.

Another common descriptor is the CNEL. The CNEL is similar to the  $L_{dn}$ , except CNEL has an additional weighting factor. Both average noise energy over a 24-hour period. The CNEL applies a +5 dB weighting to events that occur between 7:00 PM and 10:00 PM, in addition to the +10 dB weighting between 10:00 PM and 7:00 AM associated with  $L_{dn}$ . Typically, the CNEL and  $L_{dn}$  result in similar results for the same noise events, with the CNEL sometimes resulting in reporting a 1 dB increase compared to the  $L_{dn}$  to account for noise events between 7:00 PM and 10:00 PM that have the additional weighting factor.

# Vibration

Vibration is like noise in that vibration involves a source, a transmission path, and a receiver. While vibration is related to noise, vibration differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and a frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. Vibration magnitude is measured in vibration decibels (VdB) relative to a reference level of 1 micro-inch per second peak particle velocity (ppv), the human threshold of perception. The background vibration level in residential areas is usually 50 VdB or lower. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible. The range of environmental interest is typically from 50 VdB to 90 VdB (or 0.12 inch per second ppv), the latter being the general threshold where structural damage can begin to occur in fragile buildings.

# **Existing Noise Environment**

The ambient noise environment within the immediate project vicinity is defined primarily by noise from traffic on SR 99 and 5<sup>th</sup> Avenue, existing operations and associated vehicles at the University of the Pacific Campus, and existing operations and associated vehicles at the Bambino Bakery Facility to the south of the project site.

# 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<sub>dn</sub> 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-peakparticle 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 (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 and B

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not include operations that would result in noise level increases beyond what currently exists within the project vicinity. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices.

As a result, operational noise resulting from the proposed project could potentially increase from the onsite sources of operational noise that currently exist. However, residential and administrative office land uses typically do not generate substantial noise. In addition, the potential increase would not be significant because the proposed uses would be compatible with the adjacent existing residential and campus uses. Therefore, impacts resulting from project-generated noise would be considered less than significant.

Based on the above, the proposed project would have **no additional significant environmental effect** related to noise beyond what was previously evaluated in the Master EIR.

# Question C

Construction activities associated with redevelopment of Sites #1 and #2 would add to the noise environment in the immediate project vicinity. Table 6 shows maximum noise levels associated with typical construction equipment. Based on the table, activities in typical construction would generate maximum noise levels up to 85 dB at a distance of 50 feet.

The closest sensitive receptors to the project site include the residential uses located approximately seven feet north of Site #1 and approximately 11 feet west of Site #2. However, construction noise would occur over a relatively short period of time. Additionally, the Municipal Code regulates noise, and provides that construction noise during specified hours would be exempt from such controls in Section 8.68.080 of the Municipal Code. Construction operations that occur between 7:00 AM and 6:00 PM, Monday through Saturday and between 9:00 AM and 6:00 PM on Sundays are exempt from the applicable noise standards,

provided that pieces of equipment with combustion engines are equipped with suitable exhaust and intake silencers are in good working order. Therefore, the proposed project, including the potential future development of Sites #1 and #2 would not result in a substantial increase in ambient noise levels in the project vicinity due to construction, and the project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

Table 6 Construction Equipment Noise				
Type of Equipment Maximum Level, dB at 50 feet				
Backhoe	78			
Compactor	83			
Compressor (air)	78			
Dozer	82			
Dump Truck	76			
Excavator	81			
Generator 81				
Pneumatic Tools	85			
Source: Federal Highway Administration, Roadway Co.	Source: Federal Highway Administration. Roadway Construction Noise Model User's Guide. January 2006.			

# Question D through F

For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec ppv), for buildings structurally sound and designed to modern engineering standards; 0.2 in/sec ppv for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec ppv for ancient buildings or buildings that are documented to be structurally weakened.<sup>10</sup> Accordingly, the City uses a threshold of significance for vibration levels of 0.5 in/sec ppv for residential and commercial areas, and 0.2 in/sec ppv for historic buildings and archaeological sites. Given that the age of the residences to the north of Site #1 and west of Site #2 are unknown, a vibration limit of 0.2 in/sec ppv would be considered the conservative threshold for structural damage.

Operations of the potential future student housing and administration offices on Sites #1 and #2 would not generate groundborne vibration. However, during future construction, heavy equipment would be used for grading excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The primary vibration-generating activities would be grading, utilities placement, and parking lot construction. Table 7 shows the typical vibration levels produced by construction equipment.

Table 7           Vibration Levels for Various Construction Equipment						
Type of Equipment	PPV at 25 feet (inches/second)	PPV at 50 feet (inches/second)	PPV at 100 feet (inches/second)			
Large Bulldozer	0.089	0.031	0.011			
Loaded Trucks	0.076	0.027	0.010			
Small Bulldozer	0.003	0.001	0.000			
Auger/drill Rigs	0.089	0.031	0.011			
Jackhammer	0.035	0.012	0.004			
Vibratory Hammer	0.070	0.025	0.009			
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026			
Source: Transit Noise and Vibratio	Source: Transit Noise and Vibration Impact Assessment Guidelines, Federal Transit Administration, May 2006					

<sup>&</sup>lt;sup>10</sup> California Department of Transportation. *Transportation and Construction Vibration Guidance Manual*. September 2013.

As shown in Table 7, with the exception of vibratory compactors, the vibration levels of typical construction equipment are less than the 0.2 in/sec threshold at distance of 25 feet. However, redevelopment of Sites #1 and #2 could include construction which would occur at a minimum distance of approximately seven feet from the nearest adjacent single-family residential uses. Therefore, use of vibratory compactors could cause vibrations in excess of 0.2 in/sec at the adjacent residential buildings, and a potentially significant impact could occur. However, with implementation of Mitigation Measure 10-1, the *effect can be mitigated to less than significant*.

# **MITIGATION MEASURES**

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

10-1 Any compaction required less than 26 feet from the residential structures adjacent to the project site shall be accomplished by using static drum rollers, rather than vibratory compactors, which use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, preconstruction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures. The above requirements shall be included via notation on any future improvement plans approved for the redevelopment of any parcels included in the project site to the satisfaction of the City's Community Development Department.

## FINDINGS

All additional significant environmental effects of the project relating to noise 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
<ul> <li>11. <u>PUBLIC SERVICES</u> Would the project:</li> <li>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?</li> </ul>			Х

## **ENVIRONMENTAL SETTING**

The City of Sacramento provides fire, police, and parks and recreation services in the vicinity of the proposed project site.

The Sacramento Fire Department (SFD) provides fire protection services to the entire City and some small areas just outside the City boundaries within the County limits. SFD provides fire protection and emergency medical services to the project area. First-response service is provided by Station 9, located at 3101 Stockton Boulevard, approximately 1.1 miles east of the project site.

The Sacramento City Police Department (SPD) provides police protection services to the project area. The project area is serviced by the East Command which is located at the 300 Richards Boulevard, approximately 5.8 miles northwest of the project site. In addition to the SPD, the Sacramento County Sheriff's Department, California Highway Patrol (CHP), UC Davis Medical Center Police Department, and the Regional Transit Police Department aid the SPD to provide protection for the City.

The project site is within the Sacramento City Unified School District (SCUSD). The SCUSD serves 40,711 students on 75 campuses.<sup>11</sup> The nearest school, Franklin Park Elementary School, is located approximately 0.3-mile west of the project site.

The City of Sacramento Department of Youth, Parks and Community Enrichment (Department of YPCE) oversees more than 4,255.5 acres of parkland, and manages more than 223 parks within the City. The project site is located approximately 74 feet to the west of McClatchy Park.

# 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. Police, fire protection, schools, libraries and emergency services were evaluated in Chapter 4.10 of the Master EIR.

<sup>&</sup>lt;sup>11</sup> Sacramento City Unified School District. *Sacramento City Unified School District*. Available at: https://www.scusd.edu/our-district. Accessed March 2022.

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 following discussions pertains to the existing fire, police, and school facilities, as well as the proposed project's impacts related to such facilities and services.

# Fire Protection

The SFD provides fire protection services to the entire City, and small areas within Sacramento County that include the Pacific Fruitridge and the Natomas Fire Protection Districts. The SFD serves a population of over 738,000 in a 358 square mile service area. The SFD has approximately 155 on-duty personnel working daily to serve the City.<sup>12</sup>

The closest fire station to the project site is SFD Station 9, approximately 1.1 miles east of the project site. Stated within the Sacramento General Plan EIR, the goal of the SFD is to have fire suppression and paramedic services arrive at the scene within four minutes. Given that the project site is currently, developed with the University of the Pacific, Sacramento Campus, and considering the proximity of the project site to Station 9, the reasonable assumption can be made that response times from the SFD currently meet the four-minute response time goal.

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices, which could create an increased demand on fire protection services within the project area. Nonetheless, all future development within Sites #1 and #2 would be consistent with the project site's General Plan land use designations, and would be required to comply with all applicable General Plan policies and programs and regulations and standards related to public services set forth in the City's Municipal Code. In addition, the overall use of the project site currently is, and would remain, ancillary to the University of the Pacific Campus. The Campus is already adequately served by SFD.

Within the General Plan, Policy PHS 2.1.11 states that the City shall require development projects to contribute fees for fire protection services and facilities. As a result of Policy PHS 2.1.11, the project would be required to pay applicable development fees financially supporting the SFD. Considering that all future development would be consistent with the General Plan, and the proximity of the site to Station 9, the proposed project would not result in the need for new or altered services related to fire protection and a less-than-significant impact would occur.

# Police Protection

The SPD provides police protection services within the City boundaries. The SPD uses a variety of data that includes GIS based data, call and crime frequency information, and available personnel to rebalance the deployment of resources on an annual basis to meet the changing demands of the City. In addition, the Sacramento County Sheriff's Department provides police protection services outside the City limits but within the Planning Area. According to the General Plan EIR, as buildout of the General Plan occurs, the

<sup>&</sup>lt;sup>12</sup> Metro Fire Sacramento. *About Us.* Available at: https://metrofire.ca.gov/about-us. Accessed March 2022.

SPD would need new, decentralized facilities that would be required to maintain adequate response times. Currently, the SPD averages an eight minute and five second response time for Priority 2 calls.

Similar to the SFD, future development of Sites #1 and #2 facilitated by the proposed Rezones could create an increased demand in police services to the project area; however, as mentioned above, all future development would be consistent with the project site's General Plan land use designations, and would be required to comply with all applicable General Plan policies and programs and regulations and standards related to public services set forth in the City's Municipal Code. General Plan policies include measures to accommodate for growth and increased service demands. Specifically, Policy PHS 1.1.1, calls for the City to prepare a Police Master plan to address staffing and facility needs. In addition, per Policy PHS 1.1.8 within the Master EIR, the City requires development projects to contribute fees for police facilities. As a result, development would pay applicable development impact fees to fund necessary police services. Implementation of polices and goal presented within the General Plan reduce growth inducing impacts on police services to a less-than-significant impact. In addition, the overall use of the area currently is, and would remain, ancillary to the University of the Pacific Campus. The Campus is already adequately served by SPD.

Considering the above, the proposed project would not result in the need for new or altered services related to police protection and a less-than-significant impact would occur.

# Schools

The future development of Sites #1 and #2 would include construction of educational/community resources buildings, and would not generate any local students. The potential student housing buildings would be intended for use by university students. As such, the student housing would not offer all-ages family housing and, therefore, is not expected to house residents that are public school-aged. While university students living at the future student housing developments may have school-aged children/dependents, the student generation rate associated with future students living on-site would be substantially lower than that of a typical multi-family residential project.

Proposition 1A/SB 50 (1999) prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act involving the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." (Id.) Therefore, according to SB 50, the payment of the necessary school impact fees for the proposed project would be full and satisfactory CEQA mitigation.

