CITY OF RANCHO CORDOVA

SUNRISE BOULEVARD SIDEWALK INSTALLATION PROJECT

DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

Prepared by:

CITY OF RANCHO CORDOVA
DEVELOPMENT SERVICES-PLANNING
2729 PROSPECT PARK DR.
RANCHO CORDOVA, CA 95670

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1.0 INTRODUCTION

2.0 PROJECT DESCRIPTION

3.0 INITIAL STUDY CHECKLIST

4.1 SUMMARY OF MITIGATION MEASURES

5.1 LIST OF PREPARERS

6.1 REFERENCES

APPENDICES

FIGURES

TABLES

1.0 Introduction

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study (IS) with supporting environmental studies, which provides justification for a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for the 2012 Sunrise Boulevard Sidewalk Installation Project (proposed project).

The IS/MND is a public document to be used by the City of Rancho Cordova (City), acting as the CEQA lead agency, to determine whether the proposed project may have a significant effect on the environment pursuant to CEQA. If the lead agency finds substantial evidence that any aspect of the proposed project, either individually or cumulatively, may have a significant effect on the environment that cannot be mitigated, regardless of whether the overall effect of the proposed project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR), use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR to analyze the proposed project at hand (Public Resources Code Sections 21080(d) and 21082.2(d)).

If the agency finds no substantial evidence that the proposed project or any of its aspects may cause a significant impact on the environment with mitigation, a MND shall be prepared with a written statement describing the reasons why the proposed project, which is not exempt from CEQA, would not have a significant effect on the environment, and therefore, why it does not require the preparation of an EIR (State CEQA Guidelines Section 15371).

According to State CEQA Guidelines Section 15070, a Negative Declaration shall be prepared for a project subject to CEQA when either:

1) The IS shows there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

2) The initial study identifies potentially significant effects, but:

   a) Revisions in the project plans or proposals made by, or agreed to by the applicant before the proposed MND and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

   b) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

This IS/MND has been prepared in accordance with the CEQA, Public Resources Code Section 21000 *et seq*., and the State CEQA Guidelines Title 14 California Code of Regulations (CCR) Section 15000 *et seq*.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "The lead agency will normally be the agency with general governmental powers." The City of Rancho Cordova Public Works Department has initiated preliminary design of the

proposed project and it requires approval from the Rancho Cordova City Council. Therefore, based on the criteria described above, the lead agency for the proposed project is the City.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed Sunrise Boulevard Sidewalk Installation Project. Mitigation measures have also been established that reduce or eliminate any identified significant and/or potentially significant impacts. This document is divided into the following sections:

1.0 INTRODUCTION

This section provides an introduction and describes the purpose and organization of this document.

2.0 PROJECT DESCRIPTION

This section provides a detailed description of the proposed project, the process used for notifying and involving the public during project planning, and describes coordination with relevant agencies and organizations.

3.0 INITIAL STUDY CHECKLIST

This section describes the environmental setting for each of the environmental subject areas, evaluates a range of impacts classified as "no impact", "less than significant", "less than significant with mitigation incorporated", or "potentially significant" in response to the environmental checklist, and provides mitigation measures, where appropriate, to mitigate potentially significant impacts to a less than significant level; and provides an environmental determination of the Project.

4.0 SUMMARY OF MITIGATION MEASURES

This section provides a summary of mitigation measures for the proposed project.

5.0 LIST OF PREPARERS

This section identified staff and consultants responsible for preparation of this document.

6.0 REFERENCES

This section identifies resources used in the preparation of this document.

2.0 Project Description

2.1 PROJECT LOCATION

The proposed project is located along the west side of Sunrise Boulevard between American River Parkway (South Bridge Street) and Gold Country Boulevard, a sidewalk segment approximately 750 feet in length in the northeastern portion of Rancho Cordova. The adjacent undeveloped properties west of the proposed sidewalk segment are part of the American River Parkway, a public recreation area owned by Sacramento County.

2.2 PROJECT DESCRIPTION

Currently, the sidewalk for pedestrian access along the west side of Sunrise Boulevard ends at the intersection of Sunrise Boulevard and Gold Country Boulevard. An existing narrow dirt pathway is used by pedestrians for continued access along the west side of Sunrise Boulevard. The purpose of the project is to install concrete sidewalk to replace the existing dirt pathway along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard to improve pedestrian access to this area. All work will be within the existing City right-of-way, except for a strip of land approximately 2 feet in width by 420 feet in length that the City will acquire from two adjacent parcels (APNs 056-0023-016 and -017) owned by Sacramento County to construct portions of the proposed sidewalk. These parcels are identified as urban and built-up land, but are currently undeveloped. This project is beneficial to meeting the City's pedestrian movement goals. Refer to **Figure 1**, **Figure 2**, and **Figure 3** for a visual representation of the regional vicinity, location, and layout of the proposed project.

FUNDING

The City of Rancho Cordova will use local funding for this project.

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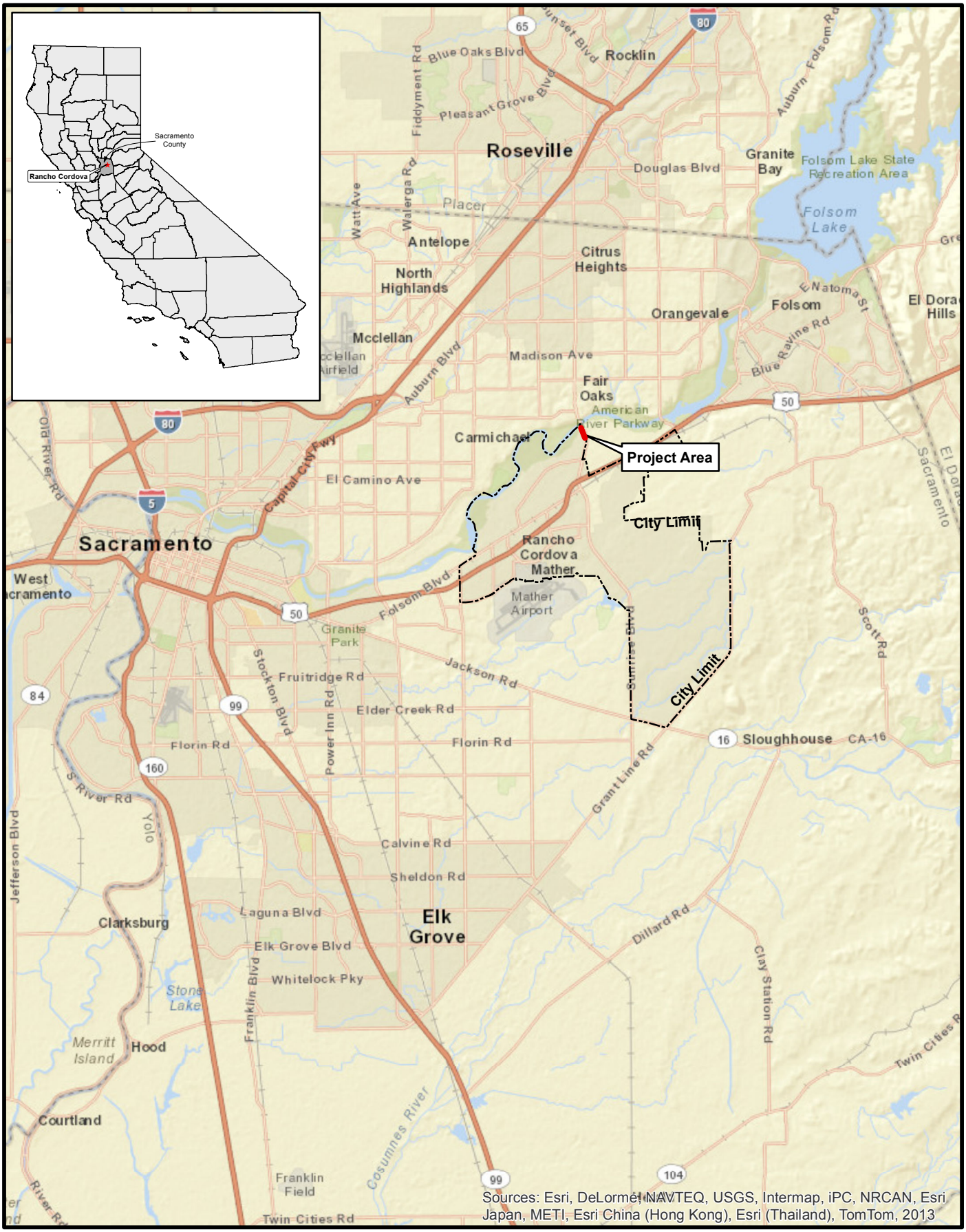


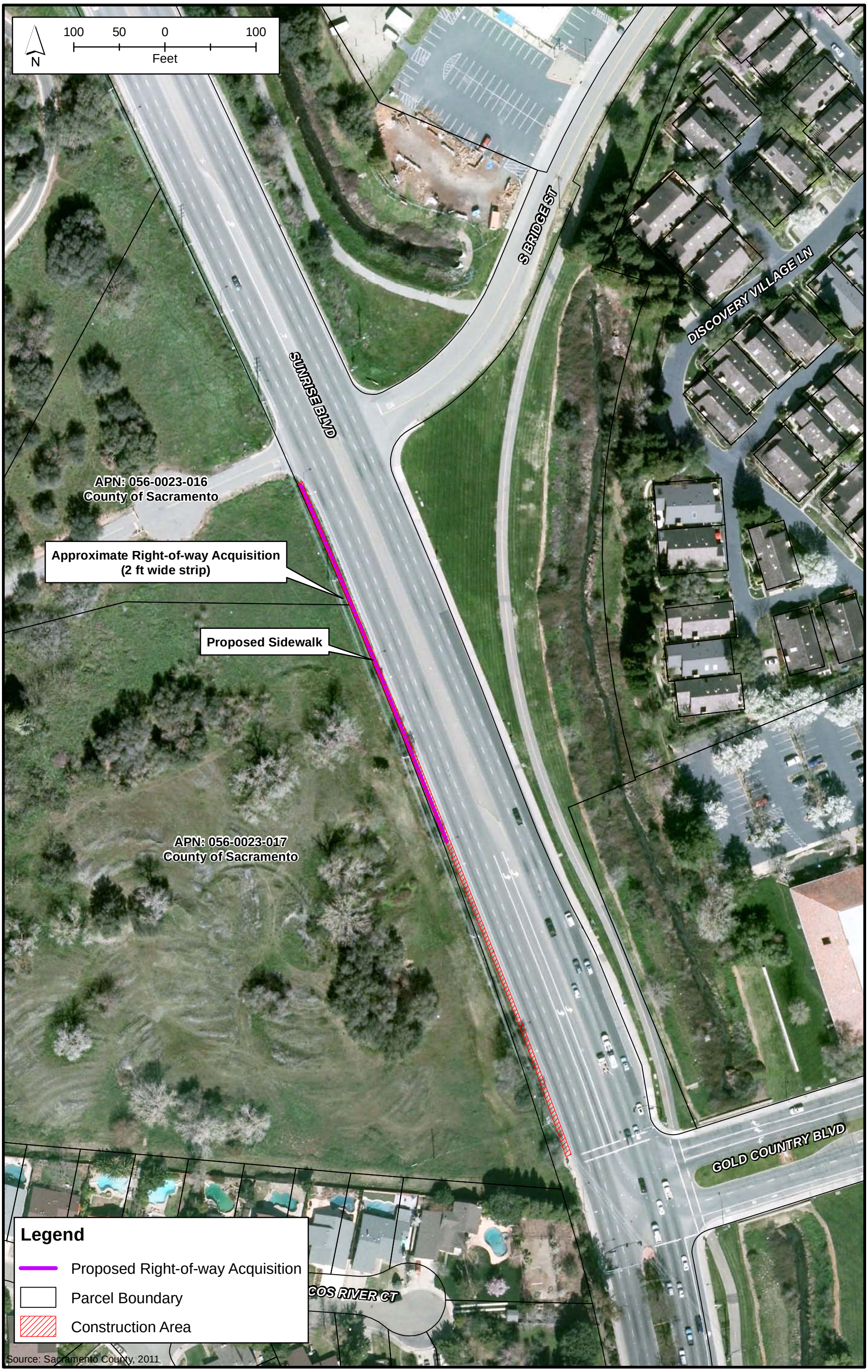
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

City of Rancho Cordova
Planning Department

Figure 1
Regional Vicinity Map

City of Rancho Cordova
Planning Department

Figure 2
Project Location Map



City of Rancho Cordova
Planning Department

Figure 3

Project Layout

2.3 PROJECT CONSTRUCTION

Analysis contained in this IS/MND has taken into consideration activities within the entire project area, including proposed contractor staging areas. All mitigation measures included as part the project would be implemented throughout these areas.

2.4 REQUIRED PROJECT APPROVALS

In order for the project to be implemented, a series of actions and approvals would be required from agencies. Anticipated project approvals/actions would include, but are not limited to, the following:

- Rancho Cordova City Council – Adoption of the MND, Mitigation Monitoring and Reporting Program (MMRP), and other actions associated with project approval

2.5 OTHER PROJECT ASSUMPTIONS

This IS/MND assumes compliance with all applicable state, federal, and local codes and regulations including, but not limited to, the City of Rancho Cordova Improvement Standards, the Sacramento County Water Agency Code, the Guidance Manual for On-site Storm Water Quality Control Measures, the California Health and Safety Code, and the California Public Resources Code.

2.6 TECHNICAL STUDIES

No technical studies were conducted as a part of this IS/MND, except for a biological field survey and database search conducted on August 8, 2013 to evaluate the potential for special-status species to occur in the project area.

