

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Foothills Business Park Bike Trail Project

July 2013

Lead Agency:



Public Works – Alternative Transportation
401 Vernon Street
Roseville, CA 95678
Contact: Michael Dour
(916) 746-1304

Prepared by:

ICF International
630 K Street, Suite 400
Sacramento, CA 95814

**NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED
FOOTHILLS BUSINESS PARK BIKE TRAIL PROJECT**

Public Notice is hereby given that an Initial Study/Mitigated Negative Declaration (IS/MND) (environmental report) is available for public review for the Foothills Business Park Bike Trail Project.

Project Description and Location: The City of Roseville (City) is proposing to construct a Class I bike trail to connect an existing bike trail to a trailhead parking area at the end of Foothills Boulevard. A "Class I" bike trail is for the exclusive use of bicycles and pedestrians with access allowed for emergency and maintenance vehicles. The proposed bike trail connection will be approximately 1,600 feet long and will run along an existing unpaved trail on the south side of Pleasant Grove Creek, within the Foothills Business Park Wetland Preserve and Conservation Area.

Document Review and Availability: The public comment period will extend July 19 to August 20, 2013. Copies of the IS/MND are available for public review at the City of Roseville Permit Center, 311 Vernon Street, Roseville, CA 95678 (8:00 A.M. to 5:00 P.M., Monday through Friday). The IS/MND can also be reviewed and/or downloaded from the City of Roseville website at the following link: http://www.roseville.ca.us/gov/community_development/edpn.asp.

During the public review period written comments on the IS/MND may be provided to:

Michael Dour
Alternative Transportation Analyst – Bikeways
Public Works – Alternative Transportation
City of Roseville
401 Vernon Street
Roseville, CA 95678
(916) 746-1304

mdour@roseville.ca.us

MITIGATED NEGATIVE DECLARATION

PROJECT TITLE: Foothills Business Park Bike Trail Project

PROJECT LOCATION: The proposed bike trail is located in the North Industrial Planning Area, approximately 3.5 miles northwest of downtown Roseville, Placer County, at the northern end of Foothills Boulevard (Figure 1).

DATE: July 19, 2013

PROJECT APPLICANT: City of Roseville, Public Works – Alternative Transportation Department

LEAD AGENCY: City of Roseville

CONTACT PERSON: Michael Dour, Alternative Transportation Analyst – Bikeways (916) 746-1304

PROJECT DESCRIPTION: The City of Roseville Public Works – Alternative Transportation Division (City) is proposing to construct a 1,600 foot long, Class I bike trail to connect an existing bike trail to a trailhead parking area at the northern end of Foothills Boulevard. The trail will be a paved, 14-foot-wide bicycle and pedestrian trail to run along the south side of Pleasant Grove Creek. The trail location will avoid the adjacent Pleasant Grove Creek and seasonal wetlands that occur in the Foothills Business Park Wetland Preserve and Conservation Area. The City is planning to install permanent fencing and interpretive signs in this area to prevent long-term degradation of the creek and wetlands and to educate the public on the environmental resources found in this area. The City anticipates receiving all the environmental clearances (including state and federal permits and authorizations) before the end of 2013. Trail construction is currently planned for summer of 2014 and is expected to take 40 days.

DECLARATION

The City of Roseville has determined that there is no substantial evidence that the above project, as mitigated, may have a significant effect on the environment and proposes that a Mitigated Negative Declaration be adopted. The determination is based on the attached initial study and the following findings:

- a) *The project will not degrade environmental quality, substantially reduce habitat, cause a wildlife population to drop below self-sustaining levels, reduce the number or restrict the range of special-status species, or eliminate important examples of California history or prehistory.*
- b) *The project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.*
- c) *The project will not have impacts that are individually limited, but cumulatively considerable.*
- d) *The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.*
- e) *No substantial evidence exists that the project will have a negative or adverse effect on the environment.*
- f) *The project incorporates all applicable mitigation measures identified in the initial study.*
- g) *This mitigated negative declaration reflects the independent judgment of the lead agency.*

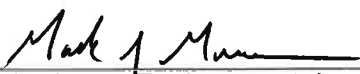
Written comments on the initial study and proposed Mitigated Negative Declaration shall be submitted no later than August 20, 2013.

Submit comments to:

Michael Dour, Alternative Transportation Analyst-
Bikeways
Public Works - Alternative Transportation
City of Roseville
401 Vernon Street
Roseville, CA 95678

Posting Period: July 19 to August 20, 2013

Initial Study approved by:



Mark Morse, Environmental
Coordinator

Initial Study/Mitigated Negative Declaration Foothills Business Park Bike Trail Project

Lead Agency:

City of Roseville
Public Works – Alternative Transportation
City of Roseville
401 Vernon Street
Roseville, CA 95678

Prepared by:

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July 2013

CONTENTS

1. Introduction.....	1
Initial Study Purpose.....	1
Review Process.....	1
2. Project Description	2
Project Location.....	2
Project Setting	2
Project Description	2
Parking Lot Improvements.....	3
Landscaping	3
Utility Coordination	3
Construction	3
Schedule.....	4
City of Roseville Mitigating Ordinances, Guidelines, and Standards.....	4
Environmental Commitments	5
Required Permits and Approvals.....	7
3. Initial Study Checklist	8
I. Aesthetics	10
II. Agriculture and Forest Resources	11
III. Air Quality	12
IV. Biological Resources	18
V. Cultural Resources	29
VI. Geology and Soils.....	33
VII. Greenhouse Gas Emissions	36
VIII. Hazards and Hazardous Materials.....	40
IX. Hydrology and Water Quality	43
X. Land Use and Planning	47
XI. Mineral Resources.....	49
XII. Noise.....	50
XIII. Population and Housing.....	53
XIV. Public Services	54
XV. Recreation	55
XVI. Transportation/Traffic.....	56
XVII. Utilities and Service Systems.....	58
XVIII. Mandatory Findings of Significance.....	60
4. Report Preparers.....	62
5. References	63
Printed References.....	63
Personal Communications.....	65

APPENDIX

- Appendix A Supporting Technical Documentation: Air Quality and Greenhouse Gas Emissions
- Appendix B Special-Status Species Identified During the Prefield Investigation as Occurring in the Project Region

FIGURES

Follows Page

Figure 1 Project Location 2
Figure 2 Foothills Business Park Bike Trail Alignment 2

TABLES

Page

Table 1 Construction Phases and Equipment 4
Table 2 Potential Federal, State, and Local Permits Required to Construct the Project 7
Table 3 Estimated Construction Emissions (Pounds Per Day) 14
Table 4 Estimated Operational Emissions (Pounds Per Day) 15
Table 5 Estimated Construction GHG Emissions (metric tons) 36
Table 6 Selection of Proposed or Adopted GHG CEQA Thresholds in California 38

ACRONYMS AND ABBREVIATIONS

AB 32	Assembly Bill 32
APE	Area of Potential Effects
ARB	California Air Resources Board's
Basin Plan	Water Quality Control Plan
BAU	business-as-usual
BMPs	best management practices
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	methane
City	City of Roseville
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CUPA	Certified Unified Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dbh	diameter at breast height
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
EIR	Environmental Impact Report
ESAs	Environmentally Sensitive Areas
Fire	Placer County Fire Hazard Severity Zone
GHG	greenhouse gases
HFCs	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
IS	initial study
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MT	metric tons
N ₂ O	nitrous oxide
NOA	Naturally occurring asbestos
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
OS	Open Space
Ozone Plan	Sacramento Regional 8-Hour Attainment and Reasonable Further Progress Plan
PCAPCD	Placer County Air Pollution Control District
PCFCWCD	Placer County Flood Control and Water Conservation District
PFCs	perfluorinated carbons
PM ₁₀	particulate matter less than or equal to 10 microns in diameter.
PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
PRC	Public Resources Code
proposed project	Foothills Business Park Bike Trail Project

RMC	Roseville Municipal Code
ROG	reactive organic gases
SF ₆	sulfur hexafluoride
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	sulfur dioxide
SP	service population
SVAB	Sacramento Valley Air Basin
SWMP	Stormwater Management Program
TAC	toxic air containment
Triennial Plan	Northern Sacramento Valley Planning Area 2009 Triennial Air Quality Attainment Plan
UAIC	United Auburn Indian Community of the Auburn Rancheria
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
VEE	visible emissions evaluations
VOCs	volatile organic compounds

1. INTRODUCTION

This project-level initial study/Mitigated Negative Declaration (IS/MND) has been prepared for the Foothills Business Park Bike Trail Project (proposed project) to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.) and State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). The City of Roseville (City) is the lead agency for this project under CEQA.

INITIAL STUDY PURPOSE

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An initial study is a public document used by the decision-making lead agency to determine whether a project may have a significant impact on the environment. If the agency finds that the proposed project may have a significant impact on the environment, but that these impacts will be reduced to a less-than-significant level through implementation of specific mitigation measures, a Mitigated Negative Declaration shall be prepared.

This IS/MND is a public information document that describes the proposed project, existing environmental setting at the project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project's compliance with CEQA and the State CEQA Guidelines.

REVIEW PROCESS

This IS/MND will be circulated for public and agency review as required by CEQA. Because state agencies will act as responsible or trustee agencies, the City will circulate the IS/MND to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a minimum 30-day review period.

During the review period, written comments may be submitted to:

Mr. Mike Dour,
Alternative Transportation Analyst – Bikeways

Public Works – Alternative Transportation
City of Roseville
401 Vernon Street
Roseville, CA 95678

2. PROJECT DESCRIPTION

This section provides an overview of the proposed project and contains the information used in Section 3 to analyze potential effects on environmental resources.

PROJECT LOCATION

The proposed bike trail would be located in the City of Roseville's North Industrial Planning Area, north of Blue Oaks Boulevard, east of Woodcreek Oaks Boulevard, and north of the end of Foothills Boulevard (Figure 1). The site is within an undeveloped open space area associated with the Foothills Business Park Wetland Preserve and Conservation Area. Figure 2 shows the project site and adjacent undeveloped open space and commercial areas that occur south and east of the project site.

PROJECT SETTING

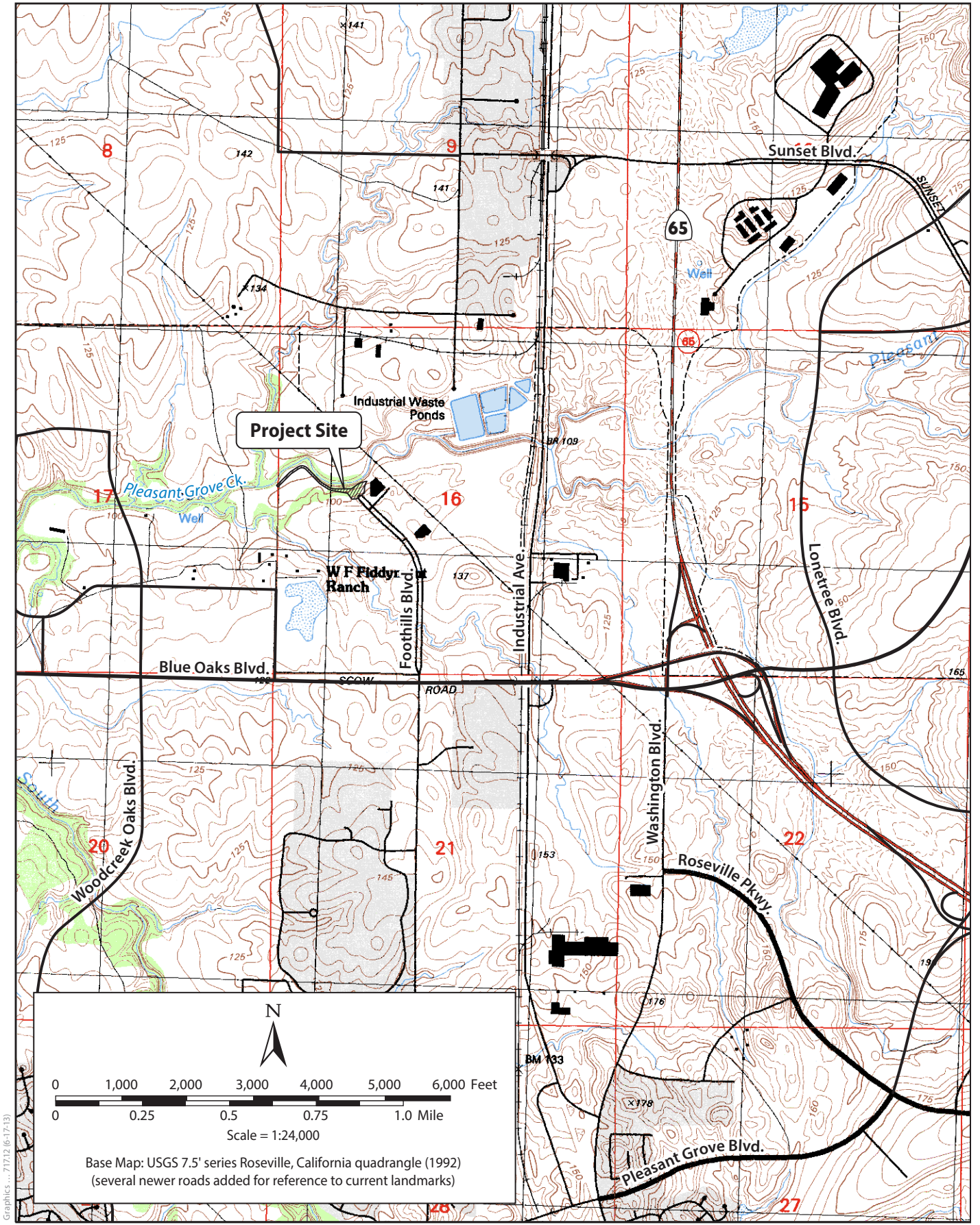
The project site is located within undeveloped open space that supports annual grasslands with seasonal wetlands, Pleasant Grove Creek and riparian habitat, and an intermittent stream with riparian habitat (as shown in Figure 2). The Foothills Business Park is located south and east of the project site, along Foothills Boulevard. Residential development occurs west of the project site, but not in the immediate project area.

PROJECT DESCRIPTION

The proposed project involves construction of 1,600 feet of paved, two-lane Class I bike trail and a parking area at the Foothill Boulevard trailhead (shown in Figure 2). The new paved trail will be 14 feet wide and will parallel the creek, but will be outside the creek channel and the associated riparian woodland habitat. The trail will be lined with a split rail, post and cable, or other permanent barrier fencing to limit casual access to the adjoining lands from the trail. The construction work area for the bike trail and parking lot is approximately 0.8 acre. The proposed Class I trail will be open to bicyclists and pedestrians. No motorized vehicles will be allowed except for fire and police emergency access and periodic open space maintenance activities.