As a result, implementation of education development fees would reduce the proposed projects potential impacts on schools to a less-than-significant level.

# Other Governmental Services

The Sacramento Public Library (SPL) serves the cities of Sacramento, Citrus Heights, Elk Grove, Galt, Iselton, Rancho Cordova, and the County of Sacramento. The SPL authority is governed by a Joint Exercise of Powers Agreement between these cities and counties to provide public library services to all citizens in the jurisdiction. Currently, 16 new libraries are current planned for construction in the City and County of Sacramento by 2025. Based on plans set forth in the SPL Authority Facility Master Plan, the SPL expects to provide 1,007,274 sf of library space throughout the SPL Authority's service area by 2025. The new library spaced would meet the target level, 0.40 sf library facilities per capita, defined in the General Plan EIR.

The Gordon D. Schaber Law Library, is located within the project site, and currently serves the students of the University of the Pacific, Sacramento Campus. While the approval of the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, such as the provision of up to 76 new units of student housing, additional student housing would not induce the student population such that the proposed project would result in the need for new or altered library facilities beyond what was anticipated in the 2035 General Plan. Thus, a less-than-significant impact would occur.

# Conclusion

As noted above, the applicant would be required to pay all of the required development fees to the appropriate public services departments. Payment of such would ensure that impacts related to fire protection, police protection, school facilities, or other governmental services would be reduced to a less-than-significant level. Therefore, implementation of proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

## **MITIGATION MEASURES**

None required.

#### FINDINGS

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

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

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

## **ENVIRONMENTAL SETTING**

Natural resources and parks provide a wide range of recreational opportunities for residents in the vicinity of the project site. The City currently contains 230 developed and undeveloped park sites, 88 miles of off-street bikeways and trails, 21 lakes/ponds or beaches, over 20 aquatic facilities, and extensive recreation facilities in the City parks. With the inclusion of the City's golf courses (633 acres) and Camp Sacramento, which is located in El Dorado County (19 acres), the City's parkland total is approximately 4,829 acres. The proposed project is adjacent to various recreational and park facilities. McClatchy Park is located immediately east of the project site. In addition, Curtis Park is located approximately 0.5-mile west 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 proposed project consists of multiple Rezones and does not include any specific development proposals. Thus, direct development would not occur as a result of the proposed project. In addition, while the approval of the proposed Rezones would allow future development of Sites #1 and #2 with college campus uses, such as the provision of up to 76 new units of student housing, additional student housing would not induce the student population such that the proposed project would 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.

In addition, implementation of the policies and goals within the General Plan would ensure that any potential future impacts to parks and recreational facilities are reduced to a less-than-significant level. For example, Policy ERC 2.2.1 states that all new development shall be consistent with the applicable provisions of the Parks and Recreation Master Plan. Furthermore, pursuant to City Code 18.56.230, the future development within Sites #1 and #2 would be required to pay a Park Development Impact Fee prior to issuance of a building permit. The City would use the Park Development Impact Fee to finance the design, construction, installation, improvement, and acquisition of park facilities for neighborhood parks within two miles of the development project, community parks within five miles of the development project, and regional and citywide park facilities located anywhere in the City.

Based on the above, implementation of the proposed project would result in *no additional environmental effect* related to recreation beyond what was analyzed in the 2035 Master EIR.

## MITIGATION MEASURES

None required.

## FINDINGS

The 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:			
<ul> <li>A) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?</li> </ul>			X
<ul> <li>B) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?</li> </ul>			х
C) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			х
D) Result in inadequate emergency access?			Х

## **ENVIRONMENTAL SETTING**

The primary roadways in the vicinity of the project site include 5<sup>th</sup> Avenue to the north of Site #7 and to the south of Sites #3 and #6, and 33<sup>rd</sup> Street to the east of all sites except Site #1, which is located west of the roadway. Both roadways are two-lane streets with a posted speed limit of 30 miles per hour (mph). SR 99 is located approximately 205 feet west of the project site and SR 50 is located approximately 0.68 miles north of the project site. The closest intersection to the project site is the 5<sup>th</sup> Avenue/33<sup>rd</sup> Street/34<sup>th</sup> Street intersection.

In the vicinity of the project site, continuous sidewalks exist along both 5<sup>th</sup> Avenue and 33<sup>rd</sup> Street. Existing Class II bike lines are located along 5<sup>th</sup> Avenue. Additionally, the City's Bikeways Master Plan shows a planned on-street bicycle route along 33<sup>rd</sup> Street.

Public transit service within the project site is provided by bus, which is operated by the Sacramento Regional Transit (RT). Routes 51 and 68 provide service on Broadway. The routes feature multiple bus stops along Broadway, with the nearest located at the Broadway/37<sup>th</sup> Street intersection, approximately 0.1-mile from the project site. Route 51 begins at the Florin Towne Center and the last stop is the 8<sup>th</sup> Street/F Street intersection in Downtown. Monday through Friday, Route 51 operates from 5:34 AM to 9:49 PM. On Saturdays, Route 51 operates from 6:14 AM to 9:14 PM. On Sundays and holidays, Route 51 operates from 6:14 AM to 8:54 PM. Route 68 begins at Consumnes River College and the last stop is the Arden Fair Mall Transit Center. Monday through Friday, Route 68 operates from 6:08 AM to 9:12 PM. On Saturdays, Route 68 operates from 7:26 AM to 8:56 PM. On Sundays and holidays, Route 68 operates from 7:32 AM to 8:30 PM.

# STANDARDS OF SIGNIFICANCE

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts, with other relevant considerations consisting of the effects of the project on transit and non-motorized travel. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips, with one end within the project site. Based on current practices from the City of Sacramento for residential projects, transportation impacts for CEQA purposes are considered significant if the proposed project would generate Household VMT per capita figures that exceed 85 percent of the regional average for

Household VMT per capita, consistent with technical advisory guidance published by the Governor's Office of Planning and Research (OPR) in 2018.

Several screening thresholds are used to quickly determine whether a project may be presumed to have a less-than-significant VMT impact without conducting a detailed project generated VMT analysis. For residential projects, screening criteria includes:

- 1. Small Projects projects that generate or attract fewer than 110 trips per day;
- 2. Map-Based Screening projects located in areas that are known to generate below-average VMT;
- 3. Near Transit Stations projects within 0.5-mile of an existing major transit stop or an existing stop along a high-quality transit corridor; or
- 4. Affordable Residential Development projects that include affordable housing within an infill location.

Lastly, for purposes of this Initial Study, impacts resulting from changes in transportation or circulation 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 Master EIR:

# Transit

- Adversely affect public transit operations; or
- Fail to adequately provide for access to public transit.

# **Bicycle Facilities**

- Adversely affect bicycle travel, bicycle paths; or
- Fail to adequately provide for access by bicycle.

# Pedestrian Circulation

- Adversely affect pedestrian travel, pedestrian paths; or
- Fail to adequately provide for access by pedestrians.

# Construction-Related Traffic Impacts

- Degrade an intersection or roadway to an unacceptable level;
- Cause inconveniences to motorists due to prolonged road closures; or
- Result in an increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

# 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 following analysis provides a summary of the project trip generation and distribution, and impacts to transit, bicycle, and pedestrian facilities.

## Project Trip Generation and Distribution

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not include operations that would result in trip generation increases beyond what currently exists within the project vicinity. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. As a result, future trips resulting from the proposed project could potentially increase from the future on-site uses. Nonetheless, future development of Sites #1 and #2 is consistent with the land use designations for the sites per the 2035 General Plan. In addition, the provision of additional student housing for the University students and would not induce population growth. Rather, the project's provision of additional student housing is anticipated to accommodate the existing student has been anticipated for the site per the General Plan. Therefore, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system beyond what has been anticipated by the City per the Master EIR, and a less-than-significant impact would occur.

## Transit, Bicycle, and Pedestrian Facilities

As stated above, Sacramento RT 51 and 68 provide transit opportunities from the project site, and the project is consistent with the General Plan land use designations for the project site. The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. The proposed Rezones would bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designations for the uses that currently exist on site. While the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, because the future development would merely serve to expand the college uses in the project site, the project would not add noticeable transit demand; however, any demand added to the transit system could be adequately accommodated by the existing/planned transit system and has been anticipated in the 2035 General Plan and Master EIR. Additionally, the proposed project would not result in removal of any existing bicycle or pedestrian facilities or preclude the implementation of any proposed or existing off-street trails in the vicinity of the project. Furthermore, future development of Sites #1 and #2 would be anticipated to include the provision of bicycle parking spaces for use by future residents.

# Conclusion

Based on the above, the proposed project would not conflict with a program, plan, ordinance, or policy address the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, implementation of the proposed project would result in *no additional environmental effects* beyond what was analyzed in the 2035 Master EIR.

#### Question B

As discussed above, the proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not include operations that would result in VMT increases beyond what currently exists within the project vicinity. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices. Nonetheless, the provision of additional student housing for the

University students would not result in new vehicle trip generation, as the student housing would accommodate the existing student population which currently travels to and from the project site. Thus, student trips would occur even without the development of Sites #1 and #2, as students would be travelling to the Campus for school. As such, future development of Sites #1 and #2 would be expected to reduce trip lengths due to students that would otherwise be living off campus, moving to on-campus housing. The associated reduction in trip lengths would correspond with an overall reduction in VMT.

Pursuant to SB 743 and technical guidance published by OPR, several screening procedures exist to potentially streamline project analysis. Based on SACOG guidance, the student housing proposed as part of the future development of Sites #1 and #2 qualifies for Map-Based Screening. Maps created with VMT data can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.

The VMT estimated for the student housing proposed as part of the future development of Sites #1 and #2 was determined using the maps derived from the traffic analysis zone results from SACOG's regional travel forecasting model system. The maps use hexagonal shaped geographic areas (HEX) to establish a uniform grid of Household VMT per capita by tallying all household VMT's generated by residents within the HEX and dividing by the total population in the HEX. The proposed project falls within a HEX estimated to produce between 50 percent to 85 percent of the Regional Average, which is less than the average household VMT per capita for the region. As a result, VMT associated with the student housing anticipated to be developed in the future within Sites #1 and #2 is considered to be less-than-significant based on the Map-Based Screening.

With regard to the administrative office uses proposed as part of the future development of Sites #1 and #2, the proposed project's VMT was assessed by applying OPR's guidance. According to OPR, localserving retail may generally be presumed to have a less-than-significant VMT impact and can generally be screened from further VMT analysis. OPR based the presumption on substantial research demonstrating that adding local-serving retail uses typically improves destination accessibility to customers, often reducing trip distances because customers need to travel shorter distances than they previously did. The total demand for retail in a region also tends to hold steady; adding new local-serving retail typically shifts trips away from another use rather than adding entirely new shopping trips to the region. While the future administrative office uses would not be considered retail, given the nature of the proposed use, a reasonable assumption can be made that the majority of people visiting the future administrative office uses would be student and staff travelling from the existing University of the Pacific campus in the immediately surrounding area. As such, the proposed project would be classified as local-serving, and, based on guidance provided by OPR, may be presumed to result in a less-than-significant VMT impact.

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and implementation of the proposed project would result in **no additional environmental effects** beyond what was analyzed in the 2035 Master EIR.

# Question C

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. As such, the proposed project would not redesign, alter, or modify existing public roadways in the project vicinity, or substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). However, the proposed Rezones could allow for the development of college campus uses on Sites #1 and #2, including administrative buildings and student housing. Future development on Sites #1 and #2 would be required to be consistent with all applicable policies, regulations, and standards related to roadway development, including those set forth in the City's General Plan and Municipal Code, as well as those required by the federal government and the State. In addition, all plans prepared for the future development facilitated by the proposed Rezones would be subject to review and approval by the City to ensure the project is consistent with applicable criteria set forth in the Municipal Code. As future development within Sites #1 and #2 would be required to be consistent with applicable criteria set forth in the Municipal Code. As future development within Sites #1 and #2 would be required to be consistent with all applicable criteria set forth in the Municipal Code. As future development of Sites #1 and #2 would be required to be consistent with all applicable policies, future development of Sites #1 and #2 would be required to be consistent with all applicable policies.