3.0 INITIAL STUDY CHECKLIST

The environmental factors checked below would be potentially affected by this project as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Population and Housing
☐ Agriculture and Forest Resources	☐ Hazards & Hazardous Materials	☐ Public Services
☐ Air Quality	☐ Hydrology/Water Quality	☐ Recreation
☒ Biological Resources	☐ Land Use and Planning	☐ Transportation/ Traffic
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities & Service Systems
☐ Geology and Soils	☐ Noise	☒ Mandatory Findings of Significance

DETERMINATION

On behalf of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

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

Signature	October 9, 2013 Date
Bret Sampson, Environmental Project Manager	City of Rancho Cordova Development Services-Planning
Printed Name	For

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed project is located in an urban mixed-use area, extending along the west side of Sunrise Boulevard, between South Bridge Street and Gold Country Boulevard. Construction would occur within the existing City right-of-way and on two undeveloped parcels along Sunrise Boulevard. The surrounding area includes land used for parks and open space, low-density residential, office mixed use, and commercial mixed use. Sunrise Boulevard, at the project location, is a six-lane arterial roadway, divided north–south. The two undeveloped parcels, adjacent to the west of the proposed project site, consist of open space, trees, grasses, and sparse vegetation, along with utility poles and overhead utility lines. There are no designated state scenic highways in or adjacent to the project site.

DISCUSSION OF IMPACTS

a) *Have a substantial adverse effect on a scenic vista?*

No Impact. The City of Rancho Cordova General Plan (2006a) does not identify any scenic vistas within or surrounding the project site. The proposed project is located in an area designated as urban, built-up land. Views from the project site are primarily of residential development and areas of open space. The overall visual character of the area is not considered scenic as it has been disturbed by urban development. Therefore, there would be no impact on a scenic vista.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. There are no officially designated state scenic highways in the vicinity of the project site or in the larger surrounding area. Therefore, the proposed project would not damage scenic resources within a state scenic highway, and no impact would occur.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Less Than Significant Impact. The proposed project would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Construction of the sidewalk segment would replace an existing dirt pathway currently used by pedestrians. This sidewalk improvement is minor in nature and will conform

to the existing character of the project site. Therefore, the project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant.

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

No Impact. The proposed construction of a sidewalk segment does not include the installation of any streetlights, traffic lights, or any other sources of light nor would it include the installation of any materials that would produce glare. Therefore, the project would not adversely affect daytime or nighttime views in the area, as new sources of substantial light or glare would not be created. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.2. AGRICULTURE AND FOREST RESOURCES. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 45260), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Agriculture in Rancho Cordova is categorized as either general or rural agriculture. Land used for general agriculture generates commercial-level production, and land used for rural agriculture permits agricultural activities while providing a transitional area between rural agricultural and residential uses. The majority of land used for agriculture within the city limits exists adjacent to or near the northwestern and southern city limit boundaries. The City of Rancho Cordova General Plan Environmental Impact Report (EIR) (2006b) explains that the majority of agricultural land within the Planning Area, historically used for grazing, growing row and field crops, orchards, and small vineyards, is now considered fallow, meaning it is vacant or underutilized. No major intensive agricultural activities exist within the Planning Area. The proposed project is located in an area largely designated as urban, built-up land. There is no designated farmland, forestland, or timberland in the project vicinity, nor would it be necessary to convert any designated farmland or timberland for the construction and operation of this project.

DISCUSSION OF IMPACTS

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?*

No Impact. According to the California Department of Conservation Sacramento County Important Farmland Map (2010), the project site is designated as Urban and Built-Up Land and Other Land. Land adjacent to and surrounding the project site is also designated as Urban and Built-Up Land and Other Land. No conversion of Prime Farmland, Unique Farmland, or Farmland of State Importance would result from the project. No impact would occur.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. According to the City of Rancho Cordova General Plan Land Use Policy Map (2006), there are no parcels zoned for agricultural use in the immediate or surrounding area of the proposed project. The project would conform to the existing urban, developed character of the surrounding region. The Sacramento County Williamson Act Lands Map (California Department of Conservation 2009) does not identify the affected parcels (APNs 056-0023-016 and –017) as enrolled in Williamson Act contracts. Furthermore, no land in the immediate or surrounding region of the proposed project is identified as being enrolled in Williamson Act contracts. Therefore, the project would have no impact to zoning for agricultural use or lands under a Williamson Act contract.

c) *Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 45260), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

No Impact. The project does not include forestland, timberland, or timberland zoned Timberland Production as defined by the Public Resources Code or the Government Code. Therefore, no impact would occur.

d) *Result in the loss of forestland or conversion of forestland to non-forest use?*

No Impact. There is no designated forestland within the project site or in the surrounding area. As a result, the proposed project would not cause any loss of forestland or the conversion of forestland to non-forest use. No impact would occur.

e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?*

No Impact. The proposed project does not involve any changes or alterations to the existing environment that could result in the conversion of Farmland to nonagricultural use or forestland to non-forest use, as no Farmland or forestland exists in the immediate or surrounding area of the proposed project. Therefore, there would be no impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3. AIR QUALITY. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB is regulated by several jurisdictions, including the United States Environmental Protection Agency (EPA), California Air Resources Board (CARB), and Sacramento Metropolitan Air Quality Management District (SMAQMD). The California Clean Air Act (CCAA) of 1988 requires the air districts, including the SMAQMD, to strive to achieve and maintain the state ambient air quality standards by the earliest practicable date and to develop plans for attaining the state ozone, carbon monoxide (CO), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) standards. In compliance with the California Clean Air Act, the SMAQMD prepared the 1991 Air Quality Attainment Plan (AQAP) to address Sacramento County's nonattainment status for ozone and CO, and although not required, particulate matter (PM). The 1991 AQAP was designed to make progress toward attaining the state ozone standard and contained preliminary implementation schedules for control programs. The CCAA requirement for the first triennial progress report and plan revision of the 1991 AQAP was fulfilled with the preparation and adoption of the 1994 Sacramento Area Regional Ozone Attainment Plan. This document was incorporated as part of the State Implementation Plan (SIP) to meet the requirements of the federal Clean Air Act (CAA) and replaced the 1991 AQAP. However, at that time the region could not show that the national ozone (1-hour) standard would be met by 1999. In exchange for moving the deadline to 2005, the region accepted a designation of "severe nonattainment" coupled with additional emission requirements on stationary sources. Additional triennial reports were also prepared in 1997, 2000, and 2003 in compliance with the CCAA that act as incremental updates (SMAQMD 2011).

As a nonattainment area, the region is also required to submit rate-of-progress milestone evaluations in accordance with the CCAA. Milestone reports were prepared for 1996, 1999, and 2002. These milestone reports include compliance demonstrations that the requirements have been met for the Sacramento nonattainment area. The air quality attainment plans and reports present comprehensive strategies to reduce the ozone precursor pollutants, reactive organic gases (ROG) and nitrogen oxide (NO_X), as well as particulate matter sized under 10 microns in

diameter (PM_{10}) from stationary, area, mobile, and indirect sources. Such strategies include the adoption of rules and regulations, enhancement of California Environmental Quality Act (CEQA) participation, implementation of a new and modified indirect source review program, adoption of local air quality plans, and stationary, mobile, and indirect source control measures.

The EPA recently promulgated a new 8-hour ozone standard. This change lowered the standard for ambient ozone from 0.08 parts per million (ppm), averaged over 8 hours, to 0.075 ppm. This new standard replaces the previous 1-hour standard. In general, the 8-hour standard is more protective of public health and more stringent than the 1-hour standard. The promulgation of this standard prompted new designations and nonattainment classifications in June 2004, and resulted in the revocation of the 1-hour standard in June 2005. The region has been designated as a nonattainment area for the national (8-hour) ozone standard with the attainment deadline of June 2019. The SMAQMD completed the *Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan for the Sacramento Federal Ozone Nonattainment Area in 2008*. This plan uses updated emissions inventories, existing control strategies, and approved control measure commitments to achieve emission reductions necessary for compliance with the Clean Air Act.

The SMAQMD has also adopted various rules and regulations pertaining to the control of emissions from area and stationary sources. Some of the more pertinent regulatory requirements applicable to the proposed project are identified as follows:

- *Rule 402: Nuisance*. The purpose of this rule is to limit emissions which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public; endanger the comfort, repose, health, or safety of any such persons or the public; or cause, or have natural tendency to cause, injury or damage to business or property.

- *Rule 403: Fugitive Dust*. The purpose of this rule is to require that reasonable precautions be taken so as not to cause or allow the emissions of fugitive dust from noncombustion sources from being airborne beyond the property line from which the emission originates.

- *Rule 442: Architectural Coatings*. The developer or contractor is required to use coatings that comply with the volatile organic compound (VOC) content limits specified in the rule.

DISCUSSION OF IMPACTS

Thresholds of Significance

For the purpose of this analysis, the following thresholds of significance, as identified by the SMAQMD or the State CEQA Guidelines (Appendix G), have been used to determine whether implementation of the proposed project would result in significant air quality impacts. Implementation of the proposed project would result in significant air quality impacts if:

- Short-Term Emissions of Criteria Air Pollutants. Construction-generated criteria air pollutants or precursor emissions exceed the SMAQMD-recommended threshold of 85 pounds per day (lbs/day) for NO_X, or substantially contribute to emissions concentrations (e.g., PM_{10}) that exceed the national ambient air quality standards (NAAQS) or the California ambient air quality standards (CAAQS). When emissions of NO_x are projected to be less than, or with implementation of all feasible mitigation measures and offsets can be reduced to below, 85 lbs/day, other construction-generated mobile-source pollutants can be considered to be less than significant. The SMAQMD provides screening criteria that can also be used for the evaluation of construction-generated NO_x, based on the overall maximum daily area of disturbance associated with proposed

projects. According to this SMAQMD screening threshold, projects that are 35 acres or less in size generally will not exceed the district's construction NOx threshold of significance, and pollutant emissions quantification is not necessary.

The SMAQMD also provides screening criteria that can also be used for the evaluation of construction-generated PM_{10}, based on the overall maximum daily area of disturbance associated with proposed projects. In accordance with these criteria, areas of disturbance in excess of the SMAQMD's screening criteria would be considered potentially significant and require emissions quantification. These screening levels are based on the maximum actively disturbed area of the project site. For example, assuming a maximum daily disturbance of less than 15 acres, implementation of recommended "Level Three Mitigation" would typically be considered sufficient to reduce fugitive dust-related impacts to a less than significant level. If the maximum daily area of disturbance would exceed the screening criteria or if the project cannot undertake the mitigation measures that would be required, a more detailed analysis, involving dispersion modeling, may be required. Mitigation is not required for construction that disturbs 5 acres or less (SMAQMD 2011). Construction of the proposed project would disturb less than 5 acres.

The emissions resulting from installation of the proposed segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard were quantified using the CalEEMod air quality model (**Appendix B**).

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. A project is considered to conflict with or obstruct implementation of the regional air quality plan (*Federal 8-Hour Ozone Reasonable Further Progress Plan for the Sacramento Federal Ozone Nonattainment Area in 2008)* if it would be inconsistent with the emissions inventories contained in it. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region.

The proposed project consists of constructing a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. The project would not result in an increase in population or VMT. Furthermore, the proposed project would not result in an increase in mobile, stationary, area, or indirect sources of air pollution, as the sidewalk improvement would support pedestrian access along this segment of Sunrise Boulevard, encouraging the use of alternative modes of transportation. The proposed project would not conflict with existing or future air quality planning efforts; therefore, no impact would occur.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact. Short-term increases in pollutant emissions would occur during construction. The total construction period is limited to 30 days maximum. The project would disturb less than 0.05 acre and therefore does not surpass the SMAQMD screening threshold for construction-generated NO_x emissions since the area of disturbance is less than 35 acres. Furthermore, the project would not surpass the SMAQMD particulate matter screening levels for construction projects as the area of disturbance is less than 5 acres. Therefore, construction-generated air pollutants associated with the proposed project would be less than significant; no emissions quantification is required. Additionally, in terms of potential operational air quality impacts, once the segment of sidewalk has been constructed and is in operation, the proposed project would not contribute to any stationary, mobile, area, or indirect sources of air pollution. Based on the small scale and limited duration of

construction, and the fact that no operational emissions would be generated, the project would not violate an air quality standard or contribute to an existing or projected air quality violation. Therefore, this impact would be less than significant.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

Less Than Significant Impact. The SMAQMD considers projects that are both consistent with the air quality plan (the *Federal 8-Hour Ozone Reasonable Further Progress Plan for the Sacramento Federal Ozone Nonattainment Area in 2008*) and below SMAQMD significance thresholds of the ozone precursor pollutants (i.e., ROG and NO_x) to have less than significant cumulative impacts. As discussed in Issue a), the proposed project would not conflict with the air quality plan since it would not result in an increase in population or VMT. As discussed in Issue b), predicted construction operational emissions attributable to the proposed project would not exceed SMAQMD screening thresholds and by the very nature of the project, would not result in any stationary, mobile, area, or indirect sources of air pollution. As such, cumulative impacts would be less than significant per the SMAQMD significance threshold since the project would be consistent with the applicable air quality plan and would not exceed SMAQMD significance thresholds.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. Sensitive receptors are generally defined as facilities that house or attract groups of children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include schools, hospitals, residential areas, and convalescent facilities. The proposed project includes construction activities near residential areas. Sidewalk improvements, by nature, do not produce any long-term air quality impacts. Air quality impacts resulting from the proposed project are limited to the construction period. Particulate exhaust emissions from diesel-fueled engines (diesel-exhaust PM) have been identified as a toxic air contaminant (TAC) by CARB. Implementation of the proposed project would result in short-term generation of diesel PM emissions from the use of off-road diesel equipment for site grading, paving, and other construction-related activities.

Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure. Since construction activities are anticipated to occur over 30 days or less, and because the use of diesel-powered construction equipment would be temporary and episodic, effects of diesel-exhaust PM generated by project construction would be brief and temporary.

Furthermore, in accordance with current SMAQMD-recommended guidance for the analysis of air quality impacts, if emissions of NO_x associated with on-site construction equipment are determined to be less than significant, then it can be assumed other pollutants from on-site mobile sources would be less than significant. As previously discussed and in comparison to SMAQMD recommendations, predicted construction-generated emissions of NO_x, as well as other mobile source emissions, would be considered to have a less than significant impact. For these reasons discussed throughout this air quality section, exposure of sensitive receptors to substantial pollutant concentrations would be considered less than significant.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. Numerous factors account for the occurrence and severity of odor impacts, such as the nature, frequency, and intensity of the odor source; wind speed and direction; and the sensitivity of the receptors. Objectionable odors rarely cause any physical harm, but rather, such odors can cause a nuisance or annoyance to the public. The proposed project would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard, generating only short-term emissions of odors that may be considered objectionable.

Operation of the proposed project would not create any objectionable odors. Odors generated by the proposed project would be limited to dust and equipment emissions during the temporary construction period. Diesel-powered equipment, emitting diesel exhaust used during construction activities associated with the proposed project, would emit temporary odors, which may be considered objectionable by some. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, exposure of sensitive receptors to these emissions would be limited. The construction period for the proposed project is limited to 30 days or less. Additionally, SMAQMD Rule 402 addresses the exposure of emissions that may cause a nuisance to any substantial number of people. The proposed project would be subject to Rule 402 and any objectionable odors resulting from the proposed project would be short-term and limited to the construction period. Therefore, the impact would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.4. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Note to the reader: As of January 1, 2013, the agency formerly known as the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW). For purposes of this discussion, the agency names and abbreviations are interchangeable.

This section describes the natural resources present within and immediately surrounding the project site, and includes a discussion of the special-status species and sensitive habitats potentially occurring in the area. Also included is an analysis of impacts that could occur to biological resources due to project implementation, and appropriate mitigation measures to reduce or avoid those impacts. The analysis of biological resources presented in this section is based on a review of the current project description, as well as maps and available literature.

ENVIRONMENTAL SETTING

A PMC biologist conducted an evaluation of the project to characterize the environmental setting on and adjacent to the proposed project. The evaluation involved a thorough query of available data and literature from local, state, federal, and nongovernmental agencies.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Sacramento Office Species List (2013a)
- USFWS's Critical Habitat Portal (2013b)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (2013a)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (2013)

A search of the USFWS's Critical Habitat Portal database and Sacramento Office Species List for the Folsom, Buffalo Creek, Citrus Heights, and Carmichael, California, US Geological Survey (USGS) 7.5-minute quadrangles was performed for the project area to identify federally protected species and their habitats that may be affected by the proposed project. In addition, a query of the CNDDB was conducted to identify known occurrences for special-status species within a 1- and 5-mile radius of the project site. Lastly, the CNPS database was queried to identify special-status plant species with the potential to occur within the quadrangles mentioned above. Please see **Appendix A** for a summary of the database search results.

The project site has relatively flat topography and is approximately 105 feet above mean sea level. The land west of the project footprint is characterized by annual grassland with scattered trees, including valley oak (*Quercus lobata*), interior live oak (*Q. agrifolia*), and box elder (*Acer negundo*). Sunrise Boulevard extends approximately 100 feet to the east of the sidewalk footprint. Surrounding land uses include residential development, commercial development, and open space.

SPECIAL-STATUS SPECIES

Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their range. These species have been identified and assigned a status ranking by governmental agencies such as the CDFW, the USFWS, and nongovernmental organizations such as the CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996, candidates)
2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Section 670.1 et seq.)

3. Designated as Species of Special Concern by the CDFW

4. Designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515)

5. Species that meet the definition of rare or endangered under CEQA (14 CCR Section15380) including CNPS List Rank 1B and 2

The query of the USFWS, CNPS, and CNDDB databases revealed 8 special-status plant species and 19 special-status wildlife species with the potential to occur in the project vicinity. **Appendix A** provides a summary of all special-status species identified in the search results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to be impacted by the proposed project.

DISCUSSION OF IMPACTS

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Less Than Significant Impact With Mitigation Incorporated. Database queries revealed 27 special-status species with the potential to occur in the project vicinity. However, the habitat present on and adjacent to the proposed project site does not provide suitable habitat for the majority of the special-status species identified. The proposed project does, however, have the potential to impact valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*) and Cooper's hawk (*Accipiter cooperi*), as well as migratory birds and raptors.

Valley Elderberry Longhorn Beetle

Protocol-level surveys for the VELB were completed within a 100-foot radius of the project footprint, in accordance with USFWS conservation guidelines (1999). Three elderberry shrubs or clumps with approximately 23 stems greater than 1 inch diameter at ground level are within a 100-foot radius of the project footprint (**Figure 4**). A clump includes all the stems or shoots within 10 to 30 feet of each other without a significant break in canopy cover. Elderberry shrubs and clumps that occurred along the roadside were recorded as non-riparian due to their proximity to areas of prolonged disturbance and lack of associated riparian vegetation.

According to the USFWS conservation guidelines (1999), direct removal, trimming, or construction activities within 20 feet of the dripline of an elderberry shrub could result in direct loss (take) of a VELB. One shrub with a total of 13 stems greater than 1 inch in diameter at ground level is within 20 feet of the project footprint. This shrub, although within the 20-foot buffer, will not be directly removed by the proposed project; however, if a shrub is present within a 20-foot buffer of project activities, there may be impacts such as direct mortality from construction dust and noise. In addition, the introduction of Argentine ants (*Linepithema humile*) from trash left at the construction site may also negatively affect the beetle, as this species is known to prey on the beetle (Holway et al. 2002). As a result, construction-related activities could result in potentially significant impacts to VELB; however, implementation of mitigation measures **MM 3.4.1** through **MM 3.4.6** will reduce those impacts to a less than significant level.

Mitigation Measures

MM 3.4.1 **Limited operating period (March 1–June 30).** The City shall impose a limited operating period (LOP) for all elderberry shrubs to avoid construction- or project-related disturbances to valley elderberry longhorn beetle. An LOP constitutes a period during which project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur. The LOP will be imposed within 20 feet of all elderberry shrubs during the VELB emergence period (March 1–June 30).

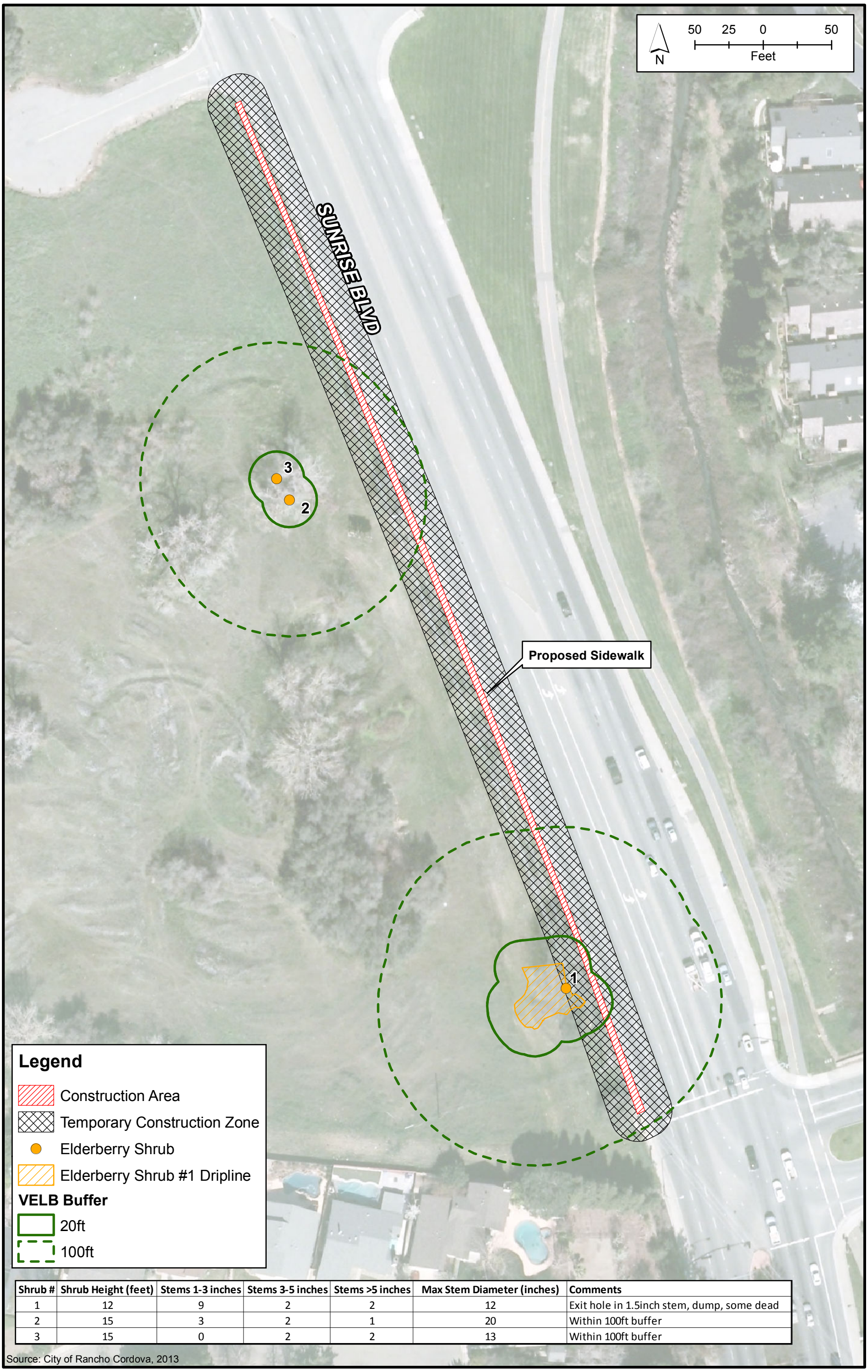
Timing/Implementation: *March 1 through June 30*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.2 **Establish a 20-foot-wide buffer (minimum) around all elderberry shrubs where feasible.** Before any ground-disturbing activity, the City will ensure that a temporary plastic mesh–type construction fence (Tensor Polygrid or equivalent), a minimum of 4 feet tall, is installed at least 20 feet from the driplines of elderberry shrubs that will be retained and adjacent to the project area. The fencing requirement is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing will be determined by a qualified biologist, with the goal of protecting habitat for VELB. The fencing will be strung tightly on posts set at a maximum interval of 10 feet. The fencing will be installed in a way that prevents equipment from enlarging the work area beyond the delineated area. The fencing will be checked and maintained weekly until all construction is completed. This buffer zone will be marked by signs stating, "This is habitat of the valley elderberry longhorn beetle, a threatened species, and it must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." Signs will be placed at intervals of 50 feet and must be readable at a distance of 20 feet. No construction activity, including grading, will be allowed until this condition is satisfied. No grading, clearing, storing of equipment or machinery, or other disturbance or activity may occur until a City representative has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition will be shown on the construction plans.

Timing/Implementation: *Prior to construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*



Shrub #	Shrub Height (feet)	Stems 1-3 inches	Stems 3-5 inches	Stems >5 inches	Max Stem Diameter (inches)	Comments
1	12	9	2	2	12	Exit hole in 1.5inch stem, dump, some dead
2	15	3	2	1	20	Within 100ft buffer
3	15	0	2	2	13	Within 100ft buffer

Source: City of Rancho Cordova, 2013

City of Rancho Cordova
Planning Department

Figure 4

Elderberry Shrubs, Host Plant to the Valley Elderberry Longhorn Beetle within the Vicinity of the Construction Area

MM 3.4.3 **Biological monitoring and worker environmental awareness training.** A qualified biologist(s) shall monitor construction activities that could potentially cause significant impacts to sensitive biological resources. In addition, the City shall retain a qualified biologist to conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the identified location(s) of sensitive biological resources, including how to identify species with the potential to occur in the construction area, the need to avoid impacts to biological resources (e.g., plants, wildlife, and jurisdictional waters), and to brief them on the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor will ensure that they receive the mandatory training before starting work.

Timing/Implementation: *Prior to and ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.4 **Dust control measures.** The City will ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include applying water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants (*Linepithema humile*), water will not be sprayed within the driplines of elderberry shrubs at any time.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.5 No insecticides, herbicides, fertilizers, or other chemicals will be applied during construction.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.6 **Trash removal.** During project construction activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

Migratory Birds and Raptors

Habitats adjacent to the project site may provide suitable nesting habitat for Cooper's hawk, migratory birds, and raptors protected under the Migratory Bird and Treaty Act (MBTA), as well under FGC Sections 3503.5 and 3800–3806. Potential nest abandonment and mortality to eggs and chicks would be considered a potentially significant impact to protected bird species; however, implementation of mitigation measures **MM 3.4.7** and **MM 3.4.8** will reduce those impacts to a less than significant level.

Mitigation Measures

MM 3.4.7 **Migratory bird surveys.** If clearing and/or construction activities will occur during the migratory bird nesting season (April 15–August 15), preconstruction surveys for nesting migratory birds shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.