The proposed project was included in the Foothills Business Park Annexation Environmental Impact Report (SCH #2000022007). The location and Class I status of the proposed trail are consistent with the City's 2008 Bicycle Master Plan, which is a component of the circulation element of its General Plan. No lighting will be provided for the proposed trail because, pursuant to the 2008 Bicycle Master Plan, the City has made a decision to preserve the natural feel of open spaces to the extent possible.

At the eastern end of the alignment, the trail will cross an unnamed intermittent stream that is a tributary of Pleasant Grove Creek (shown in Figure 2). A 36-inch diameter, 52-foot-long culvert will be placed into the stream to accommodate side slopes and create a suitable crossing for the proposed bike trail connection to Foothills Boulevard. Installation of the culvert will require



Graphics ... 71712 (6-17-13)



Figure 1
Project Location



Graphics ... 0071712 (6-18-2013)

Figure 2
Foothills Business Park Bike Trail Alignment

the placement of fill material into the stream and removal of woody riparian vegetation from the stream bank and floodplain.

For purposes of this analysis, the minimum project site consists of the footprint of the Class I bike trail and the adjoining construction area.

PARKING LOT IMPROVEMENTS

No parking lot improvements are proposed as part of bike trail project. On-street, parallel parking along Foothill Boulevard will be provided for trail users.

LANDSCAPING

No landscaping is proposed for the bike trail.

UTILITY COORDINATION

The proposed project would not require connection to existing water, storm drainage, and electric utilities located in adjoining streets. Currently, the City does not anticipate the need to relocate existing facilities and none conflict with proposed improvements.

CONSTRUCTION

Activities

Construction of the proposed project would require the removal of annual grassland vegetation along the trail and woody riparian vegetation at the culvert crossing (see “Biological Resources” discussion in Section 3). Following initial clearing, the site would be rough-graded, and any required drainage improvements would be installed. Finish grading and bike trail paving would occur after the foundation work is completed. Final stages of construction would include the installation of fencing, striping, and final cleanup.

As currently designed, the proposed project would avoid direct impacts on seasonal wetlands by constructing all project facilities outside of wetland boundaries and by constructing during the dry season (generally May 1 through October 15) when wetland features are dry.

Construction Access and Staging

Construction access to the project site will be from Foothills Boulevard at the eastern end and the existing bike trail at the western end of the trail alignment. Travel lane closures would not be required during construction. All staging (equipment and materials) would be located within the work area and at the Foothills Boulevard terminus (shown on Figure 2).

Construction Phases and Equipment

A list of the construction phases and equipment that may be used during the project is provided in Table 1. The equipment listed in this table was used in the air quality and greenhouse gas emissions evaluation provided in Section 3 of this IS.

Table 1 Construction Phases and Equipment

Phase	Equipment	Number per Day
Initial clearing	Excavator	1
	Backhoe	2
Rough-grading	Scraper	1
	Excavator	1
	Generator	1
	Backhoe	2
Drainage and utilities	Excavator	1
	Generator	1
	Backhoe	2
	Loader	1
Finish grading	Scraper	1
	Generator	1
	Backhoe	2
Paving	Paving Machine	1
	Steel Drum Roller	1
	Backhoe	2
Installation of fencing and other facilities	Skid Steer	1
	Generator	1
	Backhoe	2
Striping and final cleanup	Backhoe	1
	Generator	1

SCHEDULE

The City expects that construction of the proposed project would take approximately 40 working days, beginning in summer 2014 and ending before October 15, 2014.

CITY OF ROSEVILLE MITIGATING ORDINANCES, GUIDELINES, AND STANDARDS

The City has adopted the following regulations and ordinances, which include standards and policies that are uniformly applied throughout the City, that substantially mitigate specified environmental effects of future projects:

- Noise Regulation (Roseville Municipal Code [RMC] Ch.9.24)
- Urban Stormwater Quality Management and Discharge Control Ordinance (RMC Ch.14.20)
- Stormwater Quality Design Manual (Resolution 07-432)
- City of Roseville Design and Construction Standards (Resolution 07-137)
- Community Design Guidelines (Resolution 95-347)
- Tree Preservation (RMC Ch. 19.66)

The City's mitigating ordinances, guidelines, and standards are referenced, where applicable, in the environmental checklist (Section 3 in this IS/MND), and will be implemented by the City as part of the proposed project to reduce potential impacts to a less-than-significant level.

ENVIRONMENTAL COMMITMENTS

In addition to the City of Roseville Mitigating Ordinances, Guidelines, and Standards discussed above, the project would implement a variety of best management practices (BMPs) and other measures to avoid short- and long-term effects on the physical and human environment. These plans would be prepared before project activities are initiated, included in the contract specifications for contractors working on the proposed project, and implemented during project construction. The applicable measures are described below.

Water Pollution Control Plan

The City will prepare a Water Pollution Control Plan that contains stormwater BMPs. The project will also comply with the City's design/construction standards (refer to http://www.roseville.ca.us/pw/engineering/land_development/design_construction_standards.asp) and the City's Stormwater Quality BMP Guidance Manual for Construction (2007). The project would also implement the applicable requirements of the Placer County Flood Control and Water Conservation District's (PCFCWCD's) Stormwater Management Manual (Placer County Flood Control and Water Conservation District 1994).

Traffic Control Plan

The City would require the construction contractor to implement a traffic control plan, including a construction schedule and plan to meet the City's notice procedures, before construction activities begin. The City will ensure its contractor prepares the traffic control plan during the final stage of project design to ensure local traffic is accommodated during construction and access to businesses and residences is maintained. This plan would identify general methods by which construction activities will be managed to minimize substantial delays to traffic. These methods may include (but are not limited to):

- Appropriately sequencing activities (e.g., segment phasing, timing of grading, hours of construction) to minimize effects on traffic flow.
- Maintaining traffic flow in the project area to the extent possible.
- Maintaining bicycle and pedestrian access.

If the City determines that a short-term lane closure is required, traffic lane closures will be approved by the City Engineering Department and notification will be provided to the City Police and Fire Departments 48 hours in advance of any road closures.

Noise Control Measures

The following measures will be incorporated into the construction specifications for the proposed project to reduce and control noise generated by construction-related activities, consistent with City ordinances and standards:

- Noise-generating construction activities will be restricted to Monday through Friday from 7 a.m. to 7 p.m., and Saturday and Sunday from 8 a.m. to 8 p.m. to comply with the City of Roseville noise ordinance.
- All construction equipment will have sound-control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.
- Appropriate additional noise-reducing measures will be implemented, including (but not limited to) the following: stationary construction equipment will be located as far as possible from sensitive uses; sensitive uses will be identified on construction drawings; and equipment idling will be prohibited when the equipment is not in use.

REQUIRED PERMITS AND APPROVALS

Table 2 lists the permits and approvals that will be required to construct the proposed bike trail project.

Table 2 Potential Federal, State, and Local Permits Required to Construct the Project

Agency	Activity	Entitlement	Applicable Project Components
Federal			
U.S. Army Corps of Engineers	Required for placement of fill into waters of the United States	Section 404— Nationwide Permit No.14 Authorization	Installation of culvert and placement of fill material in the intermittent stream
California Office of Historic Preservation	Section 106 required to determine if project has an effect on historic property	Section 106—National Historic Preservation Act	Installation of culvert and placement of fill material in the intermittent stream
State			
California Department of Fish and Wildlife	Work in waters of the State	Section 1602 of the California Fish and Game Code—Lake and Streambed Alteration Agreement	Installation of culvert and removal of riparian vegetation from the intermittent stream
Central Valley Regional Water Quality Control Board	Water quality certification required under Section 401 of the Clean Water Act to support the Section 404 Nationwide Permit Authorization	Water quality certification	Installation of culvert and placement of fill material in the intermittent stream
Local Approvals			
Roseville City Council	Project approval	Adoption of the MND and Mitigation Monitoring and Reporting Plan	All project components

3. INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines recommends that lead agencies use an initial study checklist to determine the potential impacts of the proposed project on the physical environment. The checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the proposed project. This section of the initial study incorporates a portion of the Appendix “G” environmental checklist form, contained in the CEQA Guidelines (revised 2012). Impact questions and responses are included in both tabular and narrative formats for each of the 17 environmental topic areas. There are four possible answers to the environmental impacts checklist questions on the following pages. Each possible answer is explained herein:

1. A “Potentially Significant Impact” is appropriate if there is enough relevant information and reasonable inferences from that information that a fair argument can be made to support a conclusion that a substantial or potentially substantial adverse change may occur to any of the physical conditions within the area affected by the proposed project. When one or more “Potentially Significant Impact” entries are made, an EIR is required.
2. A “Potentially Significant Unless Mitigation Incorporated” answer is appropriate when the City has incorporated a mitigation measure to reduce an impact from “Potentially Significant” to “Less than Significant.” The lead agency must describe the mitigation measures, and briefly explain how the measures would reduce the impact to a less-than-significant level.
3. A “Less-Than-Significant Impact” is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant or the application of development policies and standards to the project will reduce the impact(s) to a less-than-significant level. For example, the application of the City’s Improvement Standards reduces potential erosion impacts to a less-than-significant impact.
4. A “No Impact” answer is appropriate where it can be clearly seen that the impact at hand does not have the potential to adversely affect the environment. For example, a project in the center of an urbanized area will clearly not have an adverse effect on agricultural resources or operations.

All answers must take into account the whole action involved, including offsite, onsite, cumulative, project level, indirect, direct, construction, and operational impacts.

A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited in the parentheses following each response. A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

On the basis of this initial evaluation:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the proposed project have been made by the City. 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 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 that earlier EIR OR NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

July 19, 2013

Date


 Mark Morse, Environmental Coordinator

City of Roseville, City Manager's Office
 Organization

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 along a 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 which would adversely affect daytime or nighttime views in the area?				✓

Discussion of Checklist Answers:

a., b. **No Impact.** The City has not designated any specific scenic vistas to be protected in Roseville, and there is not a state-designated scenic highway in the project vicinity. There would be no impact. No mitigation is required.

c. **Less-Than-Significant Impact.** The proposed project would construct a Class I bike trail within the existing Foothills Business Park Wetland Preserve and Compensation Area. The project site is dominated by annual grasslands and includes several oak trees along Pleasant Grove Creek and the southeastern end of the project. Two light industrial buildings are located at the eastern terminus of the proposed bike trail, while residential land uses are located to the west.

The proposed bike trail and visible project features, such as interpretive signage, would be smaller in terms of mass and scale than surrounding buildings. The project would therefore be compatible with existing and adjacent residential and light industrial uses. No operational characteristics of the proposed project would introduce a new use that would degrade views. Construction would be temporary and would not permanently degrade the character or quality of the project area and surroundings. This impact is less than significant. No mitigation is required.

d. **No Impact.** The proposed project would not include any project components that could increase glare in the project area. No additional lighting would be installed as part of the project. Accordingly, the project would have no effect on daytime or nighttime views in the project area. No mitigation is required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				✓
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				✓

Discussion of Checklist Answers:

a–e. **No Impact.** The project site is in an urban area and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or active agricultural operations. The project would not involve the loss of any forest land. The project site is not zoned for any agricultural use or designated for agricultural use by the City’s General Plan or zoning ordinance. No agricultural operations exist in the project vicinity, and the project would not involve any changes that could result in conversion of any farmland to a non-agricultural use or forest land to non-forest land use. Accordingly, there would be no impact related to agricultural and forest resources. No mitigation is required.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 a non- attainment area for 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?			✓	

Discussion of Checklist Answers:

- a. **Less-Than-Significant Impact.** Placer County is currently designated a nonattainment area for the federal 8-hour ozone and PM2.5 standards, as well as for the state ozone and PM10 standards (U.S. Environmental Protection Agency 2012; California Air Resources Board 2012).¹ The *Sacramento Regional 8-Hour Attainment and Reasonable Further Progress Plan* (Ozone Plan), which is intended to address ozone issues in the Sacramento Valley Air Basin (SVAB), was adopted by the Placer County Air Pollution Control District (PCAPCD) on August 11, 2011. Counties in the Sacramento area (Sacramento, Yolo, Placer, El Dorado, Solano, Sutter, and Butte) have also adopted the *Northern Sacramento Valley Planning Area 2009 Triennial Air Quality Attainment Plan* (Triennial Plan) to achieve the health-based ozone standard.

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds estimates used to develop applicable air quality plans, which, in turn, would generate emissions not accounted for in the regional emissions budgets. Therefore, the proposed project is evaluated to determine if it is consistent with the land use designations and growth anticipated in the Ozone Plan and Triennial Plan prepared for the SVAB.

¹ PM2.5 refers to particulate matter less than or equal to 2.5 microns in diameter. PM10 refers to particulate matter less than or equal to 10 microns in diameter.

The purpose of the proposed project is to construct a Class I bike trail to connect an existing trail to a trailhead parking area on Foothills Boulevard. The project will therefore support recreational activities, which is consistent with land use zoning in the City of Roseville General Plan. As discussed in Section XVI, *Transportation/Traffic*, the proposed project would not permanently change the existing or planned transportation network or traffic patterns in the area. Likewise, as described in Section X, *Land Use and Planning*, the project would not conflict with any applicable land use plan or policy. The proposed project would generate emissions during construction (discussed below), but these emissions would be minimal and are not expected to impede attainment or maintenance of the National Ambient Air Quality Standards or California Ambient Air Quality Standards. Consequently, the project would not conflict with or obstruct implementation of the Ozone and Triennial Plans. Therefore, the impact would be less than significant. No mitigation is required

b. Less-Than-Significant Impact.

Construction

Construction activities associated with the proposed project would generate short-term emissions of reactive organic gases (ROG), nitrogen oxides (NO_x), carbon monoxide (CO), PM10, PM2.5, and sulfur dioxide (SO₂) (refer to Section VII, *Greenhouse Gas Emissions*, for a discussion of greenhouse gas impacts). Emissions would originate from heavy equipment use, worker vehicle trips, material deliveries, and site grading. Construction-related emissions would vary depending on the level of activity, the specific construction operations, and wind and precipitation conditions.

Construction emissions were estimated using emission factors generated by the California Emissions Estimator Model (CalEEMod), version 2011.1.1, and the California Air Resources Board's (ARB) EMFAC2011. Based on information provided by the City of Roseville, it was assumed that construction would involve seven phases between June and July 2014. Please refer to Appendix A for a description of these phases, as well as detailed information on emissions modeling and quantification methods.

An estimate of emissions associated with construction of the proposed project is presented in Table 3.