#2 would not be anticipated to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and implementation of the project would result in *no additional environmental effects* beyond what was analyzed in the 2035 Master EIR.

# Question D

Future development on Sites #1 and #2 would be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and the SFD. Required review by the aforementioned departments would ensure that the proposed circulation systems for the sites would provide adequate emergency access. In addition, Section 12.20.030 of the City's Municipal Code requires that a construction traffic control plan be prepared and approved prior to the beginning of project construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. All work performed during future construction must conform to the conditions and requirements of the approved plan. The plan would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan must include the following:

- Time and day of street closures;
- Proper advance warning and posted signage regarding street closures;
- Provision of driveway access plan to ensure safe vehicular, pedestrian, and bicycle movements;
- Safe and efficient access routes for emergency vehicles;
- Provisions for pedestrian safety;
- Use of manual traffic control when necessary;
- Number of anticipated truck trips, and time of day of arrival and departure of trucks;
- Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network; and
- The plan must be available at the site for inspection by the City representative during all work.

With implementation of the aforementioned traffic control plan, local roadways and freeway facilities would continue to operate at acceptable operating conditions during construction, and the proposed project would not result in inadequate emergency access to the project site. Therefore, the implementation of the project would result in *no additional environmental effects* beyond what was analyzed in the 2035 Master EIR.

# **MITIGATION MEASURES**

None required.

# FINDINGS

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
14. TRIBAL CULTURAL RESOURCES Would the project:			
<ul> <li>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:         <ol> <li>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</li> </ol> </li> </ul>		Х	
<ul> <li>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.</li> </ul>		х	

# ENVIRONMENTAL AND REGULATORY SETTING

Please reference the Cultural Resources Chapter for the Ethnohistory of the historic indigenous groups that occupied the region. This section focuses on the contemporary tribal communities and tribal cultural resources as they pertain to AB 52.

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 AB 52, Statutes of 2014, in 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, Ione Band, Colfax-Todds Valley, and Wilton Rancheria Tribes. The Tribes actively participate in the identification, evaluation, preservation, and restoration of Tribal Cultural Resources.

# **Data Sources and 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.

Pursuant to AB 52, project notification letters were distributed to the appropriate tribes on December 6, 2021. Requests to consult were not received from three of the tribes within the required response period. The UAIC (United Auburn Indian Community) declined consultation on the proposed project December 22, 2021.

## Federal Regulations

Federal plans, policies, or regulations related to tribal cultural resources that are directly applicable to the proposed project do not exist. However, Section 106 of the National Historic Preservation Act does require consultation with Native Americans to identify and consider certain types of cultural resources. Cultural resources of Native American origin identified as a result of the identification efforts conducted under Section 106 may also qualify as tribal cultural resources under CEQA.

# State Regulations

- California Environmental Quality Act: CEQA requires that public agencies that finance or approve public or private projects must assess the effects of the project on tribal cultural resources. Tribal cultural resources are defined in PRC 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 that is (1) listed or determined eligible for listing on the CRHR or a local register, or (2) that are determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.
- California PRC Section 5024: PRC Section 5024.1 establishes the CRHR, which is the authoritative guide for identifying the State's historical resources to indicate what properties are to be protected, if feasible, from substantial adverse change. For a resource to be eligible for the CRHR, it must be more than 50 years old, retain its historic integrity, and satisfy one or more of the following criteria:
  - 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
  - 2. Is associated with the lives of persons important in our past.
  - 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
  - 4. Has yielded, or may be likely to yield, information important in prehistory or history.
#### 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 PRC Section 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 NAHC 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

#### Questions A)i and A)ii

As discussed in Section 4, Cultural Resources, of this Initial Study, the project site includes the existing University of the Pacific, Sacramento Campus. The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. However, approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices, which would result in ground disturbance.

Given the already developed/previously disturbed nature of the project site, surface tribal cultural resources are not anticipated to be found on-site during grading and construction activities associated with future redevelopment of Sites #1 and #2. However, due to the predominant historic theme of the region as a whole, which includes thousands of years of occupation by Native American groups prior to non-Native peoples settling in the region, the possibility exists that unknown resources could be encountered during grading and excavation activities. Therefore, if redevelopment of Sites #1 and #2 were to occur as a result of the proposed project, the project could have a potentially significant impact related to damaging or destroying prehistoric

cultural resources. However, with implementation of Mitigation Measures 14-1 through 14-3, the *effect can be mitigated to less than significant*.

#### MITIGATION MEASURES

Implementation of the following mitigation measures would reduce impacts related to tribal cultural resources to a *less-than-significant* level.

#### 14-1 In the Event that Tribal Cultural Resources are Discovered During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Impact.

If 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 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, greenspace 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 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 tribal cultural resources, modification of the design to eliminate or reduce impacts to 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 notified 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 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 a tribal cultural resource will be determined in consultation with interested culturally affiliated Native American tribes and tribes will be notified 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 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 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 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 notification. 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.

# 14-3 Implement Procedures in the Event of the Inadvertent Discovery of Native American 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 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>UT</u> Would A)	ILITIES AND SERVICE SYSTEMS   the project:   Result in the determination that adequate   capacity is not available to serve the project's   demand in addition to existing commitments?			х
В)	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?			х

#### **ENVIRONMENTAL SETTING**

The project site's existing utilities and service systems are discussed below.

#### Wastewater

Wastewater collection for the existing use on-site is currently provided by the City DOU's CSS. Wastewater generated in the project area is collected in the City's CSS system through a series of sewer pipes and pump stations. Once collected in the CSS system, wastewater flows into the SRCSD interceptor system, where the wastewater is conveyed to the Sacramento Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is owned and operated by the SRCSD and provides sewage treatment for the entire City. City requires each building with a wastewater source on each lot to have a separate connection to City's CSS. Future development of Sites #1 and #2 would connect to existing combined sewer mains through a network of combined sewer lines.

#### Water Supply

To meet the City's water demand, the City uses surface water from the Sacramento and American rivers, and groundwater pumped from the North American and South American Subbasins. According to the City's 2020 Urban Water Management Plan (UWMP), the City retail supply has a current total of 333,200 acrefeet per year (AFY) in water supplies during dry years and expects the total to increase to 350,200 AFY by 2040. The total City retail water demand in 2020 was 100,483 AFY and is expected to increase to 132,942 AFY in 2045. According to the DOU 2020 Consumer Confidence Report, the City's drinking water meets or exceeds all federal and State drinking water standards.<sup>13</sup> The project site is currently connected to the existing water mains in the project vicinity through a network of water lines. The City would continue to supply water to the future development of Sites #1 and #2 would connect to the existing water mains.

#### Solid Waste Disposal

The City of Sacramento does not provide commercial solid waste collection services. Rather, commercial garbage, recycling, and yard waste services are provided by a franchised hauler authorized by the Sacramento Solid Waste Authority to collect commercial garbage and commingled recycling within the City. The Sacramento County Kiefer Landfill, located at 12701 Kiefer Boulevard in Sloughhouse, California, is the primary location for the disposal of waste for the City. According to the Master EIR, the Kiefer Landfill should serve the City adequately until the year 2065. As growth continues in the City, in accordance with the County General Plan and the City's General Plan, population would increase and the solid waste stream would continue to grow. However, implementation of the Solid Waste Authority and the Sacramento

<sup>&</sup>lt;sup>13</sup> City of Sacramento Department of Utilities. 2020 Consumer Confidence Report. Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/CCR\_2020\_Report\_5\_28\_21\_FINAL\_ WEB.pdf?la=en. Accessed March 2022.

recycling requirements, would continue to significantly reduce potential cumulative impact on landfill capacity to a less-than-significant effect.

#### STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the following:

- 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-thansignificant 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

#### Questions A and B

Existing structures which are connected to the City's utilities and service systems currently exist on Site #1 and Sites #3 through #9. However, while Site #2 is currently developed with a surface level parking lot, the site does not contain existing structures with connections to the City's utilities and service systems. The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. However, future development of Sites #1 and #2 with college campus uses, such as administration buildings and student housing, could require new connections to the existing water and sewer lines adjacent to the sites.

#### Wastewater

As discussed above, the structures currently located within the project site are provided wastewater collection and treatment services by the City's DOU CSS. Wastewater generated by the proposed project is collected by the City's CSS system. Once collected, the sewage flows into the SRCSD interceptor system, where the sewage is conveyed to the SRWWTP.

While the proposed Rezones could facilitate redevelopment of Sites #1 and #2, development of the sites with college campus uses such as administrative buildings and student housing would be consistent with the Sites current land use designations of Traditional Neighborhood Medium and Public/Quasi-Public. Therefore, the consistency of the potential future development with the allowable uses for the General Plan land use designations would ensure the demand for wastewater service would not exceed the amount anticipated for buildout of the Planning Area evaluated in the Master EIR. In addition, buildout capacity of

the entire DOU CSS service area was anticipated in the 2021 Sewer System Management Plan (SSMP).<sup>14</sup> As such, the City's DOU has anticipated the need for wastewater services in the project area and requires development impact fees to support buildout demand of their service area (including the project site). Policy U 4.1.1 in the Master EIR requires the City to ensure that all new drainage facilities are adequality sized to accommodate stormwater runoff. Additionally, the City's DOU would require payment of sewer impact fees for all future development on-site. All applicable impact fees would be required to be paid prior to issuance of a building permit.

Given the required payment of applicable impact fees, the City's DOU would be able to provide sufficient wastewater services and conveyance to serve full buildout of the City, including the project site, per the Master EIR. Therefore, adequate capacity exists to serve the project site's demands if future buildout of Sites #1 and #2 was to occur as a result of the proposed project.

#### Water Supply

The City is responsible for providing and maintaining water service for the project site. The 2020 UWMP analyzed the water supply, water demand, and water shortage contingency planning for the City's service area, which would include the project site. According to the 2020 UWMP, under all drought conditions, the City possesses sufficient water supply entitlements to meet the demands of the City's customers up to the year 2040.<sup>15</sup>

According to the 2020 UWMP, to obtain population projections for the year 2040, an assumption of a continued growth rate within the current service area and sphere of influence, consistent with the General Plan, was used. As a result, even though Sites #1 and #2 were developed with the existing surface level parking lots and Marshall Way House at the time that the 2020 UWMP was prepared, the potential growth associated with future development of Sites #1 and #2 was accounted for in the regional growth estimates, as the sites are designated Traditional Neighborhood Medium and Public/Quasi-Public within the City's General Plan. Thus, the potential development of the sites with college campus uses such as administration building and student housing that could occur with implementation of the proposed project was generally included within the growth projections evaluated in the 2020 UWMP. As such, future development of Sites #1 and #2 would not generate an increase in demand from what has already been anticipated in the Master EIR.

Based on the above, adequate capacity is expected to be available to serve the proposed project's water demands.