If active nest(s) are identified during the preconstruction survey, a qualified biologist shall monitor the nest to determine when the young have fledged. Monthly monitoring reports, documenting nest status, will be submitted to the City Public Works Department until the nest is deemed inactive. The biological monitor shall have the authority to cease construction if there is any sign of distress to a raptor or migratory bird. Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications.

Timing/Implementation: *Prior and during to construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.8 **Raptor surveys.** If construction activities will occur during nesting season for raptors (January 15–August 15), all suitable raptor nesting habitat within 0.5 miles of the impacted area shall be surveyed for active raptor nests within 14 days of the commencement of construction. If an active raptor nest is located within 0.5 miles of the construction site, a no-activity buffer will be erected around the nest while it is active to protect the nesting raptors. This buffer distance may be amended to account for nests that are not within the line of sight of the construction activity. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.

Timing/Implementation: *Prior to and during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?*

No Impact. Sensitive habitats include (a) areas of special concern to resource agencies; (b) areas protected under CEQA; (c) areas designated as sensitive natural communities by the CDFW; (d) areas outlined in Section 1600 of the FGC; (e) areas regulated under Section 404 of the federal Clean Water Act; and (f) areas protected under local regulations and policies. No riparian habitat or other sensitive natural communities occur within the project boundaries; therefore**,** no impact will occur as a result of the project.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal filling, hydrologic interruption, or other means?*

No Impact. No waters of the state or waters of the United States occur within the project boundaries. Therefore, no impact to federally protected wetlands will occur as a result of the project.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact. Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. No wildlife corridors for resident migratory wildlife species occur on or adjacent to the project. As a result, no impact to the movements of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites would occur as a result of the proposed project.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Less Than Significant With Mitigation Incorporated. There are four live oaks (*Quercus agrifolia*) whose trunks were within 10 feet of the existing curb. Several other trees, including valley oaks (*Q. lobata*) and box elders (*Acer negundo*), are located in proximity to the project site. None of the trees will be removed as a result of project implementation; however, they may be adversely affected by the construction either by compacting the roots or paving within the dripline. Implementation of mitigation measure **MM 3.4.9** will ensure there is no conflict with local policies or ordinances.

MM 3.4.9 The City shall comply with the Tree Preservation and Protection Ordinance (Chapter 19.12). Any damage to native oak trees will be mitigated accordingly.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan?*

No Impact. The project site is located within the South Sacramento Habitat Conservation Plan (SSHCP) planning area; however, this plan has not been adopted to date. There are currently no other adopted or proposed habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans that affect the proposed project. As a result, no conflict with an adopted plan will occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

ENVIRONMENTAL SETTING

The City of Rancho Cordova General Plan (2006a) provides a summary of the cultural resources and historic resources settings of the city. Sites, buildings, and artifacts associated with Native Americans, historic gold mining and railroad operations, and others exist within the city limits. Eight structures of state and local importance are found in the city, none of which exist within the proposed project site. A study of the area designates cultural resources of potential prehistoric and historic components existing within the Lower Sunrise Recreational Area adjacent to the proposed project site on the west (GANDA 2012). This site is not currently listed in the National Register of Historic Places. Construction of the sidewalk would take place outside of the site boundary.

DISCUSSION OF IMPACTS

a) *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*

No Impact. The proposed project consists of the construction of a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. No existing buildings, bridges, or other structures will be impacted by the proposed project. Therefore, the proposed project would have no impact on historic resources.

b, c) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

Less Than Significant With Mitigation Incorporated. The project site and the surrounding area have been disturbed by previous urban development with the construction of structures and roadways. The site located within the Lower Sunrise Recreational Area with potential for existing prehistoric and historic period components has been degraded from previous occurrences of vandalism and looting. The amount of area disturbed would be limited (less than 0.05 acres) and no deep excavation would occur. It is reported in a study of the site that any potential undiscovered cultural resources are likely to be present at a depth of 6 to

8 feet beneath the surface (GANDA 2012). Sidewalk excavation for the proposed project is not expected to excavate to a depth of 6 to 8 feet, and construction would occur outside of the cultural resources site boundary. However, because of the potential to discover archaeological and paleontological resources during any ground-disturbing activity, mitigation measures **MM 3.5.1** and **MM 3.5.2** will be incorporated to reduce any potential impact to less than significant.

Mitigation Measures

MM 3.5.1 In order to mitigate for the potential discovery of an archaeological or paleontological resource, the following state-mandated measure will be implemented during construction:

> *If buried archeological and/or paleontological resources, such as chipped or ground stone, historic debris, building foundations, human bone, or fossils, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City and all other appropriate agencies.*

Timing/Implementation: *Throughout project construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.5.2 In order to mitigate for the potential discovery or disturbance of archaeological resources or paleontological resources, a monitor will be present on-site during excavation.

Timing/Implementation: *During excavation*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant With Mitigation Incorporated. Based on the small scale of the proposed project, it is not anticipated that any human remains would be discovered during construction activities. It is reported in a study of the site that any potential undiscovered cultural resources within the site adjacent west of the proposed project would likely be present at a depth of 6 to 8 feet beneath the surface (GANDA 2012). Sidewalk excavation for the proposed project is not expected to excavate to a depth of 6 to 8 feet, and sidewalk construction would occur outside of the cultural resources site boundary. However, because of the potential to discover or disturb human remains during any ground-disturbing activity, mitigation measures **MM 3.5.2** and **MM 3.5.3** will be incorporated to reduce any potential impact to less than significant.

Mitigation Measures

MM 3.5.3 In order to mitigate for the potential discovery or disturbance of any human remains, the protocol of California Health and Safety Code Section 7050.5(b) will be adhered to as follows:

> *In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.*

If the remains are determined to be Native American, City policy would dictate that the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *Throughout project construction*

Enforcement: *City of Rancho Cordova Planning Department*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.6. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Regional Geology

Rancho Cordova is located within the Great Valley geomorphic province, which is primarily described as a relatively flat alluvial plain, about 50 miles wide and 450 miles long, with thick sequences of sedimentary deposits of Jurassic through Holocene age (City of Rancho Cordova 2006b). The Great Valley geomorphic province is surrounded by mountain ranges, with the Klamath and Cascade mountain ranges to the north, the Sierra Nevada to the east, and the California Coast Range to the west.

Topography

The project site is located within the Sacramento Valley, which is primarily flat to gently rolling land with no hills or valleys. The site is located in an area of relatively level terrain with slopes

between 0 percent and 2 percent. Within the Rancho Cordova Planning Area, slopes range from 0 percent to 8 percent. The ground surface in the project area generally ranges from elevations of approximately 95 to 105 feet above main sea level (USGS 2013).

Faults and Seismicity

No known active faults or Alquist-Priolo earthquake hazard zones occur in Rancho Cordova or Sacramento County (CGS 2013). According to the Fault Activity Map of California, the nearest faults to the city with activity within the last 200 years are the Concord, Hayward, and Cleveland Hill faults. The closest known fault zone is the Willows Fault Zone, located northwest of the city. The closest known active subsurface fault is the Dunnigan Hills fault, located in northern Yolo County, to the northwest of the city (CGS 2002).

Soils

According to soil data available for the City of Rancho Cordova, provided by the Natural Resources Conservation Service (2013), the predominant soils within the proposed project site consist of Xerorthents, which are known to be excessively and somewhat excessively drained soils. The soils beneath the project site and surrounding area are largely composed of dredge tailings of the urban land complex.

DISCUSSION OF IMPACTS

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:*

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact. No known active faults or Alquist-Priolo earthquake hazard zones occur in the vicinity of the proposed project. Thus, the project would have no impact in regard to fault rupture hazards.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Although the project area is not located within an Alquist-Priolo earthquake hazard zone, major seismic events occurring in adjacent areas, especially the San Francisco Bay Area, could cause the project site to experience ground-shaking activity. The proposed project will not result in the development of habitable structures or other development that would typically cause an increase in population that could be adversely affected by seismic ground shaking. Rather, the proposed project would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. The sidewalk improvements would be designed in accordance with requirements of the Uniform Building Code and the City of Rancho Cordova Improvement Standards (2006) and Standard Construction Specifications (2008). As a result, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill. The proposed project is located on Xerorthents soils, which are excessively to somewhat excessively drained. Additionally, the depth to the groundwater table and aquifer system within the City Planning Area is generally found to be greater than

50 feet. The potential for liquefaction in the proposed project area is considered to be low, based on known soil, groundwater, and ground shaking conditions of the Rancho Cordova Planning Area (City of Rancho Cordova 2006b). No impact would occur.

iv) Landslides?

No Impact. The project site and the surrounding vicinity are relatively flat. The possibility of landslide is unlikely. No impact would occur.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact. Construction of the proposed project would involve constructing a segment of sidewalk on a relatively flat surface with slopes ranging from 0 percent to 2 percent. Construction activities associated with the proposed project may result in short-term wind-driven erosion of soils. The project would disturb less than 0.05 acres and would comply with the City's Land Grading and Erosion Control Ordinance (Title 16, Chapter 16.44 of the Municipal Code) that establishes procedures to minimize erosion and sedimentation during construction activities. The Regional Water Quality Control Board requires that a National Pollutant Discharge Elimination System (NPDES) construction activity permit be issued prior to construction. The permit requires that the City impose water quality and watershed protection measures for all development projects, including erosion control. With implementation of the City's Land Grading and Erosion Control Ordinance and the NPDES permit requirements, impacts associated with soil erosion would be considered less than significant.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Less Than Significant Impact. The proposed project involves the construction of a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. No habitable structures are proposed as part of the project. In addition, the project would be constructed in accordance with the requirements of the Uniform Building Code. The proposed project site located on a flat terrain with 0 percent to 2 percent slopes in an area not known to be susceptible to landslides, lateral spreading, subsidence, liquefaction, or collapse. For these reasons, the project would be considered to have a less than significant impact.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Less Than Significant Impact. According to soil data for the City of Rancho Cordova, provided by the Natural Resources Conservation Service (2013), the project site is underlain by Xerorthents soils and dredge tailings. These soil types are previously disturbed and consist of mixed soil material, which is typically not expansive. The proposed project consists of the construction of a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. No habitable structures are proposed as part of the project. The project would be designed in accordance with the requirements of the Uniform Building Code. Therefore, the proposed project would be considered to have a less than significant impact.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. Such facilities are not needed, as the project involves installing a segment of concrete sidewalk. Therefore, there would be no impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.7. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The earth's climate has been warming for the past century. It is believed that this warming trend is related to the release of certain gases into the atmosphere. Greenhouse gases (GHGs) include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons. GHGs absorb infrared energy that would otherwise escape from the earth. As the infrared energy is absorbed, the air surrounding the earth is heated. An overall warming trend has been recorded since the late nineteenth century, with the most rapid warming occurring over the past two decades.

Various human activities have been contributed to the increase of GHGs present in the atmosphere. There are uncertainties associated with the magnitude and timing of the consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy (CARB 2005). The *Greenhouse Gas Emissions Inventory for Sacramento County* (Sacramento County 2009) shows on-road transportation as the largest contributor to GHG emissions in Sacramento County, with Rancho Cordova contributing 4.0 percent of the GHG emissions, as a whole, within the county. Similar to Sacramento County, the primary source of GHG emissions for Rancho Cordova is also on-road transportation (Sacramento County 2009, p. 115).

REGULATORY SETTING

The State of California has been studying the impacts of climate change since 1988, when Assembly Bill (AB) 4420 was approved. This legislation directed the California Energy Commission (CEC), in consultation with CARB and other agencies, to study the implications of global warming on California's environment, economy, and water supply. The CEC was also directed to prepare and maintain the state's inventory of GHG emissions. AB 4420 directed the California Air Resources Board to adopt regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles. The CARB proposal implementing these regulations was approved in September 2004. Implementation of these regulations estimates GHG emissions from new California cars and light trucks to be reduced by approximately 22 percent by 2012 and approximately 30 percent by 2016 (CARB 2005). In 2006, California adopted AB 32, the Global Warming Solutions Act. AB 32 codifies the state's goal by requiring that the state's global warming emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on global warming emissions that has been phased in starting in 2012. In order to effectively implement the cap, AB 32 directs CARB to

develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels.

At the present time, there are no adopted or recommended thresholds of significance established by federal, state, or local agencies/jurisdictions for the evaluation of GHG emissions and resultant impacts attributable to proposed development projects. Preliminary guidance from the Office of Planning and Research (OPR) and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine if a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 CCR Section 1564.4(a)).

In its Final Statement of Reasons for Regulatory Action (FSOR) accompanying the CEQA Amendments, the California Natural Resources Agency (2009) explains that quantification of GHG emissions "is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools" and that "quantification will, in many cases, assist in the determination of significance." However, as explained in the FSOR, the revised Section 15064.4(b) assigns lead agencies the discretion to determine the methodology to quantify GHG emissions. The FSOR also notes that CEQA case law has long stated that "there is no iron-clad definition of 'significance.' Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can concerning a project's potential adverse impacts."

Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. Much of the science in this area is new and is evolving constantly. At the same time, neither the state nor local agencies are specialized in this area, nor are there currently any local, regional, or state thresholds for determining whether the proposed project would have a significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects within their jurisdiction.

As noted earlier, AB 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. AB 32 is the only legally mandated requirement for the reduction of greenhouse gases. As such, compliance with AB 32 is the adopted basis upon which the agency can base its significance threshold for evaluating the project's GHG impacts.