Table 3 Estimated Construction Emissions (Pounds Per Day)

Construction Phase	ROG	NO _x	CO	PM10	PM2.5	SO ₂
Initial clearing	1.66	14.09	9.28	0.88	0.87	0.02
Rough-grading	3.73	30.58	18.35	3.22	2.36	0.04
Drainage and utilities	2.55	18.88	13.59	1.34	1.33	0.02
Finish grading	3.17	33.26	14.54	2.97	2.09	0.04
Paving	4.18	21.77	11.42	1.21	1.19	0.03
Installation project facilities	1.47	11.38	8.01	0.73	0.72	0.02
Stripping and cleanup	0.90	8.22	4.92	0.48	0.47	0.01
PCAPCD Recommended Thresholds	82	82	-	82	-	-
<i>Significant?</i>	<i>No</i>	<i>No</i>	-	<i>No</i>	-	-

Source: CalEEMod (refer to Appendix A); Placer County Air Pollution Control District 2012
^a Period includes one or more phase (see Appendix A).

As shown in Table 3, criteria pollutant emissions associated with construction of the project would be well below the applicable PCAPCD recommended emissions thresholds. Moreover, as described in Chapter 2, *Project Description*, the project will comply with City of Roseville Design and Construction Standards. Pursuant to standard City practice, the following PCAPCD-adopted Rules are applicable to the proposed project and will be included on the project's approved engineering plan.

1. Construction equipment exhaust emissions shall not exceed PCAPCD Rule 202 visible emission limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified by PCAPCD to cease operations and the equipment must be repaired within 72 hours. (Based on PCAPCD Rule 202)
2. The contractor shall suspend all grading operations when fugitive dust exceeds PCAPCD Rule 228 (fugitive dust) limitations. The prime contractor shall be responsible for having an ARB-certified individual to perform visible emissions evaluations (VEE). This individual shall evaluate compliance with Rule 228 weekly. It is to be noted that fugitive dust is not to exceed 40% opacity and not to go beyond the property boundary at any time. Lime or other drying agents utilized to dry out wet grading areas shall not exceed PCAPCD Rule 228 fugitive dust limitations. Operators of vehicles and equipment found to exceed opacity limits will be notified by PCAPCD and the equipment must be repaired within 72 hours. (Based on PCAPCD Rule 228)
3. During construction, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less. (Based on PCAPCD Rule 228 / Section 401.2)
4. During construction, no open burning of removed vegetation shall be allowed unless permitted by the PCAPCD. All removed vegetative material shall be either chipped onsite or taken to an appropriate recycling site, or if a site is not available, a licensed disposal site. (Based on PCAPCD Rule 310)

5. A person shall not discharge into the atmosphere volatile organic compounds (VOCs) caused by the use or manufacture of cutback or emulsified asphalts for paving, road construction, or road maintenance, unless such manufacture or use complies with the provisions Rule 217. (Based on PCAPCD Rule 217)
6. Minimize diesel idling time to a maximum of 10 minutes.
7. Use California Air Resources Board (ARB) low-sulfur diesel fuel.
8. Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, if feasible.

Because estimated construction emissions would not exceed PCAPCD’s recommended thresholds and the project will implement all applicable PCAPCD-adopted rules, this impact would be less than significant. No mitigation is required.

Operation

Implementation of the project would not affect vehicle operations, land use patterns in the project area, or otherwise increase long-term operational emissions associated with use of the trail. However, the project would require routine asphalt maintenance that would generate minor amounts of criteria air pollutants. Based on information provided by the project applicant, it was assumed that asphalt sealing would be required once every seven years. ROG generated by asphalt sealing, as well as criteria pollutants associated with maintenance vehicle trips are presented in Table 4.

Table 4 Estimated Operational Emissions (Pounds Per Day)

ROG	NO _x	CO	PM10	PM2.5	SO ₂
2.6	4.3	2.9	0.4	0.4	0.0
Note: Emissions would occur once every seven years. Emissions modeling conservatively assumes asphalt repairs to 0.73 acre and two employee vehicle trips per day.					

As shown in Table 4, criteria pollutant emissions associated with operation of the project would be well below the applicable PCAPCD recommended emissions thresholds. This impact would be less than significant. No mitigation is required.

- c. **Less-Than-Significant Impact.** According to the PCAPCD’s *CEQA Air Quality Handbook*, the PCAPCD’s recommended criteria pollutant cumulative threshold of significance for land use projects is 10 pounds per day for ROG and NO_x. The *CEQA Air Quality Handbook* does not recommend cumulative thresholds for PM10 emissions or address a preferred methodology for cumulative impact determinations made consistent with CEQA Guidelines Section 15064 (h)(3).

The City, as CEQA lead agency, relies on a two-tier criteria pollutant cumulative analysis methodology similar to that adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) as outlined in the SMAQMD *Guide to Air Quality*

Assessment in Sacramento County. That is, if a project would not result in significant project-level criteria air pollutant emissions for which the region is designated non-attainment (i.e., exceed the PCAPCD recommended project threshold of 82 pounds (lbs)/day for ROG or NO_x), project emissions would not be considered cumulatively considerable and would result in a less-than-significant cumulative impact. Should a project exceed the thresholds, a Tier 2 evaluation is conducted to determine Ozone Plan consistency in accordance with CEQA Guidelines Section 15064 (h)(3). Under the Tier 2 analysis, projects found consistent with the Ozone Plan and which would not conflict with the Ozone Plan emissions budget are considered less than cumulatively considerable. The City finds the above methodology appropriate to Roseville projects because the City is located within the Sacramento Valley Air Basin (SVAB), the same air basin where the above methodology is utilized by numerous CEQA lead agencies with concurrence and support from the SMAQMD.

Tier 1: Cumulative Emissions Threshold

As shown in Tables 3 and 4, the project's construction and operational emissions are projected to be below applicable project-level thresholds. Accordingly, emissions are not considered cumulatively considerable and the cumulative impact is found less than significant. A Tier 2 evaluation is not required.

Irrespective of the above Tier 1 conclusion, the project was found consistent with and would comply with applicable requirements of the Ozone Plan and Triennial Plan, and these plans account for project emissions and are designed to substantially lessen cumulative air quality impacts in the air basin in which the project is located. Accordingly, consistent with CEQA Guidelines Section 15064(h)(3), the City finds that the project's incremental contribution is not cumulatively considerable and the impact is therefore less than significant. No mitigation is required.

- d. **Less-Than-Significant Impact.** The PCAPCD generally defines sensitive receptors as schools, hospitals, senior centers, and places where people in poor health may be located. The project site is surrounded by undeveloped space. Two light industrial buildings are located at the eastern terminus of the bike trail. The closest sensitive receptors include single-family homes approximately 0.15 mile to the northwest and southwest. Localized emissions of diesel particulate matter (DPM) and CO have the potential to adversely affect these sensitive receptors. Naturally occurring asbestos (NOA) may also represent a potential health risk to construction workers.

Diesel Particulate Matter

In 1998, ARB classified DPM as a carcinogenic toxic air contaminant (TAC). TACs are pollutants that may result in an increase in mortality or serious illnesses or pose a present or potential hazard to human health. Health effects related to TACs include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death.

Heavy-duty construction equipment and haul trucks represent sources of DPM from project construction. However, cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which assumes a 70-year exposure period. Because construction would be short-term and last less than 2 months, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed sensitive receptors. In addition, DPM emissions would be limited to a few pieces of construction equipment that would operate intermittently along the 1,600 foot long construction alignment. This would not cause a substantial increase in DPM emissions. Accordingly, construction-related DPM emissions would neither exceed PCAPCD recommended project level thresholds nor result in increased acute or chronic health effects. This impact would be less than significant. No mitigation is required.

CO Hotspots

Implementation of the proposed project would not alter or worsen the current congestion (i.e., no changes in LOS) on Foothills Boulevard or other residential streets in the project vicinity (see Item XVI, Transportation/Traffic). Likewise, the project would not alter the design of any roadways or generate number of new vehicles trips. Accordingly, the project would not contribute to or worsen localized CO concentrations within the study area from increased traffic or congestion associated with the project. This impact would be less than significant. No mitigation is required.

Naturally Occurring Asbestos

Depending on a project's size and geographic location, the PCAPCD may require mitigation to address potential impacts from NOA. Projects that disturb greater than 1 acre and are located in an area "most likely" to contain NOA are required to prepare and submit a NOA dust mitigation plan. Projects that are not located within an area "most likely" to contain NOA are required to observe District Rule 228, Fugitive Dust (Placer County Air Pollution Control District 2010).

As identified in the Naturally Occurring Asbestos Hazard map for Placer County, the proposed project is located within an area "least likely to contain NOA" (California Geological Survey 2008). Likewise, the project will disturb less than 1 acre (project area is 0.80 acre). Accordingly, the project is not required to submit an NOA mitigation plan or a dust control plan, but must comply with District Rule 228 (as described previously in the "Project Description"). This impact would be less than significant. No mitigation is required.

- e. **Less-Than-Significant Impact.** While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and air districts. Project-related odor emissions would be limited to the construction period, when emissions from equipment may be evident in the immediately surrounding area. These activities would be short term and are not likely to result in nuisance odors that would violate PCAPCD odor regulations. This impact is therefore considered less than significant. No mitigation is required.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. 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 U.S. 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, marshes, vernal pools, 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?				✓

Biological Resources Setting

The biological information in this section is based on a review of existing information and field surveys conducted by ICF biologists on November 30 and December 28, 2012 and April 15, 2013. Field surveys consisted of a habitat-based site assessment and wetlands study conducted by walking the entire project site and a 250-foot buffer around the site. A list of plant and wildlife species observed during the field survey was compiled and remains on file at ICF.

Prior to conducting field surveys, the following information was reviewed.

- A California Natural Diversity Database (CNDDDB) query for records in the Roseville, Pleasant Grove, Rocklin, Sheridan, Lincoln, Gold Hill, Rio Linda, Citrus Heights, and

Folsom U.S. Geological Survey (USGS) 7.5-minute quadrangles (California Department of Fish and Wildlife [CDFW] 2013).

- A USFWS list of endangered, threatened, and proposed species for Placer County (U.S. Fish and Wildlife Service 2013).
- A list from the California Native Plant Society's (CNPS's) 2013 online Inventory of Rare and Endangered Plants for the aforementioned nine USGS quadrangles (California Native Plant Society 2013).
- California Department of Fish and Game's 2010 List of Special Vascular Plants, Bryophytes, and Lichens.
- Central Valley Chinook Salmon Current Stream Habitat Distribution Table (<http://swr.nmfs.noaa.gov/hcd/dist2.htm>).
- Foothill Business Park 36.5-Acre Wetland Preserve and Compensation Areas Operations and Management Plan (Ecorp Consulting 2000).
- Annual monitoring reports for the Foothill Business Park Wetland Preserve and Compensation Areas between 2002 and 2009 (Ecorp Consulting Inc. 2002, 2003, 2004, 2005, and 2009).
- City of Roseville Open Space Preserves Biological Monitoring Reports for 2010 and 2011 (Vollmar Consulting 2010 and Vollmar Natural Lands Consulting 2011 and 2013).

The sources listed above were used to develop lists of special-status species and identify other sensitive biological resources that could be affected by the proposed project (Tables B-1 and B-2 in Appendix B).

Existing Conditions

The proposed project area is located 3.5 miles northwest of downtown Roseville, Placer County, at the northern end of Foothills Boulevard (Figure 1). For the purposes of this IS/MND, the study area for biological resources consists of the project limits (proposed trail alignment and temporary work area) and an additional 250 feet buffer around the project limits to assess potential indirect effects on sensitive biological resources. The study area lies within a 36.5-acre wetland preserve and compensation area that includes wetlands created in 1993 and 1994 as part of wetland mitigation for the Foothill Business Park development. This area was annexed to the City in 2000 and is now part of the City's Open Space Preserves (Ecorp Consulting 2000). Existing biological communities found in the study area are described briefly below.

Annual Grassland

Annual grassland encompasses the majority of the study area between the riparian habitats of Pleasant Grove Creek and the unnamed intermittent stream. The annual grassland in the study area is dominated by nonnative annual grasses and forbs such as ripgut brome (*Bromus diandrus*),

wild oat (*Avena fatua*), yellow star thistle (*Centaurea solstitialis*), and Medusahead (*Elymus caput-medusae*) (City of Roseville 2000). Other species commonly found in annual grasslands in the project vicinity are Italian ryegrass (*Festuca perennis*), soft chess (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), California poppy (*Eschscholzia californica*), Italian thistle (*Carduus pycnocephalus*), and filaree (*Erodium* spp.).

Seasonal Wetlands

Seasonal wetlands in the study area are located within open grassland habitat between Pleasant Grove Creek and an unnamed intermittent stream. The majority of these wetland features, except for two linear ditches along the south side of the proposed trail, were created in 1993 and 1994 as part of the Foothill Business Park wetland mitigation and are currently managed by the City of Roseville's Open Space Division. Vegetation observed within seasonal wetlands in the study area include Italian ryegrass, Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), hyssop loosestrife (*Lythrum hyssopifolia*), curly dock (*Rumex crispus*), and brome fescue (*Festuca bromoides*). The seasonal wetlands in the study area are potential habitat for special-status plants, vernal pool fairy shrimp, and vernal pool tadpole shrimp.

The seasonal wetlands in the study area would also be considered sensitive natural communities by CDFW and USFWS. Sensitive natural communities are designated as such because of their high level of species diversity, high productivity, unusual nature, limited distribution, or declining status. Additionally, the seasonal wetlands in the study area were verified by the U.S. Army Corps of Engineers (USACE) on April 19, 2013 to be waters of the United States that are subject to regulation under Section 404 of the federal Clean Water Act (CWA).

Riparian Forest

Riparian forest in the study area occurs along Pleasant Grove Creek and its unnamed tributary (intermittent stream). Dominant overstory vegetation within this community type includes species such as valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), willow (*Salix* spp.) and interior live oak (*Q. wislizeni*). The understory consists primarily of Himalayan blackberry (*Rubus armeniacus*), poison oak (*Toxicodendron diversilobum*), cutleaf geranium (*Geranium dissectum*), curly dock, and mugwort (*Artemisia douglasiana*). The riparian habitat in the study area is considered a sensitive natural community by CDFW.

Intermittent Streams

The two intermittent streams, Pleasant Grove Creek and an unnamed tributary, are present within the study area (Figure 2). The unnamed tributary conveys seasonal flows into Pleasant Grove Creek, which flows from east to west and has a hydrologic connection to the Sacramento River via drainage canals. Both intermittent streams support riparian vegetation along their banks. Neither of the intermittent streams supports suitable habitat for either Central Valley steelhead or fall-run/late-fall-run Chinook salmon. Pleasant Grove Creek and the unnamed tributary are considered waters of the United States subject to USACE jurisdiction under CWA Section 404.

Special-Status Species

A review of existing information and results of the 2012 and 2013 field surveys conducted for the proposed project resulted in identification of 12 special-status plant species and 18 special-status wildlife species with the potential to occur in the project region (Tables B-1 and B-2 in Appendix B). Pleasant Grove Creek does not support suitable habitat for fall-run and spring-run Chinook salmon and Central Valley steelhead. Accordingly, special-status fish species are not discussed further in this section.