#### Solid Waste

Solid waste generated by existing on-site uses and surrounding developments is currently disposed of at the Kiefer Landfill. Kiefer Landfill, located at 12701 Kiefer Boulevard in Sloughhouse, California, is the primary location for the disposal of waste by the City. According to the Master EIR, the landfill is permitted to accept up to 10,815 tons per day and the current peak and average daily disposal is substantially lower than the permitted amount. The landfill is anticipated to be capable of adequately serving the area, including the anticipated population growth, until the year 2065. As such, the Master EIR concluded that adequate capacity at local landfills exists for full buildout of the General Plan. The proposed project consists of multiple Rezones, and would not increase solid waste disposal needs at the project site beyond current conditions, While the proposed Rezones would allow for the future development of Sites #1 and #2 with college campus uses such as administrative buildings and student housing, the aforementioned uses are generally consistent with what was anticipated for the project site in the City's General Plan. Therefore, the increase in solid waste disposal needs associated with future development of Sites #1 and #2 was generally

<sup>&</sup>lt;sup>14</sup> City of Sacramento. Sewer System Management Plan. Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/2018-2019-Sewer-System-Management-Plan-FINAL.pdf?la=en. Accessed February 2023

<sup>&</sup>lt;sup>15</sup> City of Sacramento. 2020 Urban Water Management Plan. Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/Sacramento-2020-UWMP---Final-w-Ltr-of-Acceptance.pdf?la=en. Accessed March 2022.

considered in the Master EIR analysis. As such, adequate capacity would be expected to be available to serve the proposed project's solid waste disposal needs.

#### **Conclusion**

Because adequate capacity exists to serve the project site's current demands and demands from the future development of Sites #1 and #2 in addition to existing commitments, and construction of new utilities or expansion of existing facilities would not be required, implementation of the proposed project would result in *no additional environmental effects* beyond what was analyzed in the 2035 Master EIR.

#### MITIGATION MEASURES

None required.

#### FINDINGS

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

#### UNIVERSITY OF THE PACIFIC REZONE PROJECT Initial Study/Mitigated Negative Declaration

Issues:		Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
16. <u>MA</u>	NDATORY FINDINGS OF SIGNIFICANCE			
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?		х	
В)	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.)		Х	
C)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		Х	

#### ANSWERS TO CHECKLIST QUESTIONS

#### Question A

Implementation of the proposed project could result in the future redevelopment of Sites #1 and #2 which could have the potential to adversely impact previously undiscovered cultural, tribal cultural resources, and/or human remains. However, given the developed nature of the project site, and that future development on Sites #1 and #2 would be required to be consistent with all applicable policies, regulations, and standards related to the preservation of biological resources, special-status species would not be adversely impacted by the proposed project. With implementation of the mitigation measures required by this Initial Study, compliance with 2035 General Plan policies, and application of standard BMPs during construction, development of the proposed project would not result in any of the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, with implementation of the mitigation measures included in this Initial Study, the *effect can be mitigated to less than significant.* 

#### Question B

The proposed project consists of multiple Rezones and does not include any specific development proposals or new uses. While approval of the proposed Rezones could allow future development of Sites #1 and #2 with college campus uses, such as student housing and administration offices, such uses are an allowed use under the project site's General Plan land use designation. Thus, any future population growth associated with redevelopment of Sites #1 and #2 was included in the cumulative analysis of City buildout in the Master EIR. Furthermore, the proposed Rezones would bring the existing uses for Sites #3 through #9 into alignment with the most accurate zoning designation. Applicable policies from the 2035 General Plan would be implemented as part of the proposed project, as well as the project-specific mitigation

measures included in this Initial Study, to reduce the proposed project's contribution to potentially cumulative impacts. The potential impacts of the proposed project would be individually limited and would not be cumulatively considerable. As demonstrated in this Initial Study, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level with implementation of project-specific mitigation measures and compliance with applicable 2035 General Plan policies. When viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, development of the proposed project would not contribute to cumulative impacts in the City. Therefore, with implementation of the mitigation measures included in this Initial Study, the *effect can be mitigated to less than significant*.

#### Question C

As discussed in Section 2 and Section 8 of this Initial Study, implementation of the proposed project would not result in temporary or permanent impacts related to air quality or hazards, respectively, during construction or operation. As discussed in Section 10, impacts related to vibration would be mitigated to less-than-significant levels. The proposed project would be required to implement the project-specific mitigation measures within this Initial Study, as well as applicable policies of the 2035 General Plan, to reduce any potential direct or indirect impacts that could occur to human beings or various resources and, as demonstrated in this Initial Study, with implementation of the identified mitigation measures, all impacts would be reduced to less-than-significant levels. Therefore, with implementation of the mitigation measures included in this Initial Study, the *effect 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.

	Aesthetics	Х	Hazards
	Air Quality	Х	Noise
	Biological Resources		Public Services
Х	Cultural Resources		Recreation
	Energy and Mineral Resources		Transportation/Circulation
	Geology and Soils	Х	Tribal Cultural Resources
Х	Greenhouse Gas Emissions		Utilities and Service Systems
	Hydrology and Water Quality		
	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))

Signature

Date

Ron Bess, Associate Planner Printed Name

# **REFERENCES CITED**

It should be noted that all of the technical reports used for the purposes of the analysis throughout this Initial Study are available upon request to staff at the City of Sacramento Community Development Department located at 300 Richards Boulevard, Third Floor, Sacramento, CA 95811. The following documents are referenced information sources used for the analysis within this Initial Study:

- 1. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 2022.
- California Department of Transportation. California Scenic Highway Mapping System, Sacramento County. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e80571 16f1aacaa. Accessed March 2022.
- 3. California Department of Transportation. *Transportation and Construction Vibration Guidance Manual*. September 2013.
- City of Sacramento Department of Utilities. 2020 Consumer Confidence Report. Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/CCR\_2020\_Report\_5\_28\_21\_FINAL\_WEB.pdf?la=en. Accessed March 2022.
- City of Sacramento. 2020 Urban Water Management Plan. Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/Sacramento-2020-UWMP---Final-w-Ltr-of-Acceptance.pdf?la=en. Accessed March 2022.
- 6. City of Sacramento. *Sewer System Management Plan.* Available at: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/2018-2019-Sewer-System-Management-Plan-FINAL.pdf?la=en. Accessed February 2023.
- 7. Department of Toxic Substances Control. *EnviroStor*. Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed March 2022.
- 8. Federal Emergency Management Agency. *Flood Insurance Rate Map Community Panel Number 06067C0190H*. Available at: https://msc.fema.gov/portal/home. Accessed March 2022.
- 9. Metro Fire Sacramento. *About Us*. Available at: https://metrofire.ca.gov/about-us. Accessed March 2022.
- 10. Regional San. *Impact Fees.* Available at: https://www.regionalsan.com/impact-fees-businesses. Accessed March 2022.
- 11. Sacramento Area Sewer District. Sewer Ordinance SDI-0072. Effective May 27, 2016.
- 12. Sacramento City Unified School District. Sacramento City Unified School District. Available at: https://www.scusd.edu/our-district. Accessed March 2022.
- 13. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions*. June 2020.
- 14. University of the Pacific. *Fast Facts.* Available at: https://www.pacific.edu/about-pacific/fast-facts. Accessed March 2022.
- 15. University of the Pacific. *Sacramento Campus Housing.* Available at: https://www.pacific.edu/student-life/housing-dining/residential-life-and-housing/sacramento-housing. Accessed March 2022.

# APPENDIX A CALEEMOD MODELING RESULTS

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# University of the Pacific Rezone Project

Sacramento Metropolitan AQMD Air District, Annual

# **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	76.00	Dwelling Unit	0.77	76,000.00	203
General Office Building	50.31	1000sqft	0.00	50,311.80	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 Utilit	y District			
CO2 Intensity (Ib/MWhr)	357.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity ( (Ib/MWhr)	0.004

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjused to represent total lot acreage for both sites. Commerical acreage zeroed out based on assumption that development would inlcude a mixed-use building.

Demolition - Based on assumption that Marshall Way House would be demolished.

Construction Phase - Architectural Coating assumed to start two weeks after building construction and last for the same duration.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value			
tblConstructionPhase	NumDays	5.00	100.00			
tblConstructionPhase	PhaseEndDate	11/20/2023	11/27/2023			
tblConstructionPhase	PhaseEndDate	11/6/2023	11/13/2023			
tblConstructionPhase	PhaseEndDate	11/13/2023	6/26/2023			

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	11/14/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	6/20/2023	6/27/2023
tblConstructionPhase	PhaseStartDate	11/7/2023	6/20/2023
tblLandUse	LotAcreage	2.00	0.77
tblLandUse	LotAcreage	1.15	0.00

# 2.0 Emissions Summary

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							МТ	/yr		
2023	0.7695	0.4891	0.6208	1.2600e- 003	0.0429	0.0225	0.0655	0.0126	0.0211	0.0337	0.0000	112.7496	112.7496	0.0203	2.9400e- 003	114.1324
Maximum	0.7695	0.4891	0.6208	1.2600e- 003	0.0429	0.0225	0.0655	0.0126	0.0211	0.0337	0.0000	112.7496	112.7496	0.0203	2.9400e- 003	114.1324

#### 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					ton	s/yr							МТ	/yr		
2023	0.7695	0.4891	0.6208	1.2600e- 003	0.0429	0.0225	0.0655	0.0126	0.0211	0.0337	0.0000	112.7495	112.7495	0.0203	2.9400e- 003	114.1323
Maximum	0.7695	0.4891	0.6208	1.2600e- 003	0.0429	0.0225	0.0655	0.0126	0.0211	0.0337	0.0000	112.7495	112.7495	0.0203	2.9400e- 003	114.1323

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

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2023	8-31-2023	0.5514	0.5514
2	9-1-2023	9-30-2023	0.2561	0.2561
		Highest	0.5514	0.5514

# 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					ton	MT/yr										
Area	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123
Energy	7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003		5.1000e- 003	5.1000e- 003	0.0000	234.6448	234.6448	0.0163	3.1400e- 003	235.9894
Mobile	0.3572	0.4489	3.1653	6.4100e- 003	0.6578	5.1600e- 003	0.6629	0.1759	4.8200e- 003	0.1807	0.0000	602.7909	602.7909	0.0427	0.0306	612.9643
Waste	n					0.0000	0.0000		0.0000	0.0000	16.5945	0.0000	16.5945	0.9807	0.0000	41.1122
Water	n			 - - - -		0.0000	0.0000	1	0.0000	0.0000	4.9155	16.1295	21.0450	0.0184	0.0109	24.7444
Total	0.9524	0.5229	3.9903	6.8500e- 003	0.6578	0.0146	0.6724	0.1759	0.0143	0.1901	21.5101	854.8467	876.3568	1.0594	0.0446	916.1226

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 2.2 Overall Operational

#### Mitigated Operational

	ROG	NOx	со	SO2	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					ton	s/yr							МТ	/yr		
Area	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123
Energy	7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003		5.1000e- 003	5.1000e- 003	0.0000	234.6448	234.6448	0.0163	3.1400e- 003	235.9894
Mobile	0.3572	0.4489	3.1653	6.4100e- 003	0.6578	5.1600e- 003	0.6629	0.1759	4.8200e- 003	0.1807	0.0000	602.7909	602.7909	0.0427	0.0306	612.9643
Waste	ri — — — — — — — — — — — — — — — — — — —					0.0000	0.0000		0.0000	0.0000	16.5945	0.0000	16.5945	0.9807	0.0000	41.1122
Water	ri — — — — — — — — — — — — — — — — — — —					0.0000	0.0000		0.0000	0.0000	4.9155	15.1517	20.0672	0.0183	0.0109	23.7611
Total	0.9524	0.5229	3.9903	6.8500e- 003	0.6578	0.0146	0.6724	0.1759	0.0143	0.1901	21.5101	853.8690	875.3790	1.0593	0.0446	915.1393

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.01	0.02	0.11

# **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	6/1/2023	6/14/2023	5	10	
2	Site Preparation	Site Preparation	6/15/2023	6/15/2023	5	1	
3	Grading	Grading	6/16/2023	6/19/2023	5	2	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	6/27/2023	11/13/2023	5	100	
5	Paving	Paving	6/20/2023	6/26/2023	5	5	
6	Architectural Coating	Architectural Coating	7/11/2023	11/27/2023	5	100	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