In April 2012, the San Luis Obispo County Air Pollution Control District (SLOAPCD) published its greenhouse gas threshold in its CEQA Handbook. If the proposed project would generate GHG emissions above the SLOAPCD threshold level of 1,150 metric tons of carbon dioxide equivalents (CO_2e) per year, it would be considered to contribute substantially to a cumulative impact and the impact would be considered significant. The SLOAPCD thresholds were chosen for use in this analysis based on the substantial evidence that such thresholds represent compliance with AB 32, which means that the environmental impact of the GHG emissions will normally not be

cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the State's ability to meet its goals of reduced statewide GHG emissions under AB 32.

DISCUSSION OF IMPACTS

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact. The proposed project would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Construction activities associated with the proposed project would result in short-term emissions of GHGs. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the proposed project is depicted in **Table 3.7-1**.

TABLE 3.7-1
PROJECT CONSTRUCTION GHG EMISSIONS – METRIC TONS PER YEAR

Construction Phase	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	CO_2e
Construction Total	61.00	0.02	0.00	62.00

*Source: Emissions modeled by PMC using the CalEEMod computer program. See **Appendix B** for modeling outputs.*

As shown, estimated GHG emissions resulting from construction of the proposed project would equal 62 metric tons of CO_2e per year, which is less than the GHG threshold of 1,150 metric tons of CO_2e per year. Therefore, the impact would be less than significant.

In terms of operation GHG emissions, the project would not include any new, permanent stationary or mobile sources of emissions and by its very nature, would not generate quantifiable GHG emissions. When complete, the project would not affect local motor vehicle traffic patterns nor will the project result in an increase in automobile trips to the area, as the sidewalk improvements provide additional pedestrian access. This impact is considered less than significant.

b) *Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. The City of Rancho Cordova is subject to compliance with AB 32, as discussed above. The proposed project would construct a segment of sidewalk on the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. This sidewalk improvement project, by its nature, would be consistent with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions as it would not encourage increased automobile transportation that emits greenhouse gases into the atmosphere. Rather, it supports walking as an alternative mode of transportation by improving pedestrian access. Furthermore, as identified under Issue a), proposed project-generated GHG emissions would not surpass GHG significance thresholds, which were prepared with the purpose of complying with the requirements of AB 32. Therefore, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed project site is located near the northeastern edge of Rancho Cordova city limits. The City of Rancho Cordova General Plan EIR (2006b) identifies the known hazardous material and waste sites to be outside of the project vicinity. The closest hazardous material or waste site to the project location is the Aerojet Groundwater Contamination Plume, located south of the project site (City of Rancho Cordova 2006a). The proposed project would not come in contact with the plume during construction or operation. Mather Airport is the nearest public use airport facility, located approximately 5 miles southwest of the proposed project. There are no private airstrips in the vicinity of the proposed project.

DISCUSSION OF IMPACTS

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. The proposed project would not include the routine transportation, use, or disposal of hazardous materials that could create a significant hazard to the public. Small amounts of hazardous materials (such as oil, fuel, and solvents) would be used during construction activities for minor equipment maintenance. All equipment fueling and major maintenance activities will be performed off-site. Any use of hazardous materials would be in compliance with all applicable local, state, and federal standards associated with the handling of hazardous materials. Therefore, this impact is considered less than significant.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. Once construction is finished, the proposed project would not create a significant hazard to the public or the environment. No refueling or major maintenance of construction equipment will be performed on location, and no heavy equipment or hazardous materials will be staged on-site. The use and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws, including California Occupational Health and Safety Administration (Cal/OSHA) requirements. These actions would minimize the potential and extent of any minor spill, and impacts would be less than significant.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

No Impact. Currently there are no existing or proposed daycare/preschools, elementary, middle, or high schools within one-quarter mile of the project area. IHS Christian School (located at 11111 Morgan River Court) is approximately one-half mile to the southeast of the proposed project, and Bryan College (located at 2317 Gold Meadow Way) is approximately one-third mile to the southwest of the proposed project. The proposed project would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard and would not emit or handle any hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact would occur.

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

No Impact. The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." An online search of the Cortese List (DTSC 2013) found no records within or adjacent to the proposed project site. Thus, no impact would occur.

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

No Impact. The nearest airport/airstrip to the project site is Mather Airport, located approximately 5 miles southwest of the proposed project site. Additionally, the proposed

project would not result in a safety hazard for people residing or working in the project area as it is not located within 2 miles of a public or public use airport or within an airport land use plan, nor does it include any structures or equipment anticipated to obstruct navigable airspace. For these reasons, there would be no impact.

f) *For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?*

No Impact. There are no private airstrips in the vicinity of the project. No impact would occur.

g) *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

No Impact. The proposed project would not impede or conflict with the objectives or policies of City emergency response plans and evacuation plans. No road closures or traffic detours would be required during project construction. During operation, the sidewalk improvement would have no impact on emergency access or evacuation. No impact would occur.

h) *Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Less Than Significant Impact. The project site is located in an urbanized area with occurrences of land designated as parks and open space. The two undeveloped parcels (APN 056-0023-016 and -017), adjacent to the west of the proposed project site, consist of open space, trees, grasses, and sparse vegetation, along with utility poles and overhead utility lines. Rancho Cordova is not located within a designated Fire Hazard Severity Zone (Cal Fire 2008). Furthermore, the proposed project consists of sidewalk improvements that will not result in new development which would induce population growth in the area, and emergency access will be maintained throughout construction. In the event of a fire, the Sacramento Metropolitan Fire District would provide fire and emergency services to the project area. Impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.9. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed project site is located within the boundaries of the Lower American River watershed (Sacramento River Watershed Program 2013). The Lower American River watershed is included in the American River subregion of the larger Sacramento River watershed. The Lower American River watershed is the smallest watershed of the American River subregion, located at the southern edge of the subregion. The proposed project site is relatively flat, in an area with 0 percent to 2 percent slopes, and covers an area of excessively and somewhat excessively drained soils. The highest elevation along the proposed project site is approximately 105 feet,

near the northern end of the project location. Elevation at the project site gradually declines approaching Gold Country Boulevard going south on Sunrise Boulevard (USGS 2013). Because development has occurred in the project vicinity, storm drains and associated stormwater infrastructure routing stormwater to stormwater drainage channels have been previously installed to accommodate runoff. One stormwater runoff drain is located along the portion of Sunrise Boulevard in which the proposed project would be constructed, and additional stormwater runoff drains exist north and south of the project site along Sunrise Boulevard.

Groundwater

According to the Hydrology Component of the Rancho Cordova General Plan EIR (2006b), the Sacramento Valley Groundwater Basin and the South American (or Central Area) Subbasin underlie the proposed project site.

Floodplain

The Rancho Cordova General Plan (2006a) 100-Year Floodplain Map shows the 100-year floodplain to be directly adjacent north of the proposed project and includes the most northern tip of the proposed project.

DISCUSSION OF IMPACTS

a) *Violate any water quality standards or waste discharge requirements?*

Less Than Significant Impact.

Construction Water Quality Impacts

The proposed project involves the construction of a segment of sidewalk (less than 0.05 acres) along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. The State Water Resources Control Board requires dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit 99-08-DWQ). Although the project itself involves less than 1 acre of soil disturbance, because it involves roadway improvements associated with ultimate buildout of the City of Rancho Cordova General Plan, it is considered part of a larger plan of development and must comply with the General Storm Water Permit. Effective July 1, 2010, all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation.

The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP should contain a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices (BMPs) the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program—a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of the best management practices.

In addition, measures would be included in the grading plans to minimize erosion potential and water quality degradation of the project area in accordance with Rancho Cordova Municipal Code Title 16, Chapter 16.44, Land Grading and Erosion Control. Chapter 16.44 establishes administrative procedures, minimum standards for review, and implementation and enforcement procedures for controlling erosion, sedimentation, disruption of existing drainage, and related environmental damage caused by land clearing activities, grading, filling, and land excavation. Additionally, the State has published a set of BMPs for both pre- and post-construction periods, which would be applied to the project. The City would identify the appropriate BMPs for the proposed project. Compliance with the provisions of the best management practices and with Municipal Code Chapter 16.44 would reduce impacts associated with water quality standards and discharge requirements to a less than significant level.

Operational Water Quality Impacts

The proposed project consists of sidewalk improvements along an existing street, which would replace a portion of an existing dirt pathway. Impervious surfaces would be slightly increased with the addition of the segment of concrete sidewalk; thus, the types, quantities, and timing of contaminant discharges in stormwater runoff would be slightly altered relative to existing conditions. The amount of contaminants discharged in stormwater drainage varies based on a variety of factors, including vehicle traffic, the pollutants on street surfaces, and the amount of rainfall. Development of the proposed project would be subject to the requirements of NPDES Stormwater Permit No. CAS617002, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. The NPDES permit requires a stormwater pollution prevention plan to be developed and implemented and the SWPPP to identify best management practices for construction and operation in project design for new development. Implementation of the City's NPDES permit would reduce water quality impacts to a less significant level.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less Than Significant Impact. The overall area disturbed by the project, including paving, is less than 0.05 acres. The segment of sidewalk would replace a portion of an existing dirt pathway, resulting in a slight increase in impervious surfaces. However, impacts to groundwater resources would be minimal, because the proposed project does not contain elements that add to or draw from groundwater supplies. Additionally, the project would not be constructed immediately above any pre-existing well, nor would areas known to contain wells be disturbed by project construction. Therefore impacts to groundwater supply would be less than significant.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Less Than Significant Impact. Activities related to the construction of the proposed project would result in replacement of a portion of an existing dirt pathway with a concrete

sidewalk. The project would be required to implement appropriate BMPs to prevent erosion and provide sedimentation control during construction. Once completed, the project would not impact drainage patterns or cause erosion or siltation. This impact is considered less than significant.

The project would also be subject to Chapter 16.44 of the City's Municipal Code, which establishes administrative procedures, minimum standards for review, and implementation and enforcement procedures for controlling erosion, sedimentation, disruption of existing drainage and related environmental damage caused by land clearing activities, grading, filling, and land excavation. Compliance with the provisions of the BMPs and with Municipal Code Chapter 16.44 would reduce impacts associated with erosion and siltation to a less than significant level.

d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

Less Than Significant Impact. The project would replace a portion of an existing dirt pathway with a segment of concrete sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Construction would result in minimal change to the existing drainage pattern. No streams or rivers would be altered by the project. The project would not result in on- or off-site flooding in the area. This impact is considered less than significant.

e) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant Impact. The project would cause a slight increase in the quantity of runoff generated as a result of the new segment of concrete sidewalk. The minor increase in impervious surface would not contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems in the vicinity of the project. This impact is considered less than significant.

f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. Refer to discussion of Issue a) of this subsection. The project, by virtue of its nature and scale, is not anticipated to substantially degrade water quality once completed and implementation of the City's NPDES permit occurs. This impact is considered less than significant.

g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. The project is limited to the construction of a segment of concrete sidewalk on the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Although the project site is within a 100-year floodplain, the project would not include any new development of housing. Therefore, no impact would occur.

h) *Place structures within a 100-year flood hazard area that would impede or redirect flood flows?*

Less Than Significant Impact. A small portion of the proposed project is located within a 100-year floodplain at the most northern part of the project site. However, the project would not include new development of structures within a 100-year flood hazard area that would impede or redirect flood flows in the event of a flood. This impact is considered less than significant.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?*

No Impact. The proposed project site is located outside the Sacramento Levee flood risk area and the Folsom Dam flood risk area. Therefore, In the event of a levee or dam failure, the project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam. No impact would occur.

j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. The proposed project area is not located near any ocean coast or seiche hazard areas and would not involve the development of residential or other sensitive land uses in or near these areas. Therefore, the project would not expose people to potential impacts involving seiche or tsunami. No potential for mudflows is anticipated. Therefore, no impact is anticipated with regard to inundation by seiche, tsunami, or mudflow.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.10. LAND USE AND PLANNING. Would the project:					
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The project site is located along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard in Rancho Cordova. Various land uses occur within the immediate and surrounding area of the proposed project, including recreational to the north and west, commercial mixed use to the north and east, office mixed use to the east, medium-density residential to the east, and low-density residential to the east and south. The area directly west of the proposed project is designated as parks and open space by Sacramento County. All work for the proposed project is within the existing City right-of-way except for an 840-square-foot strip of land existing on parcels APNs 056-0023-016 and –017 in Sacramento County's right-of-way. These two parcels, adjacent to the west of the proposed project site, consist of open space, trees, grasses, and sparse vegetation, along with utility poles and overhead utility lines. The region in which the proposed project is located is designated as parks and open space on the City of Rancho Cordova General Plan Land Use Map (2006a).

DISCUSSION OF IMPACTS

a) *Physically divide an established community?*

No Impact. The proposed project is located along the west side of existing Sunrise Boulevard and consists of constructing a segment of sidewalk between South Bridge Street and Gold Country Boulevard. The proposed sidewalk improvements are anticipated to improve local pedestrian access and circulation. Thus, there would be no impact in regard to physically dividing an established community.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant Impact. The proposed project would require the City's acquisition of a strip of land, 2 feet wide by 420 feet long, from the Sacramento County Department of Parks and Recreation on two parcels (APNs 056-0023-016 and -017). Surrounding the proposed project, recreational, mixed office use, mixed commercial use, and residential uses are found. The proposed project is consistent with local plans, policies, and regulations. Therefore, impacts would be considered less than significant.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. Currently, no habitat conservation plans or natural community conservation plans are in place in the project region or applicable to the project site. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.11. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Surface Mining and Reclamation Act of 1975 (SMARA) requires the State Geologist to inventory and classify selected mineral resources within California. Historically, minerals such as pumice, gold, construction aggregate, kaolin clay, and common clay have been extracted in the region. More recently, the Rancho Cordova Planning Area has seen mineral extraction for course gravel construction aggregates and clay. The two mining operations within city limits and the five mining operations within the larger Planning Area do not occur in the vicinity of the project site. In addition, none of the roadways in the vicinity of the project serve as routes for traffic involved in mineral extraction activities.