Special-Status Plants

During the 2012 and 2013 field surveys, an ICF botanist determined that suitable habitat and microhabitat conditions (freshwater marsh, chaparral, conifer forest, and alkali soils) did not exist in the study area for three of the 12 special-status plants identified in Table B-1 (Appendix B). The remainder of the species typically flower in April and would have been identifiable during the April 15, 2013 field survey. No special-status plants or remnants of these species were located during the April 2013 field survey, and none have been reported from the study area during annual vegetation monitoring surveys conducted in 2010, 2011, and 2012 as part of the City's Open Space Preserve management activities (Vollmar Consulting 2010, and Vollmar Natural Lands Consulting 2011 and 2013). Therefore, this analysis concludes that special-status plants do not occur in the study area and will not be affected by the proposed project.

Special-Status Wildlife

Of the 18 special-status wildlife species listed in Table B-2 (Appendix B), four species were eliminated from further consideration because suitable habitat for these species is not present in the study area or because the species range does not extend into the study area. A brief explanation for the absence of these species and their habitats is provided in Table B-2 (Appendix B). The remaining 14 species were determined to have low-to-moderate potential to occur in the study area on the basis of existing habitat conditions observed during the field surveys. No special-status wildlife species were observed in the study area during the 2012 and 2013 field surveys conducted for the proposed project. In addition, none were found in the study area during annual monitoring surveys conducted in 2010, 2011, and 2012 as part of the City's Open Space Preserve management activities (Vollmar Consulting 2010, and Vollmar Natural Lands Consulting 2011 and 2013).

In addition to special-status species, non-special-status migratory birds and raptors could nest in or adjacent to the study area and their occupied nests and eggs are protected by California Fish and Game Code Sections 3503 and 3503.5 and the federal Migratory Bird Treaty Act (MBTA).

Discussion of Checklist Answers:

- a. **Less Than Significant with Mitigation.** The seasonal wetlands in the study area provide potential habitat for vernal pool fairy shrimp, vernal pool tadpole shrimp, and western spadefoot toad. These species are known to occur in the project region (CNDDDB 2013, Tables B-1 and B-2 in Appendix B); however, no special-status vernal pool plants or wildlife

have been previously identified within these wetlands during annual monitoring surveys conducted between 2000 and 2012 as part of the City's Open Space Preserve management activities. Out of the eight seasonal wetlands delineated in the study area, four were surveyed for federally listed brachiopods in January and February 2010 (Vollmar Consulting 2010), February and March 2011 (Vollmar Natural Lands Consulting 2011), and February and April 2012 (Vollmar Natural Lands Consulting 2013). Only one brachiopod species, California fairy shrimp (*Linderiella occidentalis*), was observed in two wetlands during these 2012 surveys. No federally listed brachiopods were found during any of the surveys. As currently designed, the proposed project would avoid direct impacts on seasonal wetlands by constructing all project facilities outside of wetland boundaries and by constructing during the dry season (generally May 1 through October 15) when wetland features are dry. Construction of the proposed project could result in indirect effects on this habitat by increasing runoff containing sediment or contaminants and increasing unauthorized recreational use of the wetland preserve area.

Historically and presently, the preserve area experiences a high level of unauthorized recreational activity. Annual monitoring reports from 2002 to 2012 indicate that dirt bike and OHV trails have been created in the preserve areas. To minimize potential indirect effects from the proposed project and to deter existing unauthorized uses of the wetland preserve, the proposed project has been designed to include permanent barrier fencing (i.e., split rail, post and cable or similar type of fencing). Additionally, all construction would occur during the dry season to minimize the potential for sediment and pollutant runoff from the work area. Potential indirect impacts on habitat for special-status species would be considered significant. Implementation of mitigation measures identified below for waters of the United States (checklist item c) would protect nearby wetland habitats and would reduce potential impacts on special-status vernal pool plants and wildlife to a less-than-significant level.

The study area also supports riparian vegetation and many large trees that could provide nesting habitat for birds and raptors, including the state listed Swainson's hawk and fully protected white-tailed kite. If project construction occurs during the breeding season (generally February 15 through August 30), tree trimming, increased noise, and ground disturbance from large equipment could result in the removal of active nests, abandonment of an active nest, or forced fledging of young. This impact is potentially significant because it could result in an appreciable reduction in the reproductive success of a locally rare species (i.e., Swainson's hawk). As proposed, the project will not affect nesting migratory birds and raptors based on a construction schedule extending from September through October. If construction activities are necessary during the nesting season (February 15 through August 30), preconstruction surveys will be required to identify the location of active special-status and non-special-status migratory bird or raptor nests and appropriate buffers will be implemented according to Mitigation Measure BIO-1 to reduce potential impacts to a less-than-significant level.

Implementation of Mitigation Measures BIO-1 through BIO-6 would ensure that any potential impact on special-status species and their habitats are minimized and avoided.

Implementation of these mitigation measures will reduce potential impacts on special-status species and their habitats to a less-than-significant level.

Mitigation Measure BIO-1: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys

To avoid and minimize effects on nesting special-status and non-special-status migratory birds and raptors, the City will implement the appropriate surveys and restrictions, as follows.

- To avoid removing or disturbing any active Swainson's hawk, white-tailed kite, or other migratory bird and raptor nests, construction activities (vegetation removal and grading) will be conducted during the nonbreeding season (generally between September 1 and February 14) or after a qualified biologist determines that fledglings have left an active nest. If construction activities cannot be postponed, the following preconstruction surveys and no-disturbance buffers will be required.
 - If construction or tree-removal activities will occur during the breeding season (February 15 through August 31), a qualified wildlife biologist (with knowledge of the species to be surveyed) will be retained to conduct a preconstruction survey for nesting birds and raptors for all trees and shrubs and ground-nesting habitat located within 500 feet (0.25 mile for Swainson's hawk) of construction activities, including grading, vegetation removal, and staging areas. The nesting survey will be conducted no greater than 14 days prior to the start of construction. The following focused nesting survey will take place prior to the start of construction and in the appropriate habitat:
 - If the biologist determines that the area surveyed does not contain any active nests, then construction activities, including removal or pruning of trees and shrubs, can commence without any further mitigation.
 - If an active nest is located in the survey area, an appropriate no-disturbance buffer will be established by the biologist. The buffer distance should be determined based on the species, nature of construction activities, and line of sight from the work area. At a minimum, all work will be conducted no less than 250 feet from an active raptor nest and 100 feet from an active migratory bird nest, or other distance as may be determined during informal agency consultation with CDFW and/or USFWS. A qualified wildlife biologist will monitor the nest to determine when the young have fledged and submit biweekly reports throughout the nesting season. The biological monitor will have the authority to halt construction if there is any sign of distress to any raptor or migratory bird. Reference to this requirement and the MBTA will be included in the construction specifications.

Mitigation Measure BIO-2: Minimize Removal of Woody Riparian Vegetation

To the extent possible, the City will ensure the contractor minimizes the long-term loss of woody riparian vegetation by trimming woody vegetation rather than removing entire shrubs within the 80-foot-wide construction zone across the intermittent stream. Shrubs that need to be trimmed will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting will be limited to the minimum area necessary within the construction zone and in areas that do not provide habitat for special-status species. Disturbance or removal of vegetation will not exceed the minimum necessary to construct the project. Except for the vegetation specifically identified for trimming and/or removal in the notification, no native oak trees with a trunk diameter greater than 6 inches dbh (diameter at breast height) will be removed or damaged without prior consultation and approval of a City of Roseville Planning Department representative. Using hand tools (e.g., clippers, chain saw), trees may be trimmed to the extent necessary to gain access to the work sites. All cleared material/vegetation will be removed from the riparian/stream zone.

Mitigation Measure BIO-3: Conduct Environmental Awareness Training for Construction Personnel

Before any work occurs in the project area, including vegetation removal and grading, a qualified biologist will conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the need to avoid impacts on sensitive biological resources and the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training from the biologist before starting work.

Mitigation Measure BIO-4: Install Construction Barrier Fencing to Protect Environmentally Sensitive Areas

The City will require the Contractor to install orange construction barrier fencing to identify Environmentally Sensitive Areas (ESAs) as follows. ESAs in and adjacent to the construction area comprise riparian woodlands along Pleasant Grove Creek and the intermittent stream, native oak trees greater than 6 inches dbh, seasonal wetlands, and any trees that support migratory bird or raptor nests. Before construction, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the barrier fencing and will place stakes around the ESAs to indicate these locations. The protected area will be clearly identified on the construction specifications. The fencing will be installed before construction activities begin and will be maintained throughout the construction period.

Temporary fences around the ESAs will be installed prior to the start of construction. Temporary fences will be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer.

The fencing will be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent).

Mitigation Measure BIO-5: Retain a Biologist to Monitor Construction Activities

The City will retain a biologist to make a weekly monitoring visit to the project site. The biological monitor will assist the construction crew, as needed, to comply with all project implementation restrictions and guidelines. Furthermore, the biological monitor will be responsible for ensuring that the contractor maintains the ESA barrier fencing.

Mitigation Measure BIO-6: Avoid and Minimize Disturbance of Intermittent Stream and Adjacent Sensitive Habitats

The City will minimize impacts on the intermittent stream and adjacent sensitive habitats (Pleasant Grove Creek and seasonal wetlands that occur adjacent to the construction corridor) by requiring the Contractor to implement the following measures. Where appropriate, these measures will be incorporated into project plans and specifications.

- Construction of the bike trail and installation of the culvert crossing would occur between May 1 and October 15.
- Prior to starting construction activities, all heavy equipment will be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances associated with project-related activities that could be hazardous to aquatic life will be prevented from contaminating the soil or entering water bodies.
- During construction, the contractor and construction personnel will not dump any debris or waste material in the stream channel. All such debris and waste will be picked up daily and properly disposed of at an appropriate site. All construction debris and associated materials will be removed from the work site upon completion of the project.
- Sediment fences will be installed in appropriate locations to reduce the introduction of sediment into the stream and other water bodies during construction. Any overburden material from the proposed project will not be sidecast into the stream channel but will be stabilized or stored offsite at approved disposal sites to preclude increased risk of sediment input to water bodies.
- The contractor will establish a spill prevention and countermeasure plan before project construction begins; the plan will include onsite handling criteria to prevent contaminants from entering the water bodies. A staging and storage area will be provided away from water bodies for equipment, construction materials, fuels, lubricants, solvents, and other possible contaminants. The contractor shall submit this document to the City for review and approval.

- All maintenance materials (e.g., oils, grease, lubricants, antifreeze, similar materials) will be stored offsite.
- During construction, all vehicles and equipment required onsite will be parked or stored at the designated staging area (located at Foothill Boulevard).
- All temporary fill material that would be placed in the stream channel to support installation of the culvert will be removed from the stream immediately after construction and the channel restored to preconstruction condition.
- Precautions will be taken to minimize turbidity/siltation during project planning and implementation. Such precautions may entail the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures will be taken. The sediment barrier(s) will be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes. Non-biodegradable silt barriers (such as plastic silt fencing) shall be removed after the disturbed areas have been stabilized with erosion control vegetation (usually after the first growing season).

b. **Less-than-Significant with Mitigation.** The sensitive natural communities in the study area consist of riparian forest and seasonal wetlands. The seasonal wetlands, which are considered waters of the United States, are discussed under checklist item (c) and will be avoided to the extent feasible during project construction. Impacts on the riparian habitat along Pleasant Grove Creek would also be avoided during construction because this habitat occurs outside the construction footprint.

The proposed project would result in impacts to 0.128-acre of riparian forest along the unnamed tributary during installation of the culvert crossing. This impact would be considered a substantial adverse effect (and therefore significant) because riparian communities are declining statewide and they support a diverse array of wildlife.

Implementation of Mitigation Measures BIO-2 through BIO-6 (described above) and BIO-7 (described below) would ensure that any potential impact on riparian habitat along Pleasant Grove Creek from the project is avoided and would minimize and compensate the impacts on the riparian habitat of the unnamed tributary. Implementation of avoidance, minimization, and compensatory mitigation will reduce impacts on riparian habitat to a less-than-significant level.

Mitigation Measure BIO-7: Compensate for Permanent Impacts on Waters of the United States and Woody Riparian Habitat

The proposed project would require the placement of permanent fill material into 0.008 acre of other waters; temporary disturbance to 0.001 acre of other waters; and removal of 0.128 acre of non-wetland woody riparian vegetation.

The City proposes to compensate for impacts to 0.009 acres of waters of the United States by implementing the following measures.

- Purchase mitigation credits at a minimum 2:1 ratio (2 acres of mitigation lands for every 1 acre impacted) to compensate for the permanent placement of fill material into 0.008 acre of the unnamed intermittent stream. As part of this compensation, the City will purchase 0.016 acre of riverine aquatic bed credits (or equivalent as may be approved by the Corps) from the National Fish and Wildlife Foundation in-lieu fee program or an approved mitigation bank.
- Restore the temporarily disturbed 0.001 acre of other waters to preconstruction condition. Immediately after the culvert is installed, the contractor will remove all temporary fill material that was deposited into the stream to support installation of the culvert. The streambed and bank will be restored to preconstruction condition.

To compensate for the loss of 0.128 acre of non-wetland riparian vegetation along the intermittent stream, the City will purchase riparian credits at a minimum 1:1 at an approved mitigation bank or in-lieu program.

The City will obtain state and federal permits through the CWA and California Fish and Game Code for impacts on regulated waters. Final compensatory mitigation ratios and approved locations (mitigation bank or in-lieu fee program) will be identified as conditions of project permits (e.g., Nationwide Permit from Corps and Section 1602 permit from CDFW) and will be implemented as part of the proposed project.

- c. **Less-than-Significant with Mitigation.** Pleasant Grove Creek, its unnamed tributary, and the seasonal wetlands in the study area have been determined to be waters of the United States that are protected under CWA Section 404. Although construction of the proposed project would not result in the placement of fill in the seasonal wetlands or Pleasant Grove Creek, there would be impacts from the project on the unnamed tributary to the creek from the placement of permanent and temporary fill during installation of a culvert. This impact would be significant, but the City will implement Mitigation Measures BIO-3 through BIO-7 to reduce impacts to a less-than-significant level. The City will implement these requirements through its own personnel or as contract specifications and requirements for all construction contractors.
- d. **Less-than-Significant Impact.** Although riparian habitat within the study area is subject to disturbance from abutting industrial uses and an existing dirt pedestrian trail, the mature riparian vegetation and associated stream channels provide food, water, and migration and

dispersal corridors, as well as escape, nesting, and thermal cover for many common resident and migratory wildlife species that are adapted to urban settings. Resident mammal species that could occur and breed in riparian forest habitats within urban areas include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), western gray squirrel (*Sciurus griseus*), ornate shrew (*Sorex ornatus*), and broad-footed mole (*Scapanus latimanu*), and several species of bats. Large, ranging mammals such as coyote (*Canis latrans*) and grey fox (*Urocyon cinereoargenteus*) occasionally use riparian and stream habitat within urban areas as a movement corridor during foraging or migration. Reptiles that could occur within or adjacent to the stream channels include Pacific pond turtle (*Actinemys marmorata*) and common garter snake (*Thamnophis sirtalis*). Numerous species of birds and raptors occur within this habitat either as resident breeders or during foraging and migration; the multi-layered vegetation structure provides suitable nesting and roosting areas and riparian woodlands and open water support abundant foraging opportunities.