#### Acres of Paving: 0

Residential Indoor: 153,900; Residential Outdoor: 51,300; Non-Residential Indoor: 75,468; Non-Residential Outdoor: 25,156; 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	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 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	4	10.00	0.00	5.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	16.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 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					ton	s/yr							MT	/yr		
Fugitive Dust		1 1 1			6.2000e- 004	0.0000	6.2000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003	1	1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005	6.2000e- 004	1.4100e- 003	2.0300e- 003	9.0000e- 005	1.3500e- 003	1.4400e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.2 Demolition - 2023

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Hauling	1.0000e- 005	4.0000e- 004	8.0000e- 005	0.0000	4.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.1553	0.1553	1.0000e- 005	2.0000e- 005	0.1628
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	1.4000e- 004	9.0000e- 005	1.1700e- 003	0.0000	3.7000e- 004	0.0000	3.7000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.2946	0.2946	1.0000e- 005	1.0000e- 005	0.2973
Total	1.5000e- 004	4.9000e- 004	1.2500e- 003	0.0000	4.1000e- 004	0.0000	4.2000e- 004	1.1000e- 004	0.0000	1.1000e- 004	0.0000	0.4499	0.4499	2.0000e- 005	3.0000e- 005	0.4602

#### 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					ton	s/yr							МТ	/yr		
Fugitive Dust					6.2000e- 004	0.0000	6.2000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005	6.2000e- 004	1.4100e- 003	2.0300e- 003	9.0000e- 005	1.3500e- 003	1.4400e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.2 Demolition - 2023

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Hauling	1.0000e- 005	4.0000e- 004	8.0000e- 005	0.0000	4.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.1553	0.1553	1.0000e- 005	2.0000e- 005	0.1628
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	1.4000e- 004	9.0000e- 005	1.1700e- 003	0.0000	3.7000e- 004	0.0000	3.7000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.2946	0.2946	1.0000e- 005	1.0000e- 005	0.2973
Total	1.5000e- 004	4.9000e- 004	1.2500e- 003	0.0000	4.1000e- 004	0.0000	4.2000e- 004	1.1000e- 004	0.0000	1.1000e- 004	0.0000	0.4499	0.4499	2.0000e- 005	3.0000e- 005	0.4602

# 3.3 Site Preparation - 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					ton	s/yr							MT	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000		1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Site Preparation - 2023

### 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					ton	s/yr							МТ	/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	1.0000e- 005	0.0000	6.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0147	0.0147	0.0000	0.0000	0.0149
Total	1.0000e- 005	0.0000	6.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0147	0.0147	0.0000	0.0000	0.0149

### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000		1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Site Preparation - 2023

## **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					ton	s/yr							МТ	/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	1.0000e- 005	0.0000	6.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0147	0.0147	0.0000	0.0000	0.0149
Total	1.0000e- 005	0.0000	6.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0147	0.0147	0.0000	0.0000	0.0149

### 3.4 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					ton	s/yr							МТ	/yr		
Fugitive Dust		1 1 1	1 1 1		5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004		3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Grading - 2023

#### 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					ton	s/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- 005	1.0000e- 005	1.9000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476
Total	2.0000e- 005	1.0000e- 005	1.9000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476

#### 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					ton	s/yr							МТ	/yr		
Fugitive Dust		1 1 1	1		5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004		3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Grading - 2023

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	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					ton	s/yr							МТ	/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- 005	1.0000e- 005	1.9000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476
Total	2.0000e- 005	1.0000e- 005	1.9000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476

### 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					ton	s/yr							МТ	/yr		
Off-Road	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160	- 	0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.5 Building Construction - 2023

#### 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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e- 003	0.0390	0.0118	1.5000e- 004	4.6800e- 003	2.1000e- 004	4.8900e- 003	1.3500e- 003	2.0000e- 004	1.5500e- 003	0.0000	14.8375	14.8375	3.7000e- 004	2.1800e- 003	15.4955
Worker	0.0102	6.3000e- 003	0.0828	2.3000e- 004	0.0261	1.4000e- 004	0.0262	6.9300e- 003	1.3000e- 004	7.0600e- 003	0.0000	20.9159	20.9159	6.6000e- 004	6.0000e- 004	21.1106
Total	0.0112	0.0453	0.0945	3.8000e- 004	0.0308	3.5000e- 004	0.0311	8.2800e- 003	3.3000e- 004	8.6100e- 003	0.0000	35.7535	35.7535	1.0300e- 003	2.7800e- 003	36.6061

#### 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					ton	s/yr							МТ	/yr		
Off-Road	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160	1 1 1	0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.5 Building Construction - 2023

#### 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					ton	s/yr							МТ	7/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e- 003	0.0390	0.0118	1.5000e- 004	4.6800e- 003	2.1000e- 004	4.8900e- 003	1.3500e- 003	2.0000e- 004	1.5500e- 003	0.0000	14.8375	14.8375	3.7000e- 004	2.1800e- 003	15.4955
Worker	0.0102	6.3000e- 003	0.0828	2.3000e- 004	0.0261	1.4000e- 004	0.0262	6.9300e- 003	1.3000e- 004	7.0600e- 003	0.0000	20.9159	20.9159	6.6000e- 004	6.0000e- 004	21.1106
Total	0.0112	0.0453	0.0945	3.8000e- 004	0.0308	3.5000e- 004	0.0311	8.2800e- 003	3.3000e- 004	8.6100e- 003	0.0000	35.7535	35.7535	1.0300e- 003	2.7800e- 003	36.6061

#### 3.6 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					ton	s/yr							MT	/yr		
Off-Road	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
Paving	0.0000		1			0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Paving - 2023

#### 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					ton	s/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	1.3000e- 004	8.0000e- 005	1.0500e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2651	0.2651	1.0000e- 005	1.0000e- 005	0.2676
Total	1.3000e- 004	8.0000e- 005	1.0500e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2651	0.2651	1.0000e- 005	1.0000e- 005	0.2676

### **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					ton	s/yr							МТ	/yr		
Off-Road	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Paving - 2023

### **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					ton	s/yr							МТ	/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	1.3000e- 004	8.0000e- 005	1.0500e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2651	0.2651	1.0000e- 005	1.0000e- 005	0.2676
Total	1.3000e- 004	8.0000e- 005	1.0500e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2651	0.2651	1.0000e- 005	1.0000e- 005	0.2676

### 3.7 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					ton	s/yr							МТ	/yr		
Archit. Coating	0.7088	1 1 1				0.0000	0.0000	, , ,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e- 003	0.0652	0.0906	1.5000e- 004		3.5400e- 003	3.5400e- 003	1 1 1 1	3.5400e- 003	3.5400e- 003	0.0000	12.7663	12.7663	7.6000e- 004	0.0000	12.7854
Total	0.7183	0.0652	0.0906	1.5000e- 004		3.5400e- 003	3.5400e- 003		3.5400e- 003	3.5400e- 003	0.0000	12.7663	12.7663	7.6000e- 004	0.0000	12.7854

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 Architectural Coating - 2023

#### 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					ton	s/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	2.0100e- 003	1.2400e- 003	0.0163	4.0000e- 005	5.1400e- 003	3.0000e- 005	5.1700e- 003	1.3700e- 003	3.0000e- 005	1.3900e- 003	0.0000	4.1243	4.1243	1.3000e- 004	1.2000e- 004	4.1627
Total	2.0100e- 003	1.2400e- 003	0.0163	4.0000e- 005	5.1400e- 003	3.0000e- 005	5.1700e- 003	1.3700e- 003	3.0000e- 005	1.3900e- 003	0.0000	4.1243	4.1243	1.3000e- 004	1.2000e- 004	4.1627

#### 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					ton	s/yr							МТ	'/yr		
Archit. Coating	0.7088					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e- 003	0.0652	0.0906	1.5000e- 004		3.5400e- 003	3.5400e- 003		3.5400e- 003	3.5400e- 003	0.0000	12.7663	12.7663	7.6000e- 004	0.0000	12.7854
Total	0.7183	0.0652	0.0906	1.5000e- 004		3.5400e- 003	3.5400e- 003		3.5400e- 003	3.5400e- 003	0.0000	12.7663	12.7663	7.6000e- 004	0.0000	12.7854

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 Architectural Coating - 2023

### 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					ton	s/yr							MT	ſ/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	2.0100e- 003	1.2400e- 003	0.0163	4.0000e- 005	5.1400e- 003	3.0000e- 005	5.1700e- 003	1.3700e- 003	3.0000e- 005	1.3900e- 003	0.0000	4.1243	4.1243	1.3000e- 004	1.2000e- 004	4.1627
Total	2.0100e- 003	1.2400e- 003	0.0163	4.0000e- 005	5.1400e- 003	3.0000e- 005	5.1700e- 003	1.3700e- 003	3.0000e- 005	1.3900e- 003	0.0000	4.1243	4.1243	1.3000e- 004	1.2000e- 004	4.1627

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					ton	s/yr							МТ	/yr		
Mitigated	0.3572	0.4489	3.1653	6.4100e- 003	0.6578	5.1600e- 003	0.6629	0.1759	4.8200e- 003	0.1807	0.0000	602.7909	602.7909	0.0427	0.0306	612.9643
Unmitigated	0.3572	0.4489	3.1653	6.4100e- 003	0.6578	5.1600e- 003	0.6629	0.1759	4.8200e- 003	0.1807	0.0000	602.7909	602.7909	0.0427	0.0306	612.9643

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,008,554	1,008,554
General Office Building	490.04	111.19	35.22	766,033	766,033
Total	903.48	484.35	346.06	1,774,587	1,774,587

#### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
General Office Building	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

# 5.0 Energy Detail

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	со	SO2	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	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	161.6068	161.6068	0.0149	1.8100e- 003	162.5174
Electricity Unmitigated	/		,	,		0.0000	0.0000	,	0.0000	0.0000	0.0000	161.6068	161.6068	0.0149	1.8100e- 003	162.5174
NaturalGas Mitigated	7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003	,	5.1000e- 003	5.1000e- 003	0.0000	73.0380	73.0380	1.4000e- 003	1.3400e- 003	73.4720
NaturalGas Unmitigated	7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003	,	5.1000e- 003	5.1000e- 003	0.0000	73.0380	73.0380	1.4000e- 003	1.3400e- 003	73.4720

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							МТ	/yr		
Apartments Mid Rise	715633	3.8600e- 003	0.0330	0.0140	2.1000e- 004		2.6700e- 003	2.6700e- 003		2.6700e- 003	2.6700e- 003	0.0000	38.1889	38.1889	7.3000e- 004	7.0000e- 004	38.4159
General Office Building	653047	3.5200e- 003	0.0320	0.0269	1.9000e- 004		2.4300e- 003	2.4300e- 003		2.4300e- 003	2.4300e- 003	0.0000	34.8491	34.8491	6.7000e- 004	6.4000e- 004	35.0562
Total		7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003		5.1000e- 003	5.1000e- 003	0.0000	73.0380	73.0380	1.4000e- 003	1.3400e- 003	73.4720

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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					
Apartments Mid Rise	715633	3.8600e- 003	0.0330	0.0140	2.1000e- 004		2.6700e- 003	2.6700e- 003		2.6700e- 003	2.6700e- 003	0.0000	38.1889	38.1889	7.3000e- 004	7.0000e- 004	38.4159
General Office Building	653047	3.5200e- 003	0.0320	0.0269	1.9000e- 004		2.4300e- 003	2.4300e- 003		2.4300e- 003	2.4300e- 003	0.0000	34.8491	34.8491	6.7000e- 004	6.4000e- 004	35.0562
Total		7.3800e- 003	0.0650	0.0409	4.0000e- 004		5.1000e- 003	5.1000e- 003		5.1000e- 003	5.1000e- 003	0.0000	73.0380	73.0380	1.4000e- 003	1.3400e- 003	73.4720
## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Apartments Mid Rise	295923	48.0510	4.4300e- 003	5.4000e- 004	48.3218
General Office Building	699334	113.5558	0.0105	1.2700e- 003	114.1956
Total		161.6068	0.0149	1.8100e- 003	162.5174