DISCUSSION OF IMPACTS

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less Than Significant Impact. The project site and surrounding area is designated as an MRZ-2 area, which includes areas that have a high likelihood for the presence of mineral deposits based on adequate information (City of Rancho Cordova 2006b). The proposed project involves the construction of a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. The immediate and surrounding area of the project is composed of developed, urban land with a smaller area of open space, not used for mineral extraction. Furthermore, based on the small scale and the nature of the project, it would not result in the use or extraction of any mineral or energy resources nor would it restrict access to known mineral resource areas. Impacts are considered less than significant.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. There are no active mining operations in the vicinity of the project site that would be adversely impacted by the project. Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.12. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, exposure of people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The project site is located near the northeastern edge of the city limits. This area is a mixture of parks, open space, and mixed-use urban lands. Motor vehicle traffic is the primary contributor to the existing noise environment near the project site. Transportation noise is produced within the project vicinity along Sunrise Boulevard. Noise-sensitive land uses in the immediate vicinity of the project include the residential developments on the east and west sides of Sunrise Boulevard.

DISCUSSION OF IMPACTS

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?*

Less Than Significant Impact. Noise associated with the proposed sidewalk improvements will be limited to the construction period. Construction noise typically occurs intermittently and varies depending on the nature of the construction activities. Noise generated by construction would result from the use of diesel-engine-driven construction equipment and other necessary construction equipment such as a backhoe, small roller, and pneumatic hand compactor. In accordance with the City's Noise Ordinance as specified in the Municipal Code (Title 6, Chapter 6.68, Section 6.68.090, Exemptions), no construction will occur prior to 6 AM or after 8 PM during weekdays (Monday through Friday), and no construction will occur prior to 7 AM or after 8 PM on Saturdays and Sundays.

During construction, noise from equipment will cause short-term localized increases in ambient noise levels. Typical construction noise from such equipment is in the 75–80 decibel range at a distance of 50 feet. The approximate distance to the nearest residences from the project activities is 100 feet. The actual noise levels at any particular location would depend on a variety of factors, including the type of construction equipment or activity involved, distance to the source of the noise, obstacles to noise that exist between the receptor and the source, time of day, and similar factors.

Construction of the proposed project will result in a temporary, periodic increase in ambient noise levels. However, the project's work hours will comply with the City's Noise Ordinance (Title 6, Chapter 6.68) and the City's Policy N.1.2 as identified in the Rancho Cordova General Plan (2006a). Because noise increases during construction will be temporary, intermittent, and limited to the permitted hours as specified in the City's Noise Ordinance and General Plan, impacts would be less than significant.

b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact. Construction activities associated with the proposed project will include construction of a segment of sidewalk in place of a portion of an existing dirt pathway along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Construction would be temporary and would occur between the hours permitted in the City's Municipal Code (between 6 AM and 8 PM Monday through Friday and between 7 AM and 8 PM on Saturdays and Sundays). No pile driving or other activities commonly associated with vibration would occur. Therefore, groundborne vibration and noise levels are considered less than significant.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

No Impact. The proposed project consists of a sidewalk improvement that would temporarily increase noise levels in the project vicinity, limited to the construction period of no more than 30 days. No permanent increase in ambient noise levels in the project vicinity would occur as a result of this project. No impact would occur.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact. During construction, temporary increases in ambient noise levels would occur in the vicinity of the project site. These increases would be intermittent and limited to daytime hours and therefore will result in less than significant impacts.

e) *For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, exposure of people residing or working in the project area to excessive noise levels?*

No Impact. The proposed project is not located within an airport land use plan or within 2 miles of a public airport. No impact would occur.

f) *For a project located within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels?*

No Impact. The proposed project is not located in the vicinity of a private airstrip. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.13. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Rancho Cordova is expected to experience significant population growth projected into the year 2030. The city began to develop at an increasing rate as a result of an increase of jobs in Sacramento County, and in 2003, Rancho Cordova became the 478th incorporated city in California. The Rancho Cordova General Plan (2006a) estimates a 105 percent increase in population to occur between 2010 and 2030, bringing the population to 183,362. The 2012 population is recorded as 66,093 persons. The 2010 Census states that there were 25,479 housing units in Rancho Cordova, and the City's General Plan projects there to be 69,986 housing units by 2030.

DISCUSSION OF IMPACTS

a) *Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

No Impact. The proposed project does not include the construction of new homes or businesses, nor does it include the extension or construction of new roadways which could potentially induce growth. Given that the project would involve constructing a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard, the project is not anticipated to induce growth above that which is planned from development in the area. No impact would occur.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. No residential structures would be displaced as a result of the proposed project as the project only consists of the construction of a segment of sidewalk along the west side of Sunrise Boulevard where no housing units exist. No impact would occur.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The proposed project would not involve the removal or relocation of any housing that would displace people or necessitate construction of any replacement housing. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Rancho Cordova receives general public safety and law enforcement services from the Rancho Cordova Police Department, contracted through the Sacramento County Sheriff's Department. Fire protection and emergency medical response services within the city are provided by the Sacramento Metropolitan Fire District. Three school districts within the Rancho Cordova Planning Area provide educational services: the Folsom Cordova Unified School District, the Elk Grove Unified School District, and the Sacramento City Unified School District. The San Juan Unified School District provides educational services to those populating the land outside the City Planning Area (City of Rancho Cordova 2006). Additionally, the City provides maintenance of public facilities, including those intended for bicycle and pedestrian uses.

DISCUSSION OF IMPACTS

a–e) *Fire protection, police protection, schools, parks, other public facilities?*

No Impact. The proposed project consists of sidewalk improvements with the construction of a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard; the project does not include new development for habitation nor does it include development of new businesses. Therefore, the proposed project would not induce population growth and furthermore, does not include any components that would result in an increased demand for fire protection, police protection, schools, parks, or other public services. Establishment of additional facilities to maintain acceptable service ratios for the public would not be necessary. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.15. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City's General Plan (2006a) contains goals and policies established to conserve existing national, state, and regional recreation areas, as well as encouragement for the development of additional recreational opportunities to meet the City's needs. The proposed project is located adjacent to the Lower Sunrise Recreational Area. The American River, located approximately a quarter of a mile north of the proposed project site, is also utilized as a recreational facility. The nearest public park to the project site is Sunriver Park, located about one-half mile to the southwest.

DISCUSSION OF IMPACTS

a, b) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*

No Impact. The proposed project is located adjacent to the Lower Sunrise Recreational Area and would construct a segment of sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard, and east of the Lower Sunrise Recreational Area. The installation of this segment of sidewalk would improve pedestrian access at this location. The project does not include a residential or commercial component that would increase demand for parks or recreation services or facilities. Therefore, there would be no need for additional facilities to maintain acceptable service ratios for parks and recreation services. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.16. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed project would construct a concrete sidewalk segment along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. These sidewalk improvements would be constructed as an extension of the existing sidewalk on Sunrise Boulevard that currently ends at the intersection of Sunrise Boulevard and Gold Country Boulevard. The project does not involve construction of new roadways or any improvements to existing roadways.

DISCUSSION OF IMPACTS

a) *Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of*

the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

No Impact. The project does not involve new roadway construction or significant physical alteration of an existing roadway. No changes in local motorized vehicle traffic patterns would occur as a result of constructing the proposed sidewalk. No traffic control plan or detours would be needed during construction. Therefore, no impact would occur with regard to existing traffic conditions.

b) *Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

No Impact. The proposed project does not involve new roadway construction or significant physical alteration of an existing roadway and would therefore have no impact on an established level of service standard. No impact would occur.

c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No Impact. Mather Airport is a public use airport facility located approximately 5 miles southwest of the proposed project site. Thus, the project would not result in a change in air traffic patterns as it involves the construction of a segment of sidewalk at a distance of approximately 5 miles northeast of the nearest airport facility. In addition, the project does not propose any structures that would impede a height limitation in close proximity to an airport. No impact would occur.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. The project would include the construction of a segment of sidewalk on the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. This would be an extension of the existing sidewalk on the west side of Sunrise Boulevard that currently stops at the intersection of Sunrise Boulevard and Gold Country Boulevard. The proposed project would be designed in accordance with the City's Building Code and standard specifications. No impact would occur with regard to hazards.

e) *Result in inadequate emergency access?*

No Impact. Construction activities for the proposed project would be off-street and are not expected to interfere with emergency access on local roadways. No impact would occur.

f) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

No Impact. The proposed project involves improving pedestrian access along Sunrise Boulevard and is consistent with adopted policies, plans, and programs supporting alternative transportation, including the Ranch Cordova General Plan and the Rancho Cordova Bicycle and Pedestrian Master Plans.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.17. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Water

Water services within the city limits are supplied by four water providers: Golden State Water Company (American State Water Company), California American Water, Sacramento County Water, and City of Folsom Water District. The proposed project is located in the district served by Golden State Water Company.

Wastewater Service

Wastewater services are provided by the Sacramento Regional County Sanitation District (SRCSD) in the urbanized portions of Sacramento County, such as in Rancho Cordova. The SRCSD is a publicly owned wastewater agency serving over one million people in the major Sacramento metropolitan area through its three contributing agencies: the City of Folsom, the City of Sacramento, and Sacramento County Sanitation District 1 (CSD-1). Service for the proposed project area falls under CSD-1.

Solid Waste Service

Solid waste collection and service in the city is under the jurisdiction of the Sacramento County Public Works Agency, Waste Management and Recycling. Residential solid waste services are provided by Republic Services Incorporated. Solid waste within the city limits is typically delivered to Sacramento County's Kiefer Landfill, located at the intersection of Grant Line Road and Kiefer Boulevard. The Kiefer Landfill is the primary municipal solid waste disposal facility in Sacramento County. It is the only landfill facility in Sacramento County permitted to accept household waste from the public. Waste is accepted from the general public, businesses, and private waste haulers.

At present, the landfill, which comprises approximately 1,084 acres, is the only landfill within Sacramento County's jurisdiction that is permitted to accept solid waste for disposal. The Kiefer Landfill is classified as a major landfill, which is defined as a facility that receives more than 50,000 tons of solid waste per year. Currently, the landfill is operating below permitted capacity and will have capacity for the next 30 to 40 years based on current disposal rates.

Electrical, Telephone, and Natural Gas Services

The Sacramento Municipal Utilities District (SMUD) provides electricity service within the Rancho Cordova city limits. Pacific Gas and Electric Company (PG&E) also provides electricity service in the city as well as natural gas service to customers within the city limits. Telephone services in the city are provided by AT&T and SureWest.

DISCUSSION OF IMPACTS

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact. The proposed project consists of sidewalk improvements and does not include any uses that would generate wastewater. Furthermore, the project does not include any components that would result in an increased demand for wastewater treatment. Therefore, the proposed project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. No impact would occur.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The proposed project consists of sidewalk improvements and does not include new development for habitation or new businesses. Thus, population growth would not result from the proposed project that would require or result in the construction, or expansion, of new water or wastewater treatment facilities. No impact would occur.

c) *Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. Minor changes in impervious surfaces would occur as a result of constructing the sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. The proposed project is not anticipated to generate runoff beyond existing storm drainage capacity. No impact would occur.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

No Impact. No increase in demand for water would occur as a result of the proposed project. There may be a temporary need for water during construction to control dust. However, no increase in demand for long-term water supply would be generated. No impact would occur.

e) *Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?*

No Impact. The proposed sidewalk construction does not include any uses that would generate wastewater. Therefore, the proposed project would not affect the capacity of the local wastewater treatment provider. No impact would occur.

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

No Impact. Solid waste generated during demolition would be transported off-site for disposal at a location to be determined by the City's construction contractor. The most likely disposal site would be the Kiefer Landfill that is currently operating below permitted capacity and will have capacity for the next 30 to 40 years based on current disposal rates. Therefore, no impact would occur.

g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

No Impact. The proposed project does not include any components that would result in an increased demand for solid waste disposal and would be in compliance with federal, state, and local statutes and regulations related to solid waste. No impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3.18. MANDATORY 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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION OF IMPACTS

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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant With Mitigation Incorporated. Habitat present on and adjacent to the proposed project does not provide suitable habitat for the majority of the special-status species identified. However, the project does have the potential to impact the valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*) and Cooper's hawk (*Accipiter cooperi*), as well as migratory birds and raptors. With implementation of mitigation measures **MM 3.4.1** through **MM 3.4.8** (included in subsection 3.4 of this IS/MND), impacts would be reduced to a less than significant level. The potential for discovery of or disturbance of historical, archaeological, or paleontological resources, or human remains is not anticipated. However, implementation of mitigation measures **MM 3.5.1** through **MM 3.5.3** (included in subsection 3.5 of this IS/MND) would reduce impacts to a less than significant level. Impacts are considered less than significant with mitigation incorporated.

b) *Does the project have impacts that are individually limited, but cumulatively considerable?*

Less Than Significant. CEQA Guidelines Section 15064(i) states that a lead agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the

cumulative effects of a project must therefore be conducted in connection with the effects of past projects, other current projects, and probable future projects.

The purpose of the proposed project is to install a segment of concrete sidewalk along the west side of Sunrise Boulevard between South Bridge Street and Gold Country Boulevard. Because the project improves pedestrian access along an existing roadway, involves minimal right-of-way acquisition, and is consistent with the goals and policies of the City of Rancho Cordova General Plan, it would make no significant contribution to cumulatively adverse impacts associated with existing or proposed development projects in the Rancho Cordova area. Construction of the proposed project, along with other construction in the Rancho Cordova area, would contribute to cumulative environmental impacts. However, the proposed project's contribution would be minimal, and impacts are considered less than cumulatively considerable.