Installation of a culvert crossing in the intermittent stream and construction of a paved trail through the associated riparian habitat could hinder wildlife movements within the stream channel itself but would not create a permanent barrier to wildlife movements. Within the study area, Pleasant Grove Creek would provide the primary migration and movement corridor for wildlife. Riparian habitat along Pleasant Grove Creek will not be affected by the proposed project. Therefore, the proposed project would not 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 mitigation is required.

- e. **Less-than-Significant Impact.** Chapter 19.66 (Tree Preservation) of the Roseville Municipal Code includes regulations controlling the removal and preservation of trees within the City of Roseville. A Protected Tree is defined in the Roseville Municipal Code as a native oak tree equal to or greater than 6 inches dbh measured as a total of a single trunk or multiple trunks.

The study area contains native oaks that would meet the City's definition of protected trees. The proposed project would result in the disturbance or removal of protected trees; however, the City will comply with uniformly applied development regulations established in the tree preservation conditions, such as implementing a revegetation plan, planting replacement oaks, or paying an in-lieu mitigation fee. The proposed project would comply with the City's tree preservation ordinance and that will reduce any impact to a less-than-significant level. No additional mitigation would be required.

- f. **No Impact.** There are no approved habitat conservation plans, natural community conservation plans, or other adopted plans that would apply to the proposed project. Accordingly, there would be no impact and no mitigation would be required.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 geologic feature?		✓		
d. Disturb any human remains, including those interred outside of formal cemeteries?		✓		

Cultural Resources Setting

A cultural resources investigation was conducted for the proposed project (ICF International 2013) to determine whether there were cultural resource impacts specific to the project or its site. The cultural resources investigation included a records search, consultation with local Native American representatives and historical societies, and a pedestrian survey of the project area. As a result of the investigation, two previously recorded cultural resources were identified within 0.25 mile of the project area. Neither of these resources was relocated. No previously recorded cultural resources were identified within the project area.

On February 28, 2013, representatives from the United Auburn Indian Community of the Auburn Rancheria (UAIC), the City of Roseville, the project engineer, and ICF met at the project site. While walking along the proposed bike trail, a fragment of stone, possibly groundstone (i.e., a stone that has a smooth surface indicating use for tool manufacture and food processing), and several pieces of fire-affected rock were located in the survey area. A small basalt projectile point and a fragment of groundstone were also identified in the survey area. The projectile point and groundstone fragment were found in a heavily disturbed, seasonal wetland along the south side of the bike trail alignment. Recommendations for minimization of effects on this sensitive area were discussed, including potential testing and construction monitoring. It was agreed that unnecessary disturbance should be avoided and because of the minimal nature of the construction through most of the project area, construction monitoring during initial ground disturbance was the more prudent measure.

Approximately 90% of the project area contains low-lying grasses and brush. The project area is considered moderately sensitive for buried archaeological resources due to its proximity to Pleasant Grove Creek. This level of sensitivity is also indicated by the discovery of a projectile point and possible groundstone fragments in the project area.

Discussion of Checklist Answers:

- a. **No Impact.** No historical resources that meet the criteria of significance under CEQA are located on or adjacent to the project site. There would be no impact.
- b. **Less-than-Significant with Mitigation.** Given the potential depth of excavation, ranging from grading (6 inches) to utility installation (3 feet), and moderate sensitivity for archaeological resources, it is possible that ground-disturbing activities may inadvertently uncover buried, previously unknown cultural resources. In the event that construction activities occur within previously undisturbed soils and buried cultural resources are discovered, such resources could be damaged or destroyed, potentially resulting in significant impacts on cultural resources. Implementation of Mitigation Measure CUL-1 would reduce this impact to a less-than-significant level.

Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources

- A qualified archaeologist and a Native American monitor shall be present for initial ground disturbing activities to monitor for buried cultural resources.
 - The City shall ensure that construction specifications include the following information in the grading notes:

Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the Roseville City Manager's Office will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site is or appears to be eligible for listing in state or federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary.
 - In the event resources are discovered, the City will retain a qualified archaeologist to assess the find, and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation (DPR) 523 forms and evaluated for significance under all applicable regulatory criteria.
 - No further grading shall occur in the area of the discovery until the City approves the measures to protect the resources. Any archaeological artifacts recovered as a result of mitigation will be donated to a qualified scientific institution approved by the Lead Agency, where they would be afforded long-term preservation to allow future scientific study.
- c. **Less-than-Significant with Mitigation.** It is possible that ground-disturbing activities may uncover buried paleontological resources (i.e., fossils). In the event that construction

activities occur within previously undisturbed soils and buried paleontological resources are discovered, such resources could be damaged or destroyed, potentially resulting in significant impacts on paleontological resources. Implementation of Mitigation Measure CUL-2 would reduce this impact to a less-than- significant level.

Mitigation Measure CUL-2: Implement Measures to Protect Previously Unidentified Paleontological Resources

- The City shall ensure construction specifications include the following information in the grading notes:

If substantial fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities on the project site, activities will stop immediately until a state-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. The applicant will be responsible for ensuring that recommendations regarding treatment and reporting are implemented.

- d. **Less-than-Significant with Mitigation.** There are no known formal cemeteries within the project area, and neither the results of the records search nor the pedestrian survey indicate that human remains are present in the project area. However, there is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains, which would be a potentially significant impact. Implementation of Mitigation Measure CUL-3 would reduce this impact to a less-than-significant level.

Mitigation Measure CUL-3: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains

- The City shall ensure construction specifications include the following in the grading notes:

If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of Roseville Public Works Department.

- In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed:
 - The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code (PRC) § 5097.98.
 - If the remains are determined by the County Coroner to be Native American, the Native American Heritage Commission (NAHC) will be notified within 24 hours, and

the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including but not limited to, the excavation and removal of the human remains.

VI. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 groundshaking?			✓	
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 Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

Discussion of Checklist Answers:

- a. **Less-Than-Significant Impact.** Several faults have been identified within 60 miles of the Sacramento area. However, no known active faults are located in Placer County, including the project vicinity, and the south Placer County area is classified as a low-severity earthquake zone. Three inactive faults lie within the immediate Roseville vicinity: the Volcano Hill fault, extending approximately 1 mile northwesterly from just east of Roseville city limits; the Linda Creek fault, extending along a portion of Linda Creek through Roseville and a portion of Sacramento County; and an unnamed fault extending east to west between Folsom Lake and Rocklin. Portions of this fault are concealed, but they are possibly connected to the Bear Mountain fault near Folsom Lake. No Alquist-Priolo Earthquake Fault Zones are located in Roseville or in Placer County.

The project site is not expected to experience fault rupture, strong ground shaking, seismically related ground failure, or liquefaction. Liquefaction is the sudden and temporary loss of soil strength when sandy, unconsolidated soils/sediments saturated by groundwater within 50 feet of the surface are subjected to strong ground shaking. Although such sediments and groundwater conditions may be present at the site, the site vicinity is subject to low earthquake shaking, such that the risk of liquefaction and related ground failures such as lateral spreading is expected to be low. Further, as part of project approvals, the City will review the site-specific geotechnical study prepared for the project and design and construction documents to ensure compliance with applicable California Building Code (CBC) regulations for seismic safety as well as the City of Roseville Design and Construction Standards. Further, the project would not include any occupied structures. No mitigation is required.

The project site is nearly level to gently sloping. Although the banks of nearby Pleasant Grove Creek are steep, there are no steep slopes within the project site that present a risk of landslide. No temporary excavations would be created during construction. No mitigation is required.

- b. **Less-Than-Significant Impact.** Construction of the proposed project would involve removing existing vegetation from the project site (i.e., trail footprint and construction zone), which would temporarily expose soil to wind or water erosion. Uniformly applicable development standards would apply to avoid a significant effect. To minimize erosion during construction, the City will comply with the City's Design and Construction Standards, which prescribe erosion/sediment control and grading requirements addressing erosion. After construction, disturbed areas of the site would be seeded and mulched to reestablish a vegetation cover that would resist erosion. The impact would be less than significant. No mitigation is required.

- c. **Less-Than-Significant Impact.** Lateral spreading, a phenomenon associated with liquefaction, and subsidence or other geologic or soil conditions that could create unstable subsurface conditions that could affect the proposed Class I bike trail, is not a significant hazard for the project site. (See item a, above.) During project design and prior to construction, the City will ensure the design specifications in the site-specific geotechnical report prepared for the project are incorporated into the project, in accordance with City of Roseville Design and Construction Standards. Impacts would be less than significant and no mitigation is required.

- d. **Less-Than-Significant Impact.** New paving for the trail would be installed for the project. The paving could be susceptible to damage if underlying soil characteristics such as shrink-swell potential and low strength are not accounted for in project design. However, any impact would be avoided through compliance with uniformly applicable development regulations. Therefore, the impact would be less than significant. No mitigation is required.

- e. **No Impact.** No restrooms would be constructed as part of the proposed project, and there would be no consequent increase in wastewater due to project implementation. Accordingly, there would be no impact on soils related to the use of septic tanks. No mitigation is required.

VII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Discussion of Checklist Answers:

a. **Less-Than-Significant Impact.**

Construction

The most common greenhouse gases (GHG) resulting from human activity are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The Intergovernmental Panel on Climate Change (IPCC) and Assembly Bill 32 (AB 32) also define GHGs to include hydrofluorocarbons (HFCs), perfluorinated carbons (PFCs), and sulfur hexafluoride (SF₆). HFCs and PFCs are usually emitted in industrial processes, whereas SF₆ is generally associated with electricity transmission. None of these processes are applicable to the project. Therefore, HFCs, PFCs, and SF₆ are not discussed further.

Construction activities would generate short-term emissions of CO₂, CH₄, and N₂O from the use of heavy-duty equipment and on-road vehicles (e.g., haul trucks and employee commuter cars). Construction emissions from these sources were estimated using emission factors provided by CalEEMod (version 2011.1.1) and other references outlined in Appendix A. Table 5 summarizes the results of the emissions modeling. Please refer to Appendix A for additional information on emissions modeling and quantification methods.

Table 5 Estimated Construction GHG Emissions (metric tons)

Construction Equipment			On-road Vehicles		CO ₂ e ^b
CO ₂	CH ₄	N ₂ O	CO ₂	Other ^a	
31.2	0.00	0.00	13.9	0.23	45.66
^a Includes CH ₄ , N ₂ O, and other trace GHGs emitted by on-road vehicles ^b Refers to carbon dioxide equivalents Source: CalEEMod (refer to Appendix A)					

As shown in Table 5, construction of the project would generate 46 metric tons (MT) carbon dioxide equivalent (CO₂e) over the 2-month construction period. The PCAPCD has not developed specific thresholds of significance for the analysis of GHG emissions in CEQA documents. The air district is currently collaborating with other air quality management agencies within the Sacramento Valley to develop a regional GHG threshold. A draft threshold is expected to be released in 2013 (Green pers. comm.).

In the absence of a quantitative significance threshold, PCAPCD's 2012 CEQA Guidelines recommend that GHG emissions be evaluated in relation to meeting Assembly Bill 32 (AB 32) GHG reduction goals and/or other GHG thresholds adopted by air districts within the state. AB 32, which was signed in 2006, codified the state's GHG emissions target by requiring that the state's GHG emission be reduced to 1990 levels by 2020. The Scoping Plan for AB 32 identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires the ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current"² emissions to be achieved by 2020.

Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which projects may have the potential to conflict with statewide efforts to reduce GHG emissions. Table 5 summarizes a selection of proposed and adopted GHG CEQA thresholds in California. These thresholds are region-specific and developed to evaluate operational GHG emissions, which are annual as opposed to temporary. Nevertheless, the thresholds provide a useful benchmark for evaluating the magnitude and potential significance of project-related emissions. As shown in Table 5, construction of the project would generate 46 MT of CO₂e, which is equivalent to adding nine passenger vehicles to the road during construction. Moreover, 46 MT is well below all mass emissions thresholds proposed within the state for compliance with AB 32 (see Table 6). Accordingly, GHG impacts caused by emissions from project construction would be less than significant.

² "Current" as it pertains to the AB 32 Scoping Plan is commonly understood as sometime between 2005 and 2008.

Table 6 Selection of Proposed or Adopted GHG CEQA Thresholds in California

Agency	Significance Thresholds (MTCO ₂ e/year for operations, unless otherwise noted)
BAAQMD (2011)	Thresholds Adopted but Withdrawn: Projects/Plans: Compliance with GHG reduction strategy; Projects: 1,100 MT or 4.6 MT/service population (SP)/year; Plans: 6.6 MT/SP/year; Stationary: 10,000 MTa
EKAPCD (2012)	Thresholds Adopted: Stationary: 25,000 MT/year; compliance with state or federal regulation; reduction of GHG emissions by 20% or more.
MDAQMD (2011)	Threshold Adopted: 100,000 MT/year and 548,000 pounds/day for construction and/or operational emissions
SDCAPCD (2012)	Draft Threshold: Stationary: 10,000 MT
SLOAPCD (2012)	Adopted Thresholds: Compliance with GHG reduction strategy; Projects: 1,150 MT; Plans: 4.9 MT/SP; Stationary Sources: 10,000 MT
SJVAPCD (2009)	Adopted Thresholds: Projects/Plans: Compliance with GHG reduction strategy; Projects: Implementation of best performance standards Projects: 29% reduction in GHG emissions relative to BAU conditions
<p>Thresholds originally proposed as part of the BAAQMD's 2010/2011 CEQA Guidelines, but withdrawn due to Alameda County Superior Court order that BAAQMD must prepare a CEQA document before it may adopt its CEQA guidelines.</p> <p>MTCO₂e = metric tons carbon dioxide equivalent BAAQMD = Bay Area Air Quality Management District EKAPCD = Eastern Kern Air Pollution Control District MDAQMD = Mojave Desert Air Quality Management District SDCAPCD = San Diego County Air Pollution Control District SLOAPCD = San Luis Obispo Air Pollution Control District SJVAPCD = San Joaquin County Air Pollution Control District</p>	

Operation

Implementation of the project would not affect vehicle operations, land use patterns, energy demand, or water use in the project area. Accordingly, the project would not increase long-term operational emissions associated with use of the trail, relative to existing conditions. However, as noted in Section III, *Air Quality*, minor asphalt sealing would be required once every seven years. GHG emissions generated by required asphalt maintenance would be minimal and would likely amount to less than 2 metric tons CO₂e every seven years. This is well below all adopted GHG thresholds. Accordingly, GHG impacts from project operations would be less than significant. No mitigation is required.