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Apartments Mid Rise	295923	48.0510	4.4300e- 003	5.4000e- 004	48.3218
General Office Building	699334	113.5558	0.0105	1.2700e- 003	114.1956
Total		161.6068	0.0149	1.8100e- 003	162.5174

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 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					ton	s/yr							MT	/yr		
Mitigated	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123
Unmitigated	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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									МТ	ſ/yr					
Architectural Coating	0.0709			, , ,		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4933					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0236	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123
Total	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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									МТ	ſ/yr					
Architectural Coating	0.0709	1 1 1				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4933	1 1 1				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0236	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123
Total	0.5878	9.0300e- 003	0.7841	4.0000e- 005		4.3400e- 003	4.3400e- 003		4.3400e- 003	4.3400e- 003	0.0000	1.2815	1.2815	1.2300e- 003	0.0000	1.3123

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	20.0672	0.0183	0.0109	23.7611
Unmitigated	21.0450	0.0184	0.0109	24.7444

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Apartments Mid Rise	4.95171 / 3.12173	7.5323	6.5600e- 003	3.8700e- 003	8.8509
General Office Building	8.94178 / 5.48045	13.5127	0.0118	7.0000e- 003	15.8934
Total		21.0450	0.0184	0.0109	24.7444

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Apartments Mid Rise	4.95171 / 2.49738	7.1775	6.5300e- 003	3.8700e- 003	8.4941
General Office Building	8.94178 / 4.38436	12.8898	0.0118	6.9900e- 003	15.2670
Total		20.0672	0.0183	0.0109	23.7611

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	16.5945	0.9807	0.0000	41.1122
Unmitigated	16.5945	0.9807	0.0000	41.1122

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 8.2 Waste by Land Use

**Unmitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
General Office Building	46.79	9.4980	0.5613	0.0000	23.5308
Total		16.5945	0.9807	0.0000	41.1122

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Mid Rise	34.96	7.0966	0.4194	0.0000	17.5814
General Office Building	46.79	9.4980	0.5613	0.0000	23.5308
Total		16.5945	0.9807	0.0000	41.1122

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

## **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

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

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

# 11.0 Vegetation

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## University of the Pacific Rezone Project

Sacramento Metropolitan AQMD Air District, Summer

# **1.0 Project Characteristics**

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	76.00	Dwelling Unit	0.77	76,000.00	203
General Office Building	50.31	1000sqft	0.00	50,311.80	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 Utilit	y District			
CO2 Intensity (Ib/MWhr)	357.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity ( (Ib/MWhr)	0.004

## 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjused to represent total lot acreage for both sites. Commerical acreage zeroed out based on assumption that development would inlcude a mixed-use building.

Demolition - Based on assumption that Marshall Way House would be demolished.

Construction Phase - Architectural Coating assumed to start two weeks after building construction and last for the same duration.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	100.00
tblConstructionPhase	PhaseEndDate	11/20/2023	11/27/2023
tblConstructionPhase	PhaseEndDate	11/6/2023	11/13/2023
tblConstructionPhase	PhaseEndDate	11/13/2023	6/26/2023

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	11/14/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	6/20/2023	6/27/2023
tblConstructionPhase	PhaseStartDate	11/7/2023	6/20/2023
tblLandUse	LotAcreage	2.00	0.77
tblLandUse	LotAcreage	1.15	0.00

# 2.0 Emissions Summary

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/d	day		
2023	15.3067	10.1918	11.4553	0.0233	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,318.015 7	2,318.015 7	0.4430	0.0628	2,346.697 0
Maximum	15.3067	10.1918	11.4553	0.0233	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,318.015 7	2,318.015 7	0.4430	0.0628	2,346.697 0

#### 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/e	day							lb/c	lay		
2023	15.3067	10.1918	11.4553	0.0233	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,318.015 7	2,318.015 7	0.4430	0.0628	2,346.697 0
Maximum	15.3067	10.1918	11.4553	0.0233	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,318.015 7	2,318.015 7	0.4430	0.0628	2,346.697 0

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

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 2.2 Overall Operational

## Unmitigated Operational

	ROG	NOx	со	SO2	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/e	day							lb/c	lay		
Area	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Energy	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
Mobile	2.8631	2.6630	21.8793	0.0442	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,582.289 4	4,582.289 4	0.2881	0.2081	4,651.509 7
Total	6.1839	3.0913	28.3761	0.0468	4.3712	0.0959	4.4671	1.1654	0.0937	1.2591	0.0000	5,034.744 5	5,034.744 5	0.3074	0.2162	5,106.857 9

#### 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/o	day							lb/c	lay		
Area	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Energy	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
Mobile	2.8631	2.6630	21.8793	0.0442	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,582.289 4	4,582.289 4	0.2881	0.2081	4,651.509 7
Total	6.1839	3.0913	28.3761	0.0468	4.3712	0.0959	4.4671	1.1654	0.0937	1.2591	0.0000	5,034.744 5	5,034.744 5	0.3074	0.2162	5,106.857 9

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

# **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	6/1/2023	6/14/2023	5	10	
2	Site Preparation	Site Preparation	6/15/2023	6/15/2023	5	1	
3	Grading	Grading	6/16/2023	6/19/2023	5	2	
4	Building Construction	Building Construction	6/27/2023	11/13/2023	5	100	
5	Paving	Paving	6/20/2023	6/26/2023	5	5	
6	Architectural Coating	Architectural Coating	7/11/2023	11/27/2023	5	100	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 153,900; Residential Outdoor: 51,300; Non-Residential Indoor: 75,468; Non-Residential Outdoor: 25,156; 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	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	5.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	16.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Demolition - 2023

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	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/e	day							lb/c	day		
Fugitive Dust		1 1 1			0.1232	0.0000	0.1232	0.0187	0.0000	0.0187			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120	0.1232	0.2821	0.4053	0.0187	0.2698	0.2885		1,148.405 5	1,148.405 5	0.2089		1,153.629 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/d	day		
Hauling	1.3600e- 003	0.0752	0.0159	3.1000e- 004	8.7200e- 003	5.8000e- 004	9.3000e- 003	2.3900e- 003	5.5000e- 004	2.9400e- 003		34.2354	34.2354	1.3700e- 003	5.4300e- 003	35.8871
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	0.0337	0.0162	0.2725	7.0000e- 004	0.0761	3.9000e- 004	0.0765	0.0202	3.6000e- 004	0.0205		71.1699	71.1699	1.9500e- 003	1.7500e- 003	71.7396
Total	0.0351	0.0914	0.2884	1.0100e- 003	0.0848	9.7000e- 004	0.0858	0.0226	9.1000e- 004	0.0235		105.4053	105.4053	3.3200e- 003	7.1800e- 003	107.6266

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Demolition - 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/e	day							lb/c	lay		
Fugitive Dust		, , ,	1 1 1		0.1232	0.0000	0.1232	0.0187	0.0000	0.0187			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120	0.1232	0.2821	0.4053	0.0187	0.2698	0.2885	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 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/e	day							lb/c	day		
Hauling	1.3600e- 003	0.0752	0.0159	3.1000e- 004	8.7200e- 003	5.8000e- 004	9.3000e- 003	2.3900e- 003	5.5000e- 004	2.9400e- 003		34.2354	34.2354	1.3700e- 003	5.4300e- 003	35.8871
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	0.0337	0.0162	0.2725	7.0000e- 004	0.0761	3.9000e- 004	0.0765	0.0202	3.6000e- 004	0.0205		71.1699	71.1699	1.9500e- 003	1.7500e- 003	71.7396
Total	0.0351	0.0914	0.2884	1.0100e- 003	0.0848	9.7000e- 004	0.0858	0.0226	9.1000e- 004	0.0235		105.4053	105.4053	3.3200e- 003	7.1800e- 003	107.6266

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Site Preparation - 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/e	day							lb/c	day		
Fugitive Dust			1		0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

#### 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/e	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	0.0169	8.1000e- 003	0.1363	3.5000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		35.5849	35.5849	9.8000e- 004	8.7000e- 004	35.8698	
Total	0.0169	8.1000e- 003	0.1363	3.5000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		35.5849	35.5849	9.8000e- 004	8.7000e- 004	35.8698	

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Site Preparation - 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/e	day							lb/d	day		
Fugitive Dust		, , ,	1		0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517

#### **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/e	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	0.0169	8.1000e- 003	0.1363	3.5000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		35.5849	35.5849	9.8000e- 004	8.7000e- 004	35.8698
Total	0.0169	8.1000e- 003	0.1363	3.5000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		35.5849	35.5849	9.8000e- 004	8.7000e- 004	35.8698

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 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/o	day							lb/d	day		
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201	1 1 1 1	0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.771 3	1,364.771 3	0.4414		1,375.806 2

#### 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/d	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	0.0270	0.0130	0.2180	5.6000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		56.9359	56.9359	1.5600e- 003	1.4000e- 003	57.3916
Total	0.0270	0.0130	0.2180	5.6000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		56.9359	56.9359	1.5600e- 003	1.4000e- 003	57.3916

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Grading - 2023

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	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/e	day							lb/d	lay		
Fugitive Dust		, , ,			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

#### **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/e	day							lb/d	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	0.0270	0.0130	0.2180	5.6000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		56.9359	56.9359	1.5600e- 003	1.4000e- 003	57.3916
Total	0.0270	0.0130	0.2180	5.6000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		56.9359	56.9359	1.5600e- 003	1.4000e- 003	57.3916

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
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	0.0214	0.7409	0.2306	3.0500e- 003	0.0964	4.1400e- 003	0.1005	0.0278	3.9600e- 003	0.0317		327.0147	327.0147	8.0800e- 003	0.0479	341.5016
Worker	0.2393	0.1150	1.9350	4.9400e- 003	0.5401	2.7800e- 003	0.5429	0.1433	2.5600e- 003	0.1458		505.3062	505.3062	0.0139	0.0124	509.3508
Total	0.2607	0.8558	2.1656	7.9900e- 003	0.6365	6.9200e- 003	0.6434	0.1710	6.5200e- 003	0.1775		832.3209	832.3209	0.0220	0.0604	850.8525

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/d	day		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
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	0.0214	0.7409	0.2306	3.0500e- 003	0.0964	4.1400e- 003	0.1005	0.0278	3.9600e- 003	0.0317		327.0147	327.0147	8.0800e- 003	0.0479	341.5016
Worker	0.2393	0.1150	1.9350	4.9400e- 003	0.5401	2.7800e- 003	0.5429	0.1433	2.5600e- 003	0.1458		505.3062	505.3062	0.0139	0.0124	509.3508
Total	0.2607	0.8558	2.1656	7.9900e- 003	0.6365	6.9200e- 003	0.6434	0.1710	6.5200e- 003	0.1775		832.3209	832.3209	0.0220	0.0604	850.8525

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.6 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/e	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 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/e	day							lb/d	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	0.0607	0.0291	0.4906	1.2500e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		128.1058	128.1058	3.5200e- 003	3.1500e- 003	129.1312
Total	0.0607	0.0291	0.4906	1.2500e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		128.1058	128.1058	3.5200e- 003	3.1500e- 003	129.1312

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.6 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/e	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 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/e	day							lb/d	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	0.0607	0.0291	0.4906	1.2500e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		128.1058	128.1058	3.5200e- 003	3.1500e- 003	129.1312
Total	0.0607	0.0291	0.4906	1.2500e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		128.1058	128.1058	3.5200e- 003	3.1500e- 003	129.1312

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 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/e	day							lb/d	lay		
Archit. Coating	14.1749	, , ,				0.0000	0.0000	1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	14.3666	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