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

Less Than Significant. The proposed project would improve pedestrian access and movement along an existing roadway. The proposed project, in and of itself, will not create a significant hazard to the public or the environment. Construction of the proposed project will result in a temporary, periodic increase in ambient noise levels and greenhouse gas emissions. However, because noise and greenhouse gas emission increases during construction will be temporary, intermittent, and limited to daytime hours, this is considered a less than significant impact.

4.0 List of Mitigation Measures

4.1 SUMMARY OF MITIGATION MEASURES

BIOLOGICAL RESOURCES (SUBSECTION 3.4)

Special-Status Species

MM 3.4.1 **Limited operating period (March 1–June 30).** The City shall impose a limited operating period (LOP) for all elderberry shrubs to avoid construction or project-related disturbances to valley elderberry longhorn beetle. An LOP constitutes a period during which project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur. The LOP will be imposed within 20 feet of all elderberry shrubs during the VELB emergence period (March 1–June 30).

Timing/Implementation: *March 1 through June 30*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.2 **Establish a 20-foot-wide buffer (minimum) around all elderberry shrubs where feasible.** Before any ground-disturbing activity, the City will ensure that a temporary plastic mesh–type construction fence (Tensor Polygrid or equivalent), a minimum of 4 feet tall, is installed at least 20 feet from the driplines of elderberry shrubs that will be retained and adjacent to the project area. The fencing requirement is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing will be determined by a qualified biologist, with the goal of protecting habitat for VELB. The fencing will be strung tightly on posts set at a maximum interval of 10 feet. The fencing will be installed in a way that prevents equipment from enlarging the work area beyond the delineated area. The fencing will be checked and maintained weekly until all construction is completed. This buffer zone will be marked by signs stating, "This is habitat of the valley elderberry longhorn beetle, a threatened species, and it must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." Signs will be placed at intervals of 50 feet and must be readable at a distance of 20 feet. No construction activity, including grading, will be allowed until this condition is satisfied. No grading, clearing, storing of equipment or machinery, or other disturbance or activity may occur until a City representative has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition will be shown on the construction plans.

Timing/Implementation: *Prior to construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.3 **Biological monitoring and worker environmental awareness training.** A qualified biologist(s) shall monitor construction activities that could potentially cause significant impacts to sensitive biological resources. In addition, the City shall retain a qualified biologist to conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the identified

location(s) of sensitive biological resources, including how to identify species with the potential to occur in the construction area, the need to avoid impacts to biological resources (e.g., plants, wildlife, and jurisdictional waters), and to brief them on the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor will ensure that they receive the mandatory training before starting work.

Timing/Implementation: *Prior to and ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.4 **Dust control measures.** The City will ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include applying water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants (*Linepithema humile*), water will not be sprayed within the driplines of elderberry shrubs at any time.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.5 No insecticides, herbicides, fertilizers, or other chemicals will be applied during construction.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.6 **Trash removal.** During project construction activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

Timing/Implementation: *Ongoing during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning*

Migratory Birds and Raptors

MM 3.4.7 **Migratory Bird Surveys.** If clearing and/or construction activities will occur during the migratory bird nesting season (April 15–August 15), preconstruction surveys for nesting migratory birds shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.

If active nest(s) are identified during the preconstruction survey, a qualified biologist shall monitor the nest to determine when the young have fledged.

Monthly monitoring reports, documenting nest status, will be submitted to the City Public Works Department until the nest is deemed inactive. The biological monitor shall have the authority to cease construction if there is any sign of distress to a raptor or migratory bird. Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications.

Timing/Implementation: *Prior to and during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.4.8 **Raptor surveys.** If construction activities will occur during nesting season for raptors (January 15–August 15), all suitable raptor nesting habitat within 0.5 miles of the impacted area shall be surveyed for active raptor nests within 14 days of construction commencement. If an active raptor nest is located within 0.5 miles of the construction site, a no-activity buffer will be erected around the nest while it is active to protect the nesting raptors. This buffer distance may be amended to account for nests that are not within the line of sight of the construction activity. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season.

Timing/Implementation: *Prior to and during construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

Cultural Resources (Subsection 3.5)

MM 3.5.1 In order to mitigate for the potential discovery of an archaeological or paleontological resource, the following state-mandated measure will be implemented during construction:

If buried archeological and/or paleontological resources, such as chipped or ground stone, historic debris, building foundations, human bone, or fossils, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City and all other appropriate agencies.

Timing/Implementation: *Throughout project construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.5.2 In order to mitigate for the potential discovery or disturbance of archaeological resources or paleontological resources, a monitor will be present on-site during excavation.

Timing/Implementation: *During excavation*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

MM 3.5.3 In order to mitigate for the potential discovery or disturbance of any human remains, the protocol of California Health and Safety Code Section 7050.5(b) will be adhered to as follows:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

If the remains are determined to be Native American, City policy would dictate that the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *Throughout project construction*

Enforcement/Monitoring: *City of Rancho Cordova Planning Department*

5.0 List of Preparers

5.1 LIST OF PREPARERS

CITY OF RANCHO CORDOVA PUBLIC WORKS DEPARTMENT

Britton Snipes	Project Engineer
Bret Sampson	Environmental Planner

CITY OF RANCHO CORDOVA PLANNING DEPARTMENT, AS PROVIDED BY PMC

Kelly Jackson	Project Manager
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6.0 REFERENCES

6.1 REFERENCES

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APPENDICES

APPENDIX A – BIOLOGICAL RESOURCES MEMORANDUM AND SPECIAL STATUS SPECIES DATABASE SEARCH

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	Habitat Present/ Absent	Rationale
Plants							
Downingia pusilla	dwarf downingia	-	-	2.2	Mesic valley and foothill grasslands, and vernal pools. Elev: 3.3-1,468.5 ft. Blooms: March-May (CNPS 2013).	A	**No effect**. Suitable habitat not present.
Gratiola heterosepala	Boggs Lake hedge-hyssop	-	SE	1B.2	Clay soils in marshes, swamps, lake margins and vernal pools. Elev: 33-7,837.5 ft. Blooms: April-August (CNPS 2013).	A	
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	-	-	1B.2	Mesic valley and foothill grasslands. Elev: 99-755.7 ft. Blooms: Mar-May (CNPS 2013).	A	
Legenere limosa	legenere	-	-	1B.1	Vernal pools. Elev: 3.3-2,904 ft. Blooms: April-June (CNPS 2013).	A	
Navarretia myersii ssp. *myersii*	pincushion navarretia	-	-	1B.1	Vernal pools, often acidic. Elev: 66-1,089 ft. Blooms: Apr-May (CNPS 2013).	A	
Orcuttia tenuis	slender Orcutt grass	FT	SE	1B.1	Vernal pools, often gravelly. Elev: 115.5-5,808 ft. Blooms: May-Oct (CNPS 2013).	A	
Orcuttia viscida	Sacramento Orcutt grass	FE	SE	1B.1	Vernal pools. Elev: 99-330 ft. Blooms: Apr-Sep (CNPS 2013).	A	
Sagittaria sanfordii	Sanford's arrowhead	-	-	1B.2	Assorted shallow freshwater marshes and swamps. Blooms: May-October (CNPS 2013).	A	

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Invertebrates							
Branchinecta conservatio	Conservation fairy shrimp	FE			Found in various types of vernal pools (USFWS 2005).	A	**No effect.** Suitable habitat not present.
Branchinecta lynchi	vernal pool fairy shrimp	FT	-		Found only in vernal pools and vernal pool-like habitats. Distributed throughout the Central Valley, including Sacramento County (USFWS 2005).	A	**No effect.** Suitable habitat not present.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	-		Dependent on hostplant, elderberry (*Sambucus spp* .), which generally grows in riparian woodlands and upland habitats of the Central Valley. Current beetle distribution in Central Valley ranges from Shasta County to Fresno County (USFWS 1999).	P	**May affect.** Three elderberry shrubs occur within 100 feet of the project footprint.
Lepidurus packardi	vernal pool tadpole shrimp	FE	-		Wide variety of ephemeral wetland habitats (vernal pools). Distributed throughout Central Valley and San Francisco bay Area (USFWS 2005).	A	**No effect**. Suitable habitat not present.

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Fish							
Hypomesus transpacificus	delta smelt	FT	SE		Distribution includes the Sacramento River below Isleton, San Joaquin River below Mossdale, and Suisun Bay. Spawning areas include the Sacramento River below Sacramento, Mokelumne River system, Cache Slough, the delta, and Montezuma Slough (USFWS 1996).	A	**No effect.** Suitable/critical habitat not present.
Oncorhynchus mykiss	Central Valley steelhead	FT	-		Currently found in the upper Sacramento River and its tributaries, including Antelope, Deer, and Mill creeks and the Yuba River. May exist in Big Chico and	A	
Oncorhynchus tshawytscha	Central Valley spring-run chinook salmon	FT	ST		Currently found in the Sacramento-San Joaquin River Delta, the Sacramento River and its tributaries, including American, Yuba and Feather rivers, and Mill, Deer and Butte Creeks. (NMFS 2009).	A	
Oncorhynchus tshawytscha	Sacramento River winter-run chinook salmon	FE	SE		Sacramento River and its larger tributaries, including American, Yuba and Feather rivers. Also found in San Joaquin rivers. Requires stream reaches with	A	

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Amphibians							
Ambystoma californiense	California tiger salamander, central population	FT	ST		Occurs in grasslands of the Central Valley and oak savannah communities in the Central valley, the Sierra Nevada and Coast ranges, and the San Francisco Bay area. Needs seasonal or semi-permanent wetlands to	A	**No effect.** No recorded occurrences within five miles of the project site (CDFW 2013a). Outside species range.
Rana draytonii	California red-legged frog	FT	SSC		Occurs in various aquatic, riparian and upland habitats. They need aquatic habitats to breed, whether they be natural or artificial, such as stock ponds. In summer, they move to habitat that provides cover (USFWS 2002).	A	**No effect.** No recorded occurrences within five miles of the project site (CDFW 2013a). Outside species range.
Spea hammondii	western spadefoot	-	SSC		Ranges throughout Central Valley and adjacent foothills. Primarily in grasslands, sometimes in valley-foothill hardwood woodlands, and able to persist in orchards/vineyards. Grasslands with shallow temporary pools are optimal habitats for the western spadefoot. Require shallow, temporary pools for breeding (CDFWb 2013).	A	**No effect.** Suitable breeding habitat not present.
Reptiles							
Emys marmorata	western pond turtle	-	SSC		Found in a wide variety of habitats throughout California, but associated with permanent ponds, lakes, streams, irrigation ditches, and permanent pools along intermittant	A	**No effect.** Suitable habitat not present. Nearby Buffalo Creek not a permanent water source.

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Thamnophis gigas	giant garter snake	FT	ST		Valley floor wetlands, marshes, sloughs, ponds, small lakes, streams and agricultural wetlands. Ranges in the Central Valley from Butte County to Buena Vista Lake in Kern County (USFWS 2012).	A	**No effect**. No recorded occurrences within five miles of the project site (CDFW 2013a). Nearby Buffalo Creek lacks emergent vegetation required for snake foraging and cover. Suitable habitat is not present.
Birds							
Accipiter cooperii	Cooper's hawk	-	SSC		A breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mts., Owens Valley, and other local areas in southern California. Ranges from sea level to above 2700 m (0-9000 ft). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently (CDFW 2013b).	P	**May affect.** Suitable riparian habitat in the project vicinity.
Agelaius tricolor	tricolored blackbird	-	SSC		Nest in wetlands or in dense vegetation near open water (Hamilton 2004).	A	**No effect.** Suitable habitat not present.

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Athene cunicularia	burrowing owl	-	SSC	Open, flat expanses with short, sparse vegetation and few shrubs, level to gentle topography and well-drained soils. Requires underground burrows or cavities for nesting and roosting. Can use rock cavities, debris piles, pipes and culverts if burrows unavailable. Habitats include grassland, shrub steppe, desert, agricultural land, vacant lots and pastures (CDFW 2012).	A	**No effect.** Suitable habitat not present. Long, dense grass covers the property that borders the sidewalk.
Buteo swainsoni	Swainson's hawk	-	ST	Nests in stands with few trees in riparian areas, juniper-sage flats, and oak savannah in the Central Valley. Forages in adjacent grasslands, agricultural fields and pastures (CDFW 2013b).	A	**No effect.** Suitable habitat not present. No adjacent foraging habitat.
Elanus leucurus	white-tailed kite	-	FP	Occurs in herbaceous and open stages of valley lowland habitats, usually near agricultural land. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Makes a nest of loosely piled sticks and twigs and lined with grass, straw, or rootlets. Nest placed near top of dense oak, willow, or other tree stand. Nest located near open foraging area (CDFW 2013b).	P	**No effect.** Suitable habitat not present. No adjacent foraging habitat.

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Riparia riparia	bank swallow	-	ST		Riparian areas with sandy, vertical bluffs or riverbanks. Also nest in earthern banks and bluffs, as well as sand and gravel pits (CDFW 1992).	A	**No effect**. Suitable habitat not present.