- b. **Less-Than-Significant Impact.** The City of Roseville has adopted the *City Operational Climate Action Plan (CAP)* to address GHG emissions generated by citywide infrastructure. The State has also adopted AB 32, which codifies the State's GHG emissions reduction targets for the future. Consistency with both documents is evaluated in this impact.

The City's CAP was adopted in 2009 and includes a GHG emissions reduction goal for citywide infrastructure based on a list of energy conservation measures. The proposed

project would not introduce any new energy, water, or transportation requirements on City infrastructure. Accordingly, the project would not create a new source of emissions or obstruct the City's ability to implement the GHG reduction efforts outlined in the adopted CAP.

ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32 goals. As discussed above, the Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. Some reductions will need to come in the form of changes pertaining to vehicle emissions and mileage standards. Some will come from changes pertaining to sources of electricity and increased energy efficiency at existing facilities. The remainder will need to come from plans, policies, or regulations that will require new facilities to have lower carbon intensities than they have under business-as-usual (BAU) conditions

The project would improve the connectivity of the existing bike system, which could encourage alternative modes of transportation and contribute to long-term GHG reductions. This measure is consistent with strategies identified in the AB 32 Scoping Plan, the City's CAP, and statewide goals to support neighborhood-oriented design.

Based on the review of project design features and estimated operational GHG emissions, implementation of the project is not expected to conflict with the City's CAP or AB 32. This impact would be less than significant. No mitigation is required.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
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 involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
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?				✓
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?				✓
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?				✓
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?				✓

Discussion of Checklist Answers:

a., b. **Less-Than-Significant Impact.** The proposed project would involve construction activities such as site preparation, grading, and paving. These activities would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as paints and adhesives. Because the proposed improvements are not extensive, both the types and amounts of products containing hazardous materials would be limited.

As part of the proposed project, the City will implement the following plans and special provisions to ensure construction of the project would not create a significant hazard to the public or environment.

- Comply with the City's Multi-Hazard Mitigation Plan (approved by the Federal Emergency Management Agency), which requires contractors to transport and store materials in appropriate and approved containers along designated truck routes, maintain required clearances, and handle materials using fire department-approved protocols, as illustrated in Roseville Fire Code Ordinance 4594.
- Implement a spill prevention and control plan to minimize the exposure of people and the environment to potentially hazardous materials. The spill prevention and control plan will ensure transport, storage, and handling of hazardous materials required for construction are consistent with relevant regulations and guidelines. Compliance with this uniformly applicable development regulation will avoid any potential effect.
- Comply with the City of Roseville Design and Construction Standards and the City's Stormwater Quality BMP Guidance Manual for Construction (2007), and implement the requirements of the PCFCWCD's Stormwater Management Manual (Placer County Flood Control and Water Conservation District 1994). Compliance with this uniformly applicable development regulation will avoid any potential effect.

In addition, the City of Roseville Fire Department is the Certified Unified Program Agency (CUPA) for Roseville. The Fire Department will review construction plans when finalized. The Fire Department is available to respond to hazardous materials complaints or emergencies, if any, during construction.

For these reasons, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and would not result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Implementation and compliance with the uniformly applicable plans, standards, and special provisions described above would reduce any potential impacts during construction to a less-than-significant level. No mitigation is required.

- c. **No Impact.** There are no public or private schools located within one-quarter mile of the project site. Construction would not generate hazardous air emissions or cause acutely hazardous substances to be handled within one-quarter mile of a school. No mitigation is required.
- d. **No Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No mitigation is required.
- e., f. **No Impact.** The project site is not located within an airport land use plan area, within 2 miles of an airport, or within the vicinity of a private airstrip. There would be no impact and no mitigation is required.
- g. **Less-Than-Significant Impact.** As noted in Section XVI, *Transportation/Traffic*, the City is not proposing any temporary lane closures to construct the project. However, as provided in the traffic control plan described in the Environmental Commitments, if the City determines that a short-term lane closure is required, traffic lane closures will be approved by the City Engineering Department and notification will be provided to the City Police and Fire Departments 48 hours in advance of any road closures. Therefore, the impact would be less than significant. No mitigation is required.
- h. **No Impact.** According to the California Department of Forestry and Fire Protection Placer County Fire Hazard Severity Zone (Fire) map, the proposed project site is not located in a fire hazard region (California Department of Forestry and Fire Protection 2007). There would be no impact associated with wildland fires. No mitigation is required.

IX. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in 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 that 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 that would result in substantial erosion or siltation onsite or offsite?			✓	
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 onsite or offsite?			✓	
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater 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 structures within a 100-year flood hazard area 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 the failure of a levee or dam?				✓
j. Contribute to inundation by seiche, tsunami, or mudflow?				✓

Discussion of Checklist Answers:

- a. **Less-Than-Significant Impact.** The project site is within the Pleasant Grove Creek-Cross Canal watershed. The applicable water quality standards and waste discharge requirements for the proposed project are the Water Quality Control Plan (Basin Plan) for the Sacramento Valley/San Joaquin Valley, the SWRCB's General Permit for Construction and Land Disturbance Activities, and the City of Roseville's Stormwater Management Program (SWMP), which implements a general permit from the Central Valley Regional Water Quality Control Board (CVRWQCB) for stormwater discharges.

Construction of the project would involve site preparation to remove existing vegetation, grading and compacting soil for the new bike trail, and installing base material and paving. Unfiltered stormwater runoff during construction would not be allowed to flow to any surface water bodies, but would be detained within the immediate area to allow it to percolate into the soil. The City's Grading Ordinance requires grading plans to include an erosion control plan to eliminate offsite flows of sediment and to reduce site erosion to protect water quality in the storm drain system and adjacent properties. The City would require the contractor to meet the requirement of the City's SWMP from the CVRWQCB. With implementation of the BMPs, the impact would be less than significant because the BMPs ensure compliance with Basin Plan water quality standards. Through compliance with regulatory standards and uniformly applicable development standards, this impact would be avoided. No mitigation is required.

The City of Roseville is responsible for ensuring the project design includes storm water quality best management practices in accordance with its Urban Stormwater Quality Management and Discharge Control Ordinance, where such measure are appropriate. These measures control increased peak flows from traditional developments such as residential subdivisions and parking lots. However, because the project would not involve construction of extensive impervious surfaces, such BMPs may not be required. The project engineer will evaluate whether the project is subject to the ordinance.

During operation of the bike trail, stormwater from the site would run off as sheet flow to adjoining areas, where it will percolate into the soil. The new trail would increase the rate and volume of runoff from the alignment area by only a small amount. This change in runoff from existing conditions is not substantial or significant. No mitigation is required.

- b. **No Impact.** The project site is located in the foothills North American Subbasin, overlying the eastern central portion of the Sacramento Valley Groundwater Basin, which has a total surface area of approximately 351,000 acres, or 548 square miles. Groundwater recharge in the basin occurs mostly by infiltration from the Sacramento, Feather, and Bear Rivers, and their tributaries. There are currently no artificial recharge areas for the North American Subbasin. The project site is vegetated and infiltration does not serve to recharge groundwater.

The project site would not substantially increase impermeable surface cover. Therefore, the proposed project would not 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. There would be no impact. No mitigation is required.

- c. **Less-Than-Significant Impact.** No stream courses exist on the project site proper. Pleasant Grove Creek flows as close as 40 feet from the project site and the bike trail will span a small, unnamed tributary to the creek near the trailhead. Drainage patterns at the site would not be appreciably altered. The trail would be crowned so that runoff would flow to both sides of the trail, where most of it is expected to percolate into the native soil. In addition, as described in Item a above, erosion and sedimentation would be controlled through implementation of required BMPs. The trail project would not result in any appreciable change in drainage patterns and the impact would be less than significant. No mitigation is required.
- d., e. **Less-Than-Significant Impact.** The rate and volume of stormwater runoff from the project site would not increase substantially due to project construction. Although the project would introduce a new impervious surface to the project site (i.e., the bike trail), the increased runoff from the trail would be generated from a small area relative to the undisturbed areas adjoining the trail. This condition is expected to have a very low potential to cause or exacerbate onsite or offsite flooding, other than small pools of water that form under the existing condition. The impact would be less than significant. No mitigation is required.
- f. **Less-Than-Significant Impact.** The bike trail alignment would pass within several feet of two small seasonal wetlands and one larger seasonal wetland, the latter a wetland that was created for mitigation in the 1990s. Unless properly protected using avoidance and erosion and sediment control practices, sediment from the construction area could reach these features and degrade their water quality. However, because the contractor would be required to implement appropriate BMPs as part of the Water Pollution Control Plan, the proposed project would not substantially degrade water quality. These development standards would reduce this impact to a less-than-significant level. No mitigation is required.
- g., h. **No Impact.** Parts of the project site are within Federal Emergency Management Agency Zone AE, which is a zone that would be inundated by a 100-year flood. However, because no housing or structures that could alter flood flows would be built as part of the project, there would be no impact. No mitigation is required.
- i. **No Impact.** The project would not introduce occupied structures to the floodplain. Therefore, there would be no substantial change in the existing level of risk of loss, injury, or death in the event of flooding at the project site. There would be no impact. No mitigation is required.

- j. **No Impact.** The project site is not located near an ocean coast or enclosed body of water that could produce a seiche or tsunami. It is not located near areas having steep slopes that would create mudflows. There would be no impact. No mitigation is required.

X. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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, a 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?				✓
d. Result in land use/operational conflicts between existing and proposed on-site or off-site land uses?				✓

Discussion of Checklist Answers:

a. **No Impact.** The development of a 1,600-foot, Class I bike trail on the proposed site would not physically divide an established community because the site is unoccupied. There would be no offsite improvements that would affect the single-family residential uses west of the project site. The proposed bike trail would unite established communities by improving the connectivity of the existing bicycle network. No mitigation is required.

b. **No Impact.** The applicable land use plan is the City of Roseville General Plan. The land use designation and zoning for the site is OS (Open Space). This zoning district is intended to protect public and private lands that are significant due to wildlife habitat, natural features, or flood hazard. Primary uses of OS land include passive recreation, walking and bike trails, and resource interpretive facilities (City of Roseville 2012). The proposed trail is identified as such in the Circulation Element of the 2025 General Plan and in the related 2008 Bicycle Master Plan. The project design has been reviewed by the City to ensure it incorporates and complies with the Roseville Municipal Code, including but not limited to sections regarding landscaping, lighting, recreation, and public signage. As noted in the project description, the trail would not be lighted.

Accordingly, the proposed project would be consistent with the intended function of the land use and zoning designation for the site and would not conflict with any policies intended to protect the environment. There would be no impact. No mitigation is required.

c. **No Impact.** There is no applicable habitat conservation plan or natural community conservation plan relevant to the project site. There would be no impact. No mitigation is required.

- d. **No Impact.** The proposed project is situated in an open space corridor that is currently an unpaved trail used by pedestrians and bicyclists. Light industrial land uses are adjacent to the eastern terminus of the bike trail, and residential subdivisions are approximately 0.15 mile to the northwest and southwest. The proposed project would be consistent with existing uses and surrounding land use context. As discussed in this initial study, the paved Class I trail would not be a substantial source of noise or air emissions, create a public safety risk, or cause an adverse change in the visual environment. Therefore, it would not result in land use or operational conflicts on- or offsite. There would be no impact. No mitigation is required.

XI. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact or Exempt per 21083.3
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?				✓

Discussion of Checklist Answers:

- a., b. **No Impact.** As stated in the Roseville General Plan, mineral resources, consisting of sand and gravel, are limited and no mineral extraction operations currently exist or are anticipated to exist in the City. The City of Roseville has not designated the site as a locally important mineral resource area. There would be no impact. No mitigation is required.

XII. NOISE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact or Exempt per 21083.3
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?			✓	
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
e. Be 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 public use airport and expose people residing or working in the project vicinity to excessive noise levels?				✓
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?				✓

Discussion of Checklist Answers:

a.,c.,d. **Less-Than-Significant Impact.** The proposed project would result in the construction of a 1,600-foot Class I bike trail on a project site predominantly surrounded by open space. The following evaluates the construction and operational impacts of the project.

The City has adopted the following uniformly applied development policies and regulations to limit exposure to excessive noise levels. The General Plan Noise Element has established Goals and Policies relating to evaluating noise impacts due to projects. The overall noise goal for the City is to protect the health and welfare of the community by promoting community development that is compatible with noise level criteria. The City Noise Element (2004) establishes noise standards for maximum allowable noise exposure due to transportation sources and performance standards for fixed noise sources. Transportation noise standards (60 dBA L_{dn} /CNEL) are applied at the outdoor activity area of noise-sensitive land use (residential). Fixed noise sources are not to exceed 50 dBA L_{eq} and 70 dBA L_{max} during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA L_{eq} and 65 dBA L_{max} during nighttime hours (10:00 p.m. to 7:00 a.m.) as measured at the property line of noise sensitive land uses, or exceed the ambient sound level by +3 dBA at the noise-sensitive land use property line, whichever is greater.

The City of Roseville Municipal Code, Health and Safety Ordinance Chapter 9.24 contains specific requirements for construction activities, stating that they are exempt from the provisions of the noise codes if all activities occur between 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. to 8:00 p.m. on Saturday and Sunday, provided that all construction equipment is fitted with factory-installed muffling devices and is maintained in good working order.

The primary source of noise in the existing project area is vehicular traffic on Foothills Boulevard. The light industrial buildings at the eastern terminus of the proposed bike trail may also represent a source of noise during business hours. The residential uses located to the west of the project site are potentially noise-sensitive uses in the project area. Open space between the sensitive receptors and the proposed bike trail would serve as a noise buffer and help to dampen potential increases in noise associated with construction and operation of the project.

Construction Impacts

Construction of the proposed project would be a source of temporary or periodic increases in ambient noise levels that could be audible to nearby sensitive receptors. The mix of equipment operating onsite would vary depending on the activity being conducted, and noise levels would vary based on the amount of equipment in operation and the location of the activity. As required by Chapter 9.24.030(G) of the City Code, construction activities would be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays, as discussed above. Chapter 9.24.030(G) also requires the use of exhaust and intake silencers for internal combustion engines used during construction to reduce noise levels associated with construction activities.

The City exempts noise associated with construction that occurs between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays because these hours are outside the recognized sleep hours for residents and outside evening and early morning hours and time periods where residents are most sensitive to exterior noise. Therefore, the proposed project would be exempt from the noise standards during these hours. No mitigation is required.