#### 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/e	day							lb/c	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	0.0472	0.0227	0.3815	9.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		99.6378	99.6378	2.7300e- 003	2.4500e- 003	100.4354
Total	0.0472	0.0227	0.3815	9.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		99.6378	99.6378	2.7300e- 003	2.4500e- 003	100.4354

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 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/e	day							lb/c	lay		
Archit. Coating	14.1749	1 1 1	1			0.0000	0.0000	1	0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	14.3666	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

#### **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/d	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	0.0472	0.0227	0.3815	9.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		99.6378	99.6378	2.7300e- 003	2.4500e- 003	100.4354
Total	0.0472	0.0227	0.3815	9.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		99.6378	99.6378	2.7300e- 003	2.4500e- 003	100.4354

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	lay		
Mitigated	2.8631	2.6630	21.8793	0.0442	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,582.289 4	4,582.289 4	0.2881	0.2081	4,651.509 7
Unmitigated	2.8631	2.6630	21.8793	0.0442	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,582.289 4	4,582.289 4	0.2881	0.2081	4,651.509 7

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,008,554	1,008,554
General Office Building	490.04	111.19	35.22	766,033	766,033
Total	903.48	484.35	346.06	1,774,587	1,774,587

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
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
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
General Office Building	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

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	со	SO2	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/d	lay							lb/d	day		
NaturalGas Mitigated	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
NaturalGas Unmitigated	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 5.2 Energy by Land Use - NaturalGas

## **Unmitigated**

	NaturalGa s 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/e	day							lb/d	lay		
Apartments Mid Rise	1960.64	0.0211	0.1807	0.0769	1.1500e- 003		0.0146	0.0146		0.0146	0.0146		230.6635	230.6635	4.4200e- 003	4.2300e- 003	232.0342
General Office Building	1789.17	0.0193	0.1754	0.1473	1.0500e- 003		0.0133	0.0133		0.0133	0.0133		210.4906	210.4906	4.0300e- 003	3.8600e- 003	211.7415
Total		0.0404	0.3561	0.2242	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4500e- 003	8.0900e- 003	443.7757

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/e	day							lb/c	day		
Apartments Mid Rise	1.96064	0.0211	0.1807	0.0769	1.1500e- 003		0.0146	0.0146		0.0146	0.0146		230.6635	230.6635	4.4200e- 003	4.2300e- 003	232.0342
General Office Building	1.78917	0.0193	0.1754	0.1473	1.0500e- 003		0.0133	0.0133		0.0133	0.0133		210.4906	210.4906	4.0300e- 003	3.8600e- 003	211.7415
Total		0.0404	0.3561	0.2242	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4500e- 003	8.0900e- 003	443.7757

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 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/d	day		
Mitigated	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Unmitigated	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348	 - - -	0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/e	day							lb/d	day		
Architectural Coating	0.3884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1889	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348		11.3010	11.3010	0.0109		11.5725
Total	3.2803	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/o	day		
Architectural Coating	0.3884					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1889	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348		11.3010	11.3010	0.0109		11.5725
Total	3.2803	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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

## **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

#### **User Defined Equipment**

Equipment Type

Number

## **11.0 Vegetation**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# University of the Pacific Rezone Project

Sacramento Metropolitan AQMD Air District, Winter

# **1.0 Project Characteristics**

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	76.00	Dwelling Unit	0.77	76,000.00	203
General Office Building	50.31	1000sqft	0.00	50,311.80	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 Utilit	y District			
CO2 Intensity (Ib/MWhr)	357.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	).004

## 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjused to represent total lot acreage for both sites. Commerical acreage zeroed out based on assumption that development would inlcude a mixed-use building.

Demolition - Based on assumption that Marshall Way House would be demolished.

Construction Phase - Architectural Coating assumed to start two weeks after building construction and last for the same duration.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	100.00
tblConstructionPhase	PhaseEndDate	11/20/2023	11/27/2023
tblConstructionPhase	PhaseEndDate	11/6/2023	11/13/2023
tblConstructionPhase	PhaseEndDate	11/13/2023	6/26/2023

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	11/14/2023	7/11/2023
tblConstructionPhase	PhaseStartDate	6/20/2023	6/27/2023
tblConstructionPhase	PhaseStartDate	11/7/2023	6/20/2023
tblLandUse	LotAcreage	2.00	0.77
tblLandUse	LotAcreage	1.15	0.00

# 2.0 Emissions Summary

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	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/d	day		
2023	15.2732	10.1948	11.1668	0.0227	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,251.422 4	2,251.422 4	0.4432	0.0651	2,280.850 5
Maximum	15.2732	10.1948	11.1668	0.0227	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,251.422 4	2,251.422 4	0.4432	0.0651	2,280.850 5

#### Mitigated Construction

	ROG	NOx	СО	SO2	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						
2023	15.2732	10.1948	11.1668	0.0227	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,251.422 4	2,251.422 4	0.4432	0.0651	2,280.850 5		
Maximum	15.2732	10.1948	11.1668	0.0227	5.3728	0.4204	5.7932	2.5847	0.3868	2.9715	0.0000	2,251.422 4	2,251.422 4	0.4432	0.0651	2,280.850 5		

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 2.2 Overall Operational

## Unmitigated Operational

	ROG	NOx	со	SO2	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/d	day							lb/c	lay		
Area	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Energy	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
Mobile	2.2222	3.0812	21.8285	0.0404	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,191.761 0	4,191.761 0	0.3282	0.2276	4,267.792 6
Total	5.5429	3.5096	28.3253	0.0430	4.3712	0.0959	4.4671	1.1654	0.0937	1.2591	0.0000	4,644.216 1	4,644.216 1	0.3475	0.2357	4,723.140 8

#### Mitigated Operational

	ROG	NOx	СО	SO2	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 3.2804 0.0723 6.2726 3.3000e- 0.0348 0.0348 0.0348											lb/c	lay		
Area	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Energy	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
Mobile	2.2222	3.0812	21.8285	0.0404	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,191.761 0	4,191.761 0	0.3282	0.2276	4,267.792 6
Total	5.5429	3.5096	28.3253	0.0430	4.3712	0.0959	4.4671	1.1654	0.0937	1.2591	0.0000	4,644.216 1	4,644.216 1	0.3475	0.2357	4,723.140 8

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

# **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	6/1/2023	6/14/2023	5	10	
2	Site Preparation	Site Preparation	6/15/2023	6/15/2023	5	1	
3	Grading	Grading	6/16/2023	6/19/2023	5	2	
4	Building Construction	Building Construction	6/27/2023	11/13/2023	5	100	
5	Paving	Paving	6/20/2023	6/26/2023	5	5	
6	Architectural Coating	Architectural Coating	7/11/2023	11/27/2023	5	100	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 153,900; Residential Outdoor: 51,300; Non-Residential Indoor: 75,468; Non-Residential Outdoor: 25,156; 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	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	5.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	71.00	16.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.2 Demolition - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	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/e	day							lb/d	day		
Fugitive Dust		1 1 1			0.1232	0.0000	0.1232	0.0187	0.0000	0.0187			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120	0.1232	0.2821	0.4053	0.0187	0.2698	0.2885		1,148.405 5	1,148.405 5	0.2089		1,153.629 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/d	day		
Hauling	1.2900e- 003	0.0813	0.0162	3.1000e- 004	8.7200e- 003	5.8000e- 004	9.3000e- 003	2.3900e- 003	5.6000e- 004	2.9400e- 003		34.2549	34.2549	1.3600e- 003	5.4300e- 003	35.9075
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	0.0298	0.0199	0.2374	6.2000e- 004	0.0761	3.9000e- 004	0.0765	0.0202	3.6000e- 004	0.0205		63.3078	63.3078	2.2500e- 003	2.0000e- 003	63.9614
Total	0.0311	0.1011	0.2535	9.3000e- 004	0.0848	9.7000e- 004	0.0858	0.0226	9.2000e- 004	0.0235		97.5627	97.5627	3.6100e- 003	7.4300e- 003	99.8689

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.2 Demolition - 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/e	day							lb/c	lay		
Fugitive Dust		, , ,	1		0.1232	0.0000	0.1232	0.0187	0.0000	0.0187			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120	0.1232	0.2821	0.4053	0.0187	0.2698	0.2885	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 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/c	day			
Hauling	1.2900e- 003	0.0813	0.0162	3.1000e- 004	8.7200e- 003	5.8000e- 004	9.3000e- 003	2.3900e- 003	5.6000e- 004	2.9400e- 003		34.2549	34.2549	1.3600e- 003	5.4300e- 003	35.9075
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	0.0298	0.0199	0.2374	6.2000e- 004	0.0761	3.9000e- 004	0.0765	0.0202	3.6000e- 004	0.0205		63.3078	63.3078	2.2500e- 003	2.0000e- 003	63.9614
Total	0.0311	0.1011	0.2535	9.3000e- 004	0.0848	9.7000e- 004	0.0858	0.0226	9.2000e- 004	0.0235		97.5627	97.5627	3.6100e- 003	7.4300e- 003	99.8689

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Site Preparation - 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/e	day							lb/c	lay		
Fugitive Dust		1 1 1			0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

#### 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/e	day							lb/d	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	0.0149	9.9300e- 003	0.1187	3.1000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		31.6539	31.6539	1.1200e- 003	1.0000e- 003	31.9807
Total	0.0149	9.9300e- 003	0.1187	3.1000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		31.6539	31.6539	1.1200e- 003	1.0000e- 003	31.9807

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Site Preparation - 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/e	day							lb/d	day		
Fugitive Dust		, , ,	1	, , ,	0.5303	0.0000	0.5303	0.0573	0.0000	0.0573		1 1 1	0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517

#### **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/e	day							lb/d	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	0.0149	9.9300e- 003	0.1187	3.1000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		31.6539	31.6539	1.1200e- 003	1.0000e- 003	31.9807
Total	0.0149	9.9300e- 003	0.1187	3.1000e- 004	0.0380	2.0000e- 004	0.0382	0.0101	1.8000e- 004	0.0103		31.6539	31.6539	1.1200e- 003	1.0000e- 003	31.9807

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 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/e	day							lb/d	day		
Fugitive Dust		1 1 1			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.771 3	1,364.771 3	0.4414		1,375.806 2

### **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/e	day							lb/d	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	0.0239	0.0159	0.1899	4.9000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		50.6463	50.6463	1.8000e- 003	1.6000e- 003	51.1691
Total	0.0239	0.0159	0.1899	4.9000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		50.6463	50.6463	1.8000e- 003	1.6000e- 003	51.1691

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Grading - 2023

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	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/e	day							lb/d	day		
Fugitive Dust		1 1 1			5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

#### **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/e	day							lb/d	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	0.0239	0.0159	0.1899	4.9000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		50.6463	50.6463	1.8000e- 003	1.6000e- 003	51.1691
Total	0.0239	0.0159	0.1899	4.9000e- 004	0.0609	3.1000e- 004	0.0612	0.0161	2.9000e- 004	0.0164		50.6463	50.6463	1.8000e- 003	1.6000e- 003	51.1691

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/c	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/c	lay							lb/c	lay		
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	0.0207	0.7963	0.2411	3.0500e- 003	0.0964	4.1800e- 003	0.1006	0.0278	4.0000e- 003	0.0318		327.2491	327.2491	8.0400e- 003	0.0481	341.7693
Worker	0.2119	0.1410	1.6852	4.3900e- 003	0.5401	2.7800e- 003	0.5429	0.1433	2.5600e- 003	0.1458		449.4855	449.4855	0.0160	0.0142	454.1260
Total	0.2326	0.9373	1.9264	7.4400e- 003	0.6365	6.9600e- 003	0.6435	0.1710	6.5600e- 003	0.1776		776.7346	776.7346	0.0240	0.0623	795.8953