Table 3.4-1: SENSITIVE HABITAT AND PLANT AND WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE STUDY AREA

Key
Federal & State Status
(FE) Federal Endangered
(FT) Federal Threatened
(FC) Federal Candidate
(FD) Federally Delisted
(SE) State Endangered
(ST) State Threatened
(SSC) State Species of Special Concern
(FP) Fully Protected
CNPS Rare Plant Rank
Rareness Ranks
(1A) Presumed Extinct in California
(1B) Rare, Threatened, or Endangered in California and Elsewhere
(2) Rare, Threatened, or Endangered in California, But More Common Elsewhere
(3) More Species Information Needed
(4) Limited Distribution
Threat Ranks
(0.1) Seriously threatened in California
(0.2) Fairly threatened in California
(0.3) Not very threatened in California

These buttons will not appear on your list.

Revise Selection

Print this page

Print species list before going on to letter.

Make Official Letter

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 130808112710

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

- Branchinecta conservatio
  - Conservancy fairy shrimp (E)

- Branchinecta lynchi
  - Critical habitat, vernal pool fairy shrimp (X)
  - vernal pool fairy shrimp (T)

- Desmocerus californicus dimorphus
  - Critical habitat, valley elderberry longhorn beetle (X)
  - valley elderberry longhorn beetle (T)

- Lepidurus packardi
  - Critical habitat, vernal pool tadpole shrimp (X)
  - vernal pool tadpole shrimp (E)

Fish

- Hypomesus transpacificus
  - delta smelt (T)

- Oncorhynchus mykiss
  - Central Valley steelhead (T) (NMFS)

- Critical habitat, Central Valley steelhead (X) (NMFS)

- Oncorhynchus tshawytscha
  - Central Valley spring-run chinook salmon (T) (NMFS)
  - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
  - California tiger salamander, central population (T)

- Rana draytonii
  - California red-legged frog (T)

Reptiles

- Thamnophis gigas
  - giant garter snake (T)

Plants

- Orcuttia tenuis
  - Critical habitat, slender Orcutt grass (X)
  - slender Orcutt grass (T)

- Orcuttia viscida
  - Critical habitat, Sacramento Orcutt grass (X)
  - Sacramento Orcutt grass (E)

Quads Containing Listed, Proposed or Candidate Species:

FOLSOM (511B)

BUFFALO CREEK (511C)

CITRUS HEIGHTS (512A)

CARMICHAEL (512D)

County Lists

Sacramento County

Listed Species

Invertebrates

- Apodemia mormo langei
  - Lange's metalmark butterfly (E)

- Branchinecta conservatio

- Conservancy fairy shrimp (E)

- Branchinecta lynchi
  - Critical habitat, vernal pool fairy shrimp (X)
  - vernal pool fairy shrimp (T)

- Desmocerus californicus dimorphus
  - Critical habitat, valley elderberry longhorn beetle (X)
  - valley elderberry longhorn beetle (T)

- Elaphrus viridis
  - delta green ground beetle (T)

- Lepidurus packardi
  - Critical habitat, vernal pool tadpole shrimp (X)
  - vernal pool tadpole shrimp (E)

Fish

- Acipenser medirostris
  - green sturgeon (T) (NMFS)

- Hypomesus transpacificus
  - Critical habitat, delta smelt (X)
  - delta smelt (T)

- Oncorhynchus mykiss
  - Central Valley steelhead (T) (NMFS)
  - Critical habitat, Central Valley steelhead (X) (NMFS)

- Oncorhynchus tshawytscha
  - Central Valley spring-run chinook salmon (T) (NMFS)
  - Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
  - Critical habitat, winter-run chinook salmon (X) (NMFS)
  - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
  - California tiger salamander, central population (T)
  - Critical habitat, CA tiger salamander, central population (X)

- Rana draytonii

- California red-legged frog (T)

Reptiles

- Thamnophis gigas
  - giant garter snake (T)

Birds

- Charadrius alexandrinus nivosus
  - western snowy plover (T)

- Rallus longirostris obsoletus
  - California clapper rail (E)

- Sternula antillarum (=Sterna, =albifrons) browni
  - California least tern (E)

- Vireo bellii pusillus
  - Least Bell's vireo (E)

Mammals

- Reithrodontomys raviventris
  - salt marsh harvest mouse (E)

- Sylvilagus bachmani riparius
  - riparian brush rabbit (E)

- Vulpes macrotis mutica
  - San Joaquin kit fox (E)

Plants

- Arctostaphylos myrtifolia
  - Ione manzanita (T)

- Calystegia stebbinsii
  - Stebbins's morning-glory (E)

- Castilleja campestris ssp. succulenta
  - Critical habitat, succulent (=fleshy) owl's-clover (X)

- succulent (=fleshy) owl's-clover (T)

- Ceanothus roderickii
  - Pine Hill ceanothus (E)

- Cordylanthus mollis ssp. mollis
  - soft bird's-beak (E)

- Cordylanthus palmatus
  - palmate-bracted bird's-beak (E)

- Eriogonum apricum var. apricum
  - Ione buckwheat (E)

- Eriogonum apricum var. prostratum
  - Irish Hill buckwheat (E)

- Erysimum capitatum ssp. angustatum
  - Contra Costa wallflower (E)
  - Critical Habitat, Contra Costa wallflower (X)

- Fremontodendron californicum ssp. decumbens
  - Pine Hill flannelbush (E)

- Galium californicum ssp. sierrae
  - El Dorado bedstraw (E)

- Lasthenia conjugens
  - Contra Costa goldfields (E)

- Neostapfia colusana
  - Colusa grass (T)

- Oenothera deltoides ssp. howellii
  - Antioch Dunes evening-primrose (E)
  - Critical habitat, Antioch Dunes evening-primrose (X)

- Orcuttia tenuis
  - Critical habitat, slender Orcutt grass (X)
  - slender Orcutt grass (T)

- Orcuttia viscida
  - Critical habitat, Sacramento Orcutt grass (X)
  - Sacramento Orcutt grass (E)

- Senecio layneae
  - Layne's butterweed (=ragwort) (T)

- Sidalcea keckii
  - Keck's checker-mallow (=checkerbloom) (E)

Candidate Species

Birds

- Coccyzus americanus occidentalis
  - Western yellow-billed cuckoo (C)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.
See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
- Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 06, 2013.

CNDDB Results
August 8, 2013

1mi					
Occurrence Count	**Scientific Name**	**Common Name**	**Federal Listing**	**State Listing**	**Rare Plant Rank**
1	Andrena subapasta	vernal pool andrenid bee	None	None	
1	Ardea herodias	great blue heron	None	None	
1	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	
2	Elanus leucurus	white-tailed kite	None	None	
1	Riparia riparia	bank swallow	None	Threatened	

5mi					
Occurrence Count	**Scientific Name**	**Common Name**	**Federal Listing**	**State Listing**	**Rare Plant Rank**
3	Accipiter cooperii	Cooper's hawk	None	None	
3	Agelaius tricolor	tricolored blackbird	None	None	
1	Andrena subapasta	vernal pool andrenid bee	None	None	
2	Ardea alba	great egret	None	None	
3	Ardea herodias	great blue heron	None	None	
3	Athene cunicularia	burrowing owl	None	None	
4	Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	
2	Buteo swainsoni	Swainson's hawk	None	Threatened	
1	Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	None	None	4.2
3	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	
1	Downingia pusilla	dwarf downingia	None	None	2.2
1	Dumontia oregonensis	hairy water flea	None	None	
9	Elanus leucurus	white-tailed kite	None	None	
5	Emys marmorata	western pond turtle	None	None	
1	Falco columbarius	merlin	None	None	
1	Fritillaria agrestis	stinkbells	None	None	4.2
1	Hydrochara rickseckeri	Ricksecker's water scavenger beetle	None	None	
2	Legenere limosa	legenere	None	None	1B.1
3	Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None	
9	Linderiella occidentalis	California linderiella	None	None	

CNDDB Results
August 8, 2013

Occurrence Count	Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank
1	Navarretia myersii ssp. myersii	pincushion navarretia	None	None	1B.1
2	Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	None	None	
4	Orcuttia viscida	Sacramento Orcutt grass	Endangered	Endangered	1B.1
1	Phalacrocorax auritus	double-crested cormorant	None	None	
3	Riparia riparia	bank swallow	None	Threatened	
2	Sagittaria sanfordii	Sanford's arrowhead	None	None	1B.2
2	Spea hammondii	western spadefoot	None	None	

Folsom, Buffalo Creek, Citrus Heights, and Carmichael USGS Quads

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	CESA	FESA	Elevation High (meters)	Elevation Low (meters)	CA Endemic
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	None	None	915	75	T
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	None	None	445	1	F
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	4.2	None	None	1555	10	T
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	CE	None	2375	10	F
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	None	None	229	30	T
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	None	None	880	1	T
Navarretia myersii ssp. myersii	pincushion navarretia	Polemoniaceae	annual herb	1B.1	None	None	330	20	T
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	1B.1	CE	FT	1760	35	T
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	1B.1	CE	FE	100	30	T
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	None	None	650	0	T

APPENDIX B - GHG EMISSIONS

Sunrise Boulevard Improvements

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	3.75	1000sqft	0.09	3,750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2014
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014											0.0000	61.3953	61.3953	0.0174	0.0000	61.7596
Total											**0.0000**	**61.3953**	**61.3953**	**0.0174**	**0.0000**	**61.7596**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014											0.0000	61.3247	61.3247	0.0173	0.0000	61.6886
Total											**0.0000**	**61.3247**	**61.3247**	**0.0173**	**0.0000**	**61.6886**

	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1149**	**0.1149**	**0.1153**	**0.0000**	**0.1149**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2014	1/15/2014	5	1	
2	Grading	Grading	1/16/2014	1/17/2014	5	2	
3	Building Construction	Building Construction	1/18/2014	6/6/2014	5	100	
4	Paving	Paving	6/7/2014	6/13/2014	5	5	
5	Architectural Coating	Architectural Coating	6/14/2014	6/20/2014	5	5	

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
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	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
Site Preparation	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	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	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4514	0.4514	1.3000e-004	0.0000	0.4542
Total											**0.0000**	**0.4514**	**0.4514**	**1.3000e-004**	**0.0000**	**0.4542**

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0176	0.0176	0.0000	0.0000	0.0177
Total											**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4509	0.4509	1.3000e-004	0.0000	0.4537
Total											**0.0000**	**0.4509**	**0.4509**	**1.3000e-004**	**0.0000**	**0.4537**

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

Acres of Grading: 0.5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0176	0.0176	0.0000	0.0000	0.0177
Total											**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0000**	**0.0177**

3.3 Grading - 2014

Unmitigated Construction On-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0952	1.0952	2.3000e-004	0.0000	1.1000
Total											**0.0000**	**1.0952**	**1.0952**	**2.3000e-004**	**0.0000**	**1.1000**

3.3 Grading - 2014

Unmitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0705	0.0705	0.0000	0.0000	0.0706
Total											**0.0000**	**0.0705**	**0.0705**	**0.0000**	**0.0000**	**0.0706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0939	1.0939	2.3000e-004	0.0000	1.0987
Total											**0.0000**	**1.0939**	**1.0939**	**2.3000e-004**	**0.0000**	**1.0987**

3.3 Grading - 2014

Mitigated Construction Off-Site

Acres of Grading: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0705	0.0705	0.0000	0.0000	0.0706
Total											**0.0000**	**0.0705**	**0.0705**	**0.0000**	**0.0000**	**0.0706**

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	54.6284	54.6284	0.0161	0.0000	54.9674
Total											**0.0000**	**54.6284**	**54.6284**	**0.0161**	**0.0000**	**54.9674**

3.4 Building Construction - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.9689	0.9689	1.0000e-005	0.0000	0.9691
Worker											0.0000	0.7054	0.7054	4.0000e-005	0.0000	0.7063
Total											**0.0000**	**1.6742**	**1.6742**	**5.0000e-005**	**0.0000**	**1.6753**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	54.5634	54.5634	0.0161	0.0000	54.9020
Total											**0.0000**	**54.5634**	**54.5634**	**0.0161**	**0.0000**	**54.9020**

3.4 Building Construction - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.9689	0.9689	1.0000e-005	0.0000	0.9691
Worker											0.0000	0.7054	0.7054	4.0000e-005	0.0000	0.7063
Total											**0.0000**	**1.6742**	**1.6742**	**5.0000e-005**	**0.0000**	**1.6753**

3.5 Paving - 2014

Unmitigated Construction On-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.5022	2.5022	6.7000e-004	0.0000	2.5164
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.5022**	**2.5022**	**6.7000e-004**	**0.0000**	**2.5164**

3.5 Paving - 2014

Unmitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3174	0.3174	2.0000e-005	0.0000	0.3178
Total											**0.0000**	**0.3174**	**0.3174**	**2.0000e-005**	**0.0000**	**0.3178**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4992	2.4992	6.7000e-004	0.0000	2.5134
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.4992**	**2.4992**	**6.7000e-004**	**0.0000**	**2.5134**

3.5 Paving - 2014

Mitigated Construction Off-Site

Acres of Paving: 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3174	0.3174	2.0000e-005	0.0000	0.3178
Total											**0.0000**	**0.3174**	**0.3174**	**2.0000e-005**	**0.0000**	**0.3178**

3.6 Architectural Coating - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	9.0000e-005	0.0000	0.6402
Total											**0.0000**	**0.6383**	**0.6383**	**9.0000e-005**	**0.0000**	**0.6402**

3.6 Architectural Coating - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6376	0.6376	9.0000e-005	0.0000	0.6395
Total											**0.0000**	**0.6376**	**0.6376**	**9.0000e-005**	**0.0000**	**0.6395**

3.6 Architectural Coating - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504217	0.068068	0.177511	0.150009	0.045572	0.006451	0.019525	0.014983	0.002306	0.002359	0.006212	0.000585	0.002203

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Unmitigated											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total											**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total											**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/ Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/ Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Vegetation