Operational Impacts

Operation of the proposed project would generate minimal noise from bicycle and recreational use of the trail. Noise generated by trail users would not be significant and would primarily occur during daytime hours. As noted in Section XVI, *Transportation/Traffic*, implementation of the proposed project would not affect traffic volumes on local roadways, and would therefore not cause a significant increase in noise relative to existing conditions. Because the project would not affect vehicular noise levels, impacts would be localized and exclusively associated with the trail users. Accordingly, the proposed project would not contribute to a permanent or temporary increase in ambient noise levels in the project

vicinity above existing conditions. This impact is less than significant as there would be no cumulative impact on noise levels. No mitigation is required.

- b. **Less-Than-Significant Impact.** Based on the Federal Transportation Administration's Transit Noise and Vibration Impact Assessment (2006) and the existing distance to adjacent sensitive receptors from the project site, groundborne vibration associated with the temporary construction activities (e.g., grading, paving) and operation of onsite construction equipment would not be considered substantial or excessive. This impact is less than significant. No mitigation is required.

- e., f. **No Impact.** The proposed project is not located within the immediate vicinity of an airport land use plan, within 2 miles of an airport, or within the vicinity of a private airstrip. There would be no impact. No mitigation is required.

XIII. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				✓
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				✓

Discussion of Checklist Answers:

- a. **No Impact.** The proposed project would connect an existing bike trail to a parking lot on Foothills Boulevard. The 1,600-foot bike trail extension would occur on a site currently used for open space and an unpaved trail. The project does not propose any new homes, businesses, or employment-generating uses, and therefore would not directly induce population growth. Moreover, the project would not indirectly induce population growth because it would not extend roads or infrastructure into previously undeveloped areas. Accordingly, there would be no impact. No mitigation is required.
- b., c. **No Impact.** There are no residences currently on the project site. The proposed project would not displace people or housing. Therefore, there would be no impact. No mitigation is required.

XIV. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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?				✓

Discussion of Checklist Answers:

- a., b. **Less-Than-Significant Impact.** The proposed project would introduce a 1,600-foot paved bike trail to a parcel that currently contains annual grasses and is surrounded by open space. Bicycle and pedestrian uses are already occurring along the existing unpaved trail. No increase in fire or police department staffing would be necessary to serve the project, as the proposed project would not increase the number of residents in the project vicinity or include operational elements that would contribute to increased risk of crime or fire. In addition, construction of the bike trail would not affect emergency access to the project area because there would be no lane closures or underground utility improvements. To the contrary, the paved trail would improve access for emergency vehicles (e.g., fire trucks in the case of a grass fire). Therefore, the proposed project would not result in the need for new or expanded police or fire department space, nor constrain the delivery of those services to the project area. This impact would be less than significant. No mitigation is required.
- c., d. **No Impact.** The proposed project would not result in a population increase that would require schools or parks. No mitigation is required.
- e. **No Impact.** The proposed project would expand the Class I bicycle network in the City, thereby resulting in a beneficial impact on the availability of recreational facilities in the project vicinity. No mitigation is required. Furthermore, the proposed project would not require any long-term maintenance or landscaping. Accordingly, there would be no impact on governmental facilities to accommodate the proposed project. No mitigation is required.

XV. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. 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. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			✓	

Discussion of Checklist Answers:

- a. **Less-Than-Significant Impact.** The proposed project would expand the Class I bicycle network in the City. The 1,600-foot extension may facilitate additional use of the existing bicycle network by connecting the existing trail to a parking lot on Foothills Boulevard. While the project would improve access to the City bicycle network, this use is consistent with the 2025 General Plan and was part of the assumptions of future use analyzed in the EIR for the General Plan. Implementing the project and improving local access to the bicycle network is not expected to substantially increase use of existing recreational facilities. This impact is considered less than significant, would not exceed previously analyzed levels, and no mitigation is necessary.

- b. **Less-Than-Significant Impact.** The proposed Class I bicycle trail is considered a passive recreational facility. The initial study analysis has determined that the construction of the proposed bike trail would have either no impact or a less-than-significant impact on the environment.

XVI. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 trails, 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 because of 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?			✓	

Discussion of Checklist Answers:

- a.,b.,d. **Less-Than-Significant Impact.** The proposed project would connect an existing Class I bike trail to the trailhead parking area on Foothills Boulevard. Development of the 1,600-foot bike trail connection would not result in changes in vehicle circulation patterns or induce a substantial number of new vehicle trips to the trailhead parking area on Foothills Boulevard. The proposed project would not alter the design of any roadways, and would therefore not include any design features that could result in increased safety hazards. This impact would be less than significant. No mitigation is required.
- c. **No Impact.** The proposed project would not result in a change in air traffic patterns because it is limited to construction and operation of a bicycle trail serving local residents. No mitigation is required.

- e. **No Impact.** The proposed project would not result in inadequate emergency access. The proposed Class I bike trail would provide access to the open space area and facilitate emergency access. There would be no impact and no mitigation is required.
- f. **Less-Than-Significant Impact.** The City of Roseville has established criteria for assessing whether a project would result in significant impacts on other transportation modes (public transit, bike, and walk). A significant impact would occur if the project would:
- result in the violation of the City's overall Level of Service goal, which is to maintain an adequate level of transportation service for all of Roseville's residents and employees through a balanced transportation system, which considers automobiles, transit, bicyclists, and pedestrians.

The proposed project is consistent with the 2025 General Plan and the 2008 Bicycle Master Plan that is a component of that Plan. As a result, it was included in the project analyzed in the General Plan EIR. The project would improve access to the City bicycle network by connecting an existing trail to the trailhead parking area on Foothills Boulevard. However, the 1,600-foot bike trail connection would not substantially increase demand for the bicycle network or affect the profile of transportation modes within the City in the context of the impacts analyzed in the General Plan EIR. Accordingly, this impact would be less than significant. No mitigation is required.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
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 would new or expanded entitlements be 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?			✓	

Discussion of Checklist Answers:

a.,b.,e. **No Impact.** The proposed project does not include the construction of any restrooms, and would therefore not involve production of any new wastewater. Consequently, Regional Water Quality Control Board wastewater treatment requirements would not have any bearing on the proposed project. Further, because the proposed project would not involve production of wastewater, it would have no effect on the need for construction of new water or wastewater treatment facilities or expansion of existing facilities. There would be no impact. No mitigation is required.

c. **Less-Than-Significant Impact.** The rate and volume of stormwater leaving the project site would slightly increase from the existing condition as result of constructing the bike trail, which would be a new impervious surface. However, because the new impervious surface area would be extremely small in proportion to the Pleasant Grove Creek watershed and because most of the runoff from the trail would tend to infiltrate into the adjoining soil, there

would be no need for the construction of new storm water infrastructure or the expansion of existing infrastructure. This impact would be less than significant. No mitigation is required.

- d. **No Impact.** The project would not require any ongoing water supplies. A small amount of water would be required during project construction for soil compaction and dust control. Accordingly, there would be no impact. No mitigation is required.

- f., g. **Less-Than-Significant Impact.** The Western Placer Waste Management Authority is a regional agency handling recycling and waste disposal for the City and surrounding areas. Their facilities include a Material Recovery Facility and the Western Regional Sanitary Landfill. Construction of the project would generate small amounts of solid waste, but this would not measurably affect landfill capacity because the amounts would not be substantial and would occur over a short period of time. As specified in the City's design/construction standards for solid waste (Section 151), the City will ensure that its contractor meets with the designated Roseville Environmental Utilities inspector prior to beginning work to ensure that an approved plan is in place to store and dispose of all construction debris, according to relevant federal, state, and local statutes. This impact would be less than significant. No mitigation is required.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		✓		
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 Checklist Answers:

- a. **Less Than Significant with Mitigation.** As stated in Section IV, *Biological Resources*, the proposed project would have no impact on habitat of a fish or wildlife species or population, no impact on any plant or animal community, and would not restrict the range of a rare or endangered plant or animal. In addition, as stated in Section V, *Cultural Resources*, with the adoption of proposed mitigation, the proposed project would not significantly affect examples of the major periods of California history or prehistory.
- b. **Less Than Significant with Mitigation.** The project’s impacts would not be cumulatively considerable. No mitigation is required to mitigate cumulative impacts.

For natural resource topics (aesthetics, agriculture and forest resources, biological resources, cultural resources, geology and soils, hydrology and water quality, and mineral resources), there would be no cumulative effects because no resources would be adversely affected, or the project effects would be localized and of limited extent. Similarly, the project would involve minimal use of hazardous materials, the risks of which are site-specific and are extensively regulated, and do not combine with similar effects to cause a cumulative effect.

The proposed project would not induce population growth or result in the development of new housing or employment-generating uses; therefore, it would not combine with other development to create a cumulative effect resulting in increased demand for services or utilities, the expansion of which could result in significant environmental effects.

- c. **Less than Significant with Mitigation.** There would be no significant direct or indirect adverse effects on human beings. There would be no significant increase in air emissions or noise levels as a result of the proposed project. For all other topics, there would be no impact, a less-than-significant impact, or mitigation would reduce impacts to a less-than-significant level.

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PERSONAL COMMUNICATIONS

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APPENDIX A
SUPPORTING TECHNICAL DOCUMENTATION:
AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Appendix A

Air Quality Modeling Details

This appendix discusses the approach and methodology used to assess construction emissions associated with the proposed project. The analysis evaluates maximum daily emissions to comply with Placer County Air Pollution Control District CEQA guidelines. Emissions analyzed include criteria pollutants and GHG emissions of CO₂, CH₄, and N₂O.

Construction Schedule

Construction would require seven phases between June and July 2014. Table A-1 outlines the expected construction schedule for each phase assumed in the emissions modeling.

Table A-1 Foothills Construction Sequence

Phase	Start Date	End Date	Total Days
Initial clearing	6/2/2014	6/6/2014	5
Rough-grading	6/9/2014	6/18/2014	8
Drainage and utilities	6/19/2014	6/25/2014	5
Finish grading	6/26/2014	6/30/2014	5
Paving	7/2/2014	7/4/2014	3
Installation of fencing and other facilities	7/5/2014	7/13/2014	6
Striping and final cleanup	7/16/2014	7/25/2014	8
Source: Siviglia pers. comm.			

Emissions Modeling

The CalEEMod (version 2011.1.1) emissions model was used to calculate exhaust emissions from heavy-duty construction equipment. Table A-2 summarizes the off-road equipment assumed in the emissions modeling. Equipment horsepower are based on CalEEMod default values. Default load factors within CalEEMod (version 2011.1.1) have been superseded by the default load factors within the revised Carl Moyer Program Guidelines, which were approved by the ARB on April 28, 2011. Accordingly, equipment load factors are based on latest Carl Moyer Program Guidelines (California Air Resources Board 2011a:236-237). All equipment was assumed to operate 8 hours per day.

Table A-2 Off-Road Equipment Modeling Assumptions

Phase	Equipment	Number per Day	Horsepower	Load Factor
Initial clearing	Excavator	1	157	0.38
	Backhoe	2	75	0.37
Rough-grading	Scraper	1	356	0.48
	Excavator	1	157	0.38
	Generator	1	84	0.42
	Backhoe	2	75	0.37
Drainage and utilities	Excavator	1	157	0.38
	Generator	1	84	0.42
	Backhoe	2	75	0.37
	Loader	1	87	0.36
Finish grading	Scraper	1	356	0.48
	Generator	1	84	0.42
	Backhoe	2	75	0.37
Paving	Paving Machine	1	89	0.42
	Steel Drum Roller	1	84	0.38
	Backhoe	2	75	0.37
Installation of fencing and other facilities	Skid Steer	1	37	0.37
	Generator	1	84	0.42
	Backhoe	2	75	0.37
Striping and final cleanup	Backhoe	1	75	0.37
	Generator	1	84	0.42

Source: Siviglia pers. comm.

Criteria pollutants generated by off-road equipment were calculated for each phase using the information summarized in Table A-2 and Equation A-1. Detailed calculation spreadsheets are provided in Attachment 1.

$$\text{Equation A-1} \quad E_{\text{phase}} = \sum(\text{Activity}_i \times \text{EF}_i \times \text{LF}_i \times \text{HP}_i) \times \text{Conv}$$

Where:

- E_{phase} = Total exhaust emissions for the phase, pounds per day
- Activity = Equipment activity, hours per day
- EF = Engine emissions factor, grams/horsepower-hour (CalEEMod)
- LF = Engine load factor, unitless (Carl Moyer Program)
- HP = Engine horsepower, unitless (CalEEMod)
- Conv = Conversion from grams to pounds, 0.002205
- i = Equipment type (Table A-2)

In addition to off-road equipment, project construction would require on-road vehicles for employee commute trips and material hauling. Emissions from on-road vehicle trips were estimated using the ARB's EMFAC2011 emissions model and the vehicle assumptions summarized in Table A-3. Trip distance, 10.8 miles, was based on CalEEMod default trip lengths for "home based work" trips in urban Placer County. Soil and material hauling would

occur during several phases, as outlined in Table A-3. Haul truck distance was assumed to be 50 miles per trip, based on information provided by the City of Roseville.

Table A-3 On-Road Vehicle Modeling Assumptions

Activity	Vehicle Type	Roundtrips per Day
Initial clearing	Employee Vehicle	8
	Haul Truck	3
Rough-grading	Employee Vehicle	20
	Haul Truck	3
Drainage and utilities	Employee Vehicle	10
	Haul Truck	2
Finish grading	Employee Vehicle	8
	Haul Truck	8
Paving	Employee Vehicle	15
	Haul Truck	7
Installation of fencing and other facilities	Employee Vehicle	6
	Haul Truck	2
Striping and final cleanup	Employee Vehicle	5
	Haul Truck	2
Source: Siviglia pers. comm.		

Criteria pollutants generated by on-road vehicle trips were calculated for each phase using the information summarized above and Equation A-2. Detailed calculation spreadsheets are provided in Attachment 1.

$$\text{Equation A-2} \quad E_{\text{phase}} = \Sigma(\text{Activity}_i \times \text{Distance}_i \times \text{EF}_i) \times \text{Conv}$$

Where:

- E_{phase} = Total exhaust emissions for the phase, pounds per day
- Activity = Vehicle trips, trips per day (Table A-3)
- Distance = Vehicle length, miles per trip (CalEEMod; City of Roseville)
- EF = Engine emissions factor, grams/mile (EMFAC2011)
- Conv = Conversion from grams to pounds, 0.002205
- i = Vehicle type

Rough-grading and finish grading would require site modification. Fugitive dust emissions generated by these activities were estimated using CalEEMod. Based on information provided by the City of Roseville, a maximum of 0.25 acre would be disturbed during these phases.

Minor asphalt paving would occur during the paving phase. Based on the project acreage, a total of 0.73 acre was assumed to be paved during this phase.

References

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Siviglia, Z. Project Manager. Mark Thomas & Company, Roseville, CA. Email message to Laura Yoon, ICF International.