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/d	day		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	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/d	day							lb/c	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	0.0207	0.7963	0.2411	3.0500e- 003	0.0964	4.1800e- 003	0.1006	0.0278	4.0000e- 003	0.0318		327.2491	327.2491	8.0400e- 003	0.0481	341.7693
Worker	0.2119	0.1410	1.6852	4.3900e- 003	0.5401	2.7800e- 003	0.5429	0.1433	2.5600e- 003	0.1458		449.4855	449.4855	0.0160	0.0142	454.1260
Total	0.2326	0.9373	1.9264	7.4400e- 003	0.6365	6.9600e- 003	0.6435	0.1710	6.5600e- 003	0.1776		776.7346	776.7346	0.0240	0.0623	795.8953

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 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/e	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 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/e	day							lb/d	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	0.0537	0.0358	0.4272	1.1100e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		113.9541	113.9541	4.0500e- 003	3.6100e- 003	115.1305
Total	0.0537	0.0358	0.4272	1.1100e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		113.9541	113.9541	4.0500e- 003	3.6100e- 003	115.1305

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 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/e	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 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/e	day							lb/d	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	0.0537	0.0358	0.4272	1.1100e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		113.9541	113.9541	4.0500e- 003	3.6100e- 003	115.1305
Total	0.0537	0.0358	0.4272	1.1100e- 003	0.1369	7.1000e- 004	0.1376	0.0363	6.5000e- 004	0.0370		113.9541	113.9541	4.0500e- 003	3.6100e- 003	115.1305

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 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/e	day							lb/d	day		
Archit. Coating	14.1749					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	14.3666	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

#### 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/e	day							lb/d	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	0.0418	0.0278	0.3323	8.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		88.6309	88.6309	3.1500e- 003	2.8100e- 003	89.5460
Total	0.0418	0.0278	0.3323	8.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		88.6309	88.6309	3.1500e- 003	2.8100e- 003	89.5460

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.7 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/e	day							lb/d	day		
Archit. Coating	14.1749	, , ,	1	, , ,		0.0000	0.0000	, , ,	0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	14.3666	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

#### **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/e	day							lb/d	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	0.0418	0.0278	0.3323	8.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		88.6309	88.6309	3.1500e- 003	2.8100e- 003	89.5460
Total	0.0418	0.0278	0.3323	8.7000e- 004	0.1065	5.5000e- 004	0.1071	0.0283	5.1000e- 004	0.0288		88.6309	88.6309	3.1500e- 003	2.8100e- 003	89.5460

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 4.0 Operational Detail - Mobile

# 4.1 Mitigation Measures Mobile

	ROG	NOx	со	SO2	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/d	day							lb/c	lay		
Mitigated	2.2222	3.0812	21.8285	0.0404	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,191.761 0	4,191.761 0	0.3282	0.2276	4,267.792 6
Unmitigated	2.2222	3.0812	21.8285	0.0404	4.3712	0.0332	4.4044	1.1654	0.0310	1.1964		4,191.761 0	4,191.761 0	0.3282	0.2276	4,267.792 6

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	413.44	373.16	310.84	1,008,554	1,008,554
General Office Building	490.04	111.19	35.22	766,033	766,033
Total	903.48	484.35	346.06	1,774,587	1,774,587

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
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
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
General Office Building	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

# 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	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/d	Jay							lb/c	lay		
NaturalGas Mitigated	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757
NaturalGas Unmitigated	0.0404	0.3561	0.2242	2.2100e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4600e- 003	8.0900e- 003	443.7757

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/e	day							lb/d	lay		
Apartments Mid Rise	1960.64	0.0211	0.1807	0.0769	1.1500e- 003		0.0146	0.0146		0.0146	0.0146		230.6635	230.6635	4.4200e- 003	4.2300e- 003	232.0342
General Office Building	1789.17	0.0193	0.1754	0.1473	1.0500e- 003		0.0133	0.0133		0.0133	0.0133		210.4906	210.4906	4.0300e- 003	3.8600e- 003	211.7415
Total		0.0404	0.3561	0.2242	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4500e- 003	8.0900e- 003	443.7757

#### Mitigated

	NaturalGa s 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/o	day		
Apartments Mid Rise	1.96064	0.0211	0.1807	0.0769	1.1500e- 003		0.0146	0.0146		0.0146	0.0146		230.6635	230.6635	4.4200e- 003	4.2300e- 003	232.0342
General Office Building	1.78917	0.0193	0.1754	0.1473	1.0500e- 003		0.0133	0.0133		0.0133	0.0133		210.4906	210.4906	4.0300e- 003	3.8600e- 003	211.7415
Total		0.0404	0.3561	0.2242	2.2000e- 003		0.0279	0.0279		0.0279	0.0279		441.1541	441.1541	8.4500e- 003	8.0900e- 003	443.7757

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 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/e	day							lb/d	day		
Mitigated	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725
Unmitigated	3.2804	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 6.2 Area by SubCategory

# <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/e	day							lb/d	day		
Architectural Coating	0.3884					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1889	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348		11.3010	11.3010	0.0109		11.5725
Total	3.2803	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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/e	day							lb/o	day		
Architectural Coating	0.3884					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7031					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1889	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348		11.3010	11.3010	0.0109		11.5725
Total	3.2803	0.0723	6.2726	3.3000e- 004		0.0348	0.0348		0.0348	0.0348	0.0000	11.3010	11.3010	0.0109	0.0000	11.5725

# 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

# EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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

# **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

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

#### **Boilers**

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

#### **User Defined Equipment**

Equipment Type

Number

# **11.0 Vegetation**

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# University of the Pacific Rezone Project

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### Sacramento Metropolitan AQMD Air District, Mitigation Report

# **Construction Mitigation Summary**

Phase	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				Percent	Reduction							
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation** 

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# University of the Pacific Rezone Project

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	4	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

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# University of the Pacific Rezone Project

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		U	nmitigated tons/yr						Unmitiga	ated mt/yr		
Air Compressors	9.58000E-003	6.51500E-002	9.05600E-002	1.50000E-004	3.54000E-003	3.54000E-003	0.00000E+000	1.27663E+001	1.27663E+001	7.60000E-004	0.00000E+000	1.27854E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industria I Saws	1.67000E-003	1.29200E-002	1.82900E-002	3.00000E-005	6.40000E-004	6.40000E-004	0.00000E+000	2.68829E+000	2.68829E+000	1.30000E-004	0.00000E+000	2.69160E+000
Cranes	8.79000E-003	9.53900E-002	4.58600E-002	1.40000E-004	3.98000E-003	3.66000E-003	0.00000E+000	1.26738E+001	1.26738E+001	4.10000E-003	0.00000E+000	1.27763E+001
Forklifts	7.69000E-003	7.19800E-002	8.58600E-002	1.10000E-004	4.45000E-003	4.09000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Graders	4.80000E-004	5.82000E-003	2.12000E-003	1.00000E-005	1.90000E-004	1.70000E-004	0.00000E+000	7.26720E-001	7.26720E-001	2.40000E-004	0.00000E+000	7.32590E-001
Pavers	4.20000E-004	4.12000E-003	6.31000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	9.03360E-001	9.03360E-001	2.90000E-004	0.00000E+000	9.10670E-001
Rollers	3.40000E-004	3.52000E-003	4.05000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	5.04270E-001	5.04270E-001	1.60000E-004	0.00000E+000	5.08350E-001
Rubber Tired Dozers	9.40000E-004	9.80000E-003	4.27000E-003	1.00000E-005	4.40000E-004	4.10000E-004	0.00000E+000	1.03158E+000	1.03158E+000	3.30000E-004	0.00000E+000	1.03992E+000
Tractors/Loaders/ Backhoes	1.68100E-002	1.70560E-001	2.47820E-001	3.50000E-004	8.42000E-003	7.75000E-003	0.00000E+000	3.03851E+001	3.03851E+001	9.83000E-003	0.00000E+000	3.06308E+001

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# University of the Pacific Rezone Project

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		М	itigated tons/yr						Mitigate	ed mt/yr		
Air Compressors	9.58000E-003	6.51500E-002	9.05600E-002	1.50000E-004	3.54000E-003	3.54000E-003	0.00000E+000	1.27663E+001	1.27663E+001	7.60000E-004	0.00000E+000	1.27854E+001
Cement and Mortar Mixers	4.40000E-004	2.76000E-003	2.31000E-003	1.00000E-005	1.10000E-004	1.10000E-004	0.00000E+000	3.43710E-001	3.43710E-001	4.00000E-005	0.00000E+000	3.44600E-001
Concrete/Industrial Saws	1.67000E-003	1.29200E-002	1.82900E-002	3.00000E-005	6.40000E-004	6.40000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.30000E-004	0.00000E+000	2.69159E+000
Cranes	8.79000E-003	9.53900E-002	4.58600E-002	1.40000E-004	3.98000E-003	3.66000E-003	0.00000E+000	1.26738E+001	1.26738E+001	4.10000E-003	0.00000E+000	1.27763E+001
Forklifts	7.69000E-003	7.19800E-002	8.58600E-002	1.10000E-004	4.45000E-003	4.09000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Graders	4.80000E-004	5.82000E-003	2.12000E-003	1.00000E-005	1.90000E-004	1.70000E-004	0.00000E+000	7.26720E-001	7.26720E-001	2.40000E-004	0.00000E+000	7.32590E-001
Pavers	4.20000E-004	4.12000E-003	6.31000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	9.03360E-001	9.03360E-001	2.90000E-004	0.00000E+000	9.10670E-001
Rollers	3.40000E-004	3.52000E-003	4.05000E-003	1.00000E-005	1.90000E-004	1.80000E-004	0.00000E+000	5.04270E-001	5.04270E-001	1.60000E-004	0.00000E+000	5.08340E-001
Rubber Tired Dozers	9.40000E-004	9.80000E-003	4.27000E-003	1.00000E-005	4.40000E-004	4.10000E-004	0.00000E+000	1.03158E+000	1.03158E+000	3.30000E-004	0.00000E+000	1.03992E+000
Tractors/Loaders/Ba ckhoes	1.68100E-002	1.70560E-001	2.47820E-001	3.50000E-004	8.42000E-003	7.75000E-003	0.00000E+000	3.03851E+001	3.03851E+001	9.83000E-003	0.00000E+000	3.06307E+001

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# University of the Pacific Rezone Project

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Pe	rcent Reduction						
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.56663E-006	1.56663E-006	0.00000E+000	0.00000E+000	7.82145E-007
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.71984E-006	3.71984E-006	0.00000E+000	0.00000E+000	3.71526E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.57806E-006	1.57806E-006	0.00000E+000	0.00000E+000	7.82700E-007
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.92866E-007	9.92866E-007	0.00000E+000	0.00000E+000	9.84903E-007
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.96715E-005
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31643E-006	1.31643E-006	0.00000E+000	0.00000E+000	1.30588E-006

## **Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction	 PM2.5 Reduction	Frequency (per day)	

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# University of the Pacific Rezone Project

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00			

		Unmitigated		Mi	tigated	Percent Reduction		
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00	
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Building Construction	Roads	0.03	0.01	0.03	0.01	0.00	0.00	
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00	
Grading	Fugitive Dust	0.01	0.00	0.01	0.00	0.00	0.00	
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00	
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00	
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00	

**Operational Percent Reduction Summary** 

# University of the Pacific Rezone Project

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
			Percent	Reduction								
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.06	4.65	0.43	0.09	3.97
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# **Operational Mobile Mitigation**

# Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.20	0.48		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

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# University of the Pacific Rezone Project

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures		 	
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	 2.00	

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# University of the Pacific Rezone Project

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commute	Provide Ride Sharing Program		 	
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

# **Area Mitigation**

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

# **Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

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# University of the Pacific Rezone Project

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting	
No	On-site Renewable	

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

# Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	0.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

# **Solid Waste Mitigation**

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# University of the Pacific Rezone Project

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	