Attachment 1 Calculation Details

Table A. Off-Road Equipment Calculations

Equipment	#	HP	Fuel	Hrs/Day	Year	LF	g/hp-hr (CalEEMod)						Pounds/day (load factor*horsepower*hours/day* g/hp-hr*number*lbs/gram)						MT/Day					
							TOG	ROG	CO	NO _x	SO ₂	PM10	PM2.5	TOG	TOG	ROG	CO	NO _x	SO ₂	PM10	PM2.5	CO ₂	CH ₄	N ₂ O
Excavator	1	157	Diesel	8	2014	0.38	9.25	0.77	3.97	4.89	0.01	0.40	0.40	568.30	9.7	0.8	4.2	5.1	0.0	0.4	0.4	0.3	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Scraper	1	356	Diesel	8	2014	0.48	5.58	0.54	2.01	4.62	0.01	0.18	0.18	568.30	16.8	1.6	6.0	13.9	0.0	0.5	0.5	0.8	0.0	0.0
Excavator	1	157	Diesel	8	2014	0.38	9.25	0.77	3.97	4.89	0.01	0.40	0.40	568.30	9.7	0.8	4.2	5.1	0.0	0.4	0.4	0.3	0.0	0.0
Generator	1	84	Diesel	8	2014	0.42	14.64	0.72	3.53	5.15	0.01	0.39	0.39	568.30	9.1	0.4	2.2	3.2	0.0	0.2	0.2	0.2	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Excavator	1	157	Diesel	8	2014	0.38	9.25	0.77	3.97	4.89	0.01	0.40	0.40	568.30	9.7	0.8	4.2	5.1	0.0	0.4	0.4	0.3	0.0	0.0
Generator	1	84	Diesel	8	2014	0.42	14.64	0.72	3.53	5.15	0.01	0.39	0.39	568.30	9.1	0.4	2.2	3.2	0.0	0.2	0.2	0.2	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Loader	1	87	Diesel	8	2014	0.36	8.10	0.87	3.97	5.45	0.01	0.46	0.46	568.30	4.5	0.5	2.2	3.0	0.0	0.3	0.3	0.1	0.0	0.0
Scraper	1	356	Diesel	8	2014	0.48	5.58	0.54	2.01	4.62	0.01	0.18	0.18	568.30	16.8	1.6	6.0	13.9	0.0	0.5	0.5	0.8	0.0	0.0
Generator	1	84	Diesel	8	2014	0.42	14.64	0.72	3.53	5.15	0.01	0.39	0.39	568.30	9.1	0.4	2.2	3.2	0.0	0.2	0.2	0.2	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Paving Machine	1	89	Diesel	8	2014	0.42	10.77	1.08	4.12	6.53	0.01	0.56	0.56	568.30	7.1	0.7	2.7	4.3	0.0	0.4	0.4	0.2	0.0	0.0
Steel Drum Roller	1	84	Diesel	8	2014	0.38	19.33	0.89	3.88	5.69	0.01	0.48	0.48	568.30	10.9	0.5	2.2	3.2	0.0	0.3	0.3	0.1	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Skid Steer	1	37	Diesel	8	2014	0.37	4.06	0.99	4.89	4.81	0.01	0.30	0.30	568.30	1.0	0.2	1.2	1.2	0.0	0.1	0.1	0.1	0.0	0.0
Generator	1	84	Diesel	8	2014	0.42	14.64	0.72	3.53	5.15	0.01	0.39	0.39	568.30	9.1	0.4	2.2	3.2	0.0	0.2	0.2	0.2	0.0	0.0
Backhoe	2	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	5.7	0.7	3.8	4.6	0.0	0.4	0.4	0.3	0.0	0.0
Generator	1	84	Diesel	8	2014	0.42	14.64	0.72	3.53	5.15	0.01	0.39	0.39	568.30	9.1	0.4	2.2	3.2	0.0	0.2	0.2	0.2	0.0	0.0
Backhoe	1	75	Diesel	8	2014	0.37	5.85	0.70	3.85	4.67	0.01	0.37	0.37	568.30	2.9	0.3	1.9	2.3	0.0	0.2	0.2	0.1	0.0	0.0

Table B. On-road Calculations

Equipment	Number per Day	Total Trips	Fuel Type	Mi/round trip	VMT/day	Year	EMFAC name	g/mi								Pounds per Day (g/mi*mi/day*lbs/g)						MT/Phase			
								TOG	ROG	CO	NO _x	SO ₂	PM10	PM2.5	CO ₂	Other	TOG	ROG	CO	NO _x	SO ₂	PM10	PM2.5	CO ₂	Other
Employee Vehicle	8	40	G/D	21.6	173	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.02	0.6	0.1	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	3	15	D	50	150	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.2	0.2	0.7	4.3	0.0	0.1	0.1	1	0.0
Employee Vehicle	20	160	G/D	21.6	432	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.1	0.1	1.6	0.1	0.0	0.0	0.0	1	0.1
Dump Truck, Standard	3	20	D	50	125	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.1	0.1	0.6	3.6	0.0	0.1	0.1	2	0.0
Employee Vehicle	10	50	G/D	21.6	216	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.0	0.8	0.1	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	2	10	D	50	100	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.1	0.1	0.5	2.9	0.0	0.1	0.1	1	0.0
Employee Vehicle	8	40	G/D	21.6	173	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.0	0.6	0.1	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	8	40	D	50	400	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.4	0.4	1.9	11.5	0.0	0.2	0.2	3	0.0
Employee Vehicle	15	45	G/D	21.6	324	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.0	1.2	0.1	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	7	20	D	50	333	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.3	0.3	1.6	9.6	0.0	0.2	0.2	2	0.0
Employee Vehicle	6	36	G/D	21.6	130	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	2	10	D	50	83	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.1	0.1	0.4	2.4	0.0	0.1	0.0	1	0.0
Employee Vehicle	5	40	G/D	21.6	108	2014	LDA/LDT	0.07	0.05	1.64	0.15	0.00	0.00	0.00	310.36	14.74	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0	0.0
Dump Truck, Standard	2	15	D	50	94	2014	T7 Tractor	0.46	0.46	2.16	13.04	0.02	0.28	0.26	1729.86	15.81	0.1	0.1	0.4	2.7	0.0	0.1	0.1	1	0.0

APPENDIX B
SPECIAL-STATUS SPECIES IDENTIFIED DURING THE
PREFIELD INVESTIGATION AS OCCURRING IN THE
PROJECT REGION

Table B-1. Special-Status Plants Identified During the Prefield Investigation as Occurring in the Project Region

Species	Status ^a			Distribution	Habitat Associations & Elevation Range	Period of Identification	Potential for Occurrence in the Study Area
	Federal	State	CRPR ¹				
California balsamroot (<i>Balsamorhiza macrolepis</i>)	—	—	1B.2	Scattered occurrences in the Coast Ranges and Sierra Nevada Foothills	Sometimes on serpentine soils in chaparral, cismontane woodland, valley and foothill grassland; 90–1,555 meters	March–June	Low
Hispid bird's-beak (<i>Chloropyron molle</i> ssp. <i>hispidum</i>)	—	—	1B.1	Central Valley in Alameda, Fresno, Kern, Merced, Placer, and Solano Counties	Meadow and seeps, valley and foothill grassland, playa, on alkaline soils; 1–155 meters	June–September	None
Brandegee's clarkia (<i>Clarkia biloba</i> ssp. <i>brandegeae</i>)	—	—	4.2	Northern Sierra Nevada foothills from Butte to El Dorado Counties	Chaparral, cismontane woodland, lower coniferous forest, often on roadcuts; 75–915 meters	May–July	None
Dwarf downingia (<i>Downingia pusilla</i>)	—	—	2.2	Central Valley	Vernal pools and mesic valley and foothill grasslands; below 445 meters	March–May	Low
Stinkbells (<i>Fritillaria agrestis</i>)	—	—	4.2	Alameda, Contra Costa, Fresno, Kern, Mendocino, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, San Luis Obispo, San Mateo, Stanislaus, and Tuolumne Counties	Chaparral, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland, on clay, sometimes serpentinite substrate; 10–1,555 meters	March–June	Low
Boggs Lake hedge-hyssop (<i>Gratiola heterosepala</i>)	—	E	1B.2	Inner North Coast Ranges, Central Sierra Nevada Foothills, Sacramento Valley and Modoc Plateau in Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, and Tehama Counties; also Oregon	Clay soils in areas of shallow water, lake margins of swamps and marshes, vernal pool margins; 10–2,375 meters	April–August	Low
Ahart's dwarf rush (<i>Juncus leiospermus</i> var. <i>ahartii</i>)	—	—	1B.2	Eastern Sacramento Valley, northeastern San Joaquin Valley with occurrences in Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba Counties	Wet areas in valley and foothill grassland, vernal pool margins; 30–229 meters	March–May	Low

¹ In March, 2010, DFG changed the name of “CNPS List” or “CNPS Ranks” to “California Rare Plant Rank” (or CRPR). This was done to reduce confusion over the fact that CNPS and DFG jointly manage the Rare Plant Status Review groups (300+ botanical experts from government, academia, nongovernmental organizations, and the private sector) and that the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

Table B-1. Continued

Species	Status ^a			Distribution	Habitat Associations & Elevation Range	Period of Identification	Potential for Occurrence in the Study Area
	Federal	State	CRPR ¹				
Red Bluff dwarf rush (<i>Juncus leiospermus</i> var. <i>leiospermus</i>)	—	—	1B.1	Northern Sacramento Valley and Cascade Range foothills with occurrences in Butte, Placer, Shasta, and Tehama Counties	Seasonally wet areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; 35–1,020 meters	March–May	Low
Legenere (<i>Legenere limosa</i>)	—	—	1B.1	Primarily in the lower Sacramento Valley, also from North Coast Ranges, northern San Joaquin Valley, and the Santa Cruz Mountains	Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 880 meters	April–June	Low
Pincushion navarretia (<i>Navarretia myersii</i> ssp. <i>myersii</i>)	—	—	1B.1	Central Valley in Amador, Calaveras, Merced, Placer, and Sacramento Counties	Edges of vernal pools; 20–330 meters	April–May	Low
Sacramento Orcutt grass (<i>Orcuttia viscida</i>)	E	E	1B.1	Endemic to Sacramento County	Vernal pools; 30–100 meters	April–July	Low
Sanford's arrowhead (<i>Sagittaria sanfordii</i>)	—	—	1B.2	Scattered locations in Central Valley and Coast Ranges	Freshwater marshes, sloughs, canals, and other slow-moving water habitats; below 650 meters	May–Oct	None

^a Status explanations:

Federal

E = Listed as endangered under the federal Endangered Species Act.

— = No listing status.

State

E = Listed as endangered under the California Endangered Species Act.

— = No listing status.

California Rare Plant Rank

1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

2 = List 2 species: rare, threatened, or endangered in California but more common elsewhere.

4 = List 4 species: species has limited distribution and is on a watch list

Threat Code Extentions

.1 = seriously endangered in California (over 80% of occurrences threatened—high degree and immediacy of threat).

.2 = fairly endangered in California (20–80% occurrences threatened).

Table B-2. Special-Status Wildlife Species Identified during the Prefield Investigation as Potentially Occurring in the Project Region

Species	Status ^a		California Distribution	Habitats	Potential for Occurrence in the Study Area
	Federal	State			
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T	—	Central Valley, central and South Coast Ranges from Tehama to Santa Barbara Counties; isolated populations in Riverside County	Vernal pools; also sandstone rock outcrop pools	Moderate—seasonal wetlands in the study area provide potential habitat for this species. Closest known occurrence is 0.25 mile to the east (CNDDDB 2013).
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	E	—	Shasta to Merced Counties	Vernal pools and ephemeral stock ponds, often deep and turbid	Moderate—seasonal wetlands in the study area provide potential habitat for this species. The closest known occurrence is more than 10 miles southwest from the study area (CNDDDB 2013).
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	T	—	Streamside habitats below 3,000 feet above sea level through Central Valley	Riparian and oak savanna habitats with elderberry shrubs; elderberries are host plant	None—no elderberry shrubs were identified on or within 100 feet of the trail alignment and temporary work area.
Western spadefoot (<i>Spea hammondi</i>)	—	SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	Moderate—seasonal wetlands in the study area provide potential habitat for this species. Closest known occurrence is 3 mile to the southwest (CNDDDB 2013).
California red-legged frog (<i>Rana aurora draytoni</i>)	T	SSC	Along the coast and coastal mountain ranges from Humboldt to San Diego Counties; Sierra Nevada (mid-elevations [generally above 1,000 feet above sea level] from Butte to Fresno Counties)	Permanent and semipermanent aquatic habitats, such as creeks and coldwater ponds, with emergent and submergent vegetation and riparian species along the edges; may estivate in rodent burrows or cracks during dry periods	None—Pleasant Grove Creek upstream and downstream of the study area flows through a highly urban setting within the greater Sacramento Valley. Red-legged frogs are presumed to be extirpated from the valley floor. The closest known occurrences are within the Sierra Nevada foothills more than 35 miles northeast from the study area (CNDDDB 2013).
Pacific pond turtle (<i>Actinemys marmorata</i>)	—	SSC	From Oregon border of Del Norte and Siskiyou Counties south along coast to San Francisco Bay, inland through Sacramento Valley, and on the western slope of the Sierra Nevada; range overlaps with that of southwestern pond turtle through the Delta and Central Valley to Tulare County	Woodlands, grasslands, and open forests; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation	High—suitable aquatic habitat occurs in Pleasant Grove Creek and an unnamed stream in the study area; grassland habitat within the proposed trail alignment and temporary work area is heavily disturbed from existing recreational uses and would not provide suitable nesting habitat for pond turtles.

Table B-2. Continued

Species	Status ^a		California Distribution	Habitats	Potential for Occurrence in the Study Area
	Federal	State			
White-tailed kite (<i>Elanus leucurus</i>)	—	FP	Lowland areas west of Sierra Nevada from the head of Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging	High—suitable nesting habitat (large trees in the vicinity of Pleasant Grove Creek) and foraging habitat (annual grassland) is present within the study area. Species is known to nest along Pleasant Grove Creek in the project vicinity.
Northern harrier (<i>Circus cyaneus</i>)	—	SSC	Throughout lowland California; has been recorded in fall at high elevations	Grasslands, meadows, marshes, and seasonal and agricultural wetlands providing tall cover	Moderate—tall grasses in the study area could provide suitable nesting habitat for northern harriers.
Sharp-shinned hawk (<i>Accipiter striatus</i>)	—	SSC	Permanent resident in the Sierra Nevada, Cascade, Klamath, and North Coast Ranges at mid-elevations and along the coast in Marin, San Francisco, San Mateo, Santa Cruz, and Monterey Counties; winters over the rest of the state except very high elevations	Dense canopy ponderosa pine or mixed-conifer forest and riparian habitats	Low—does not nest in the project region; possible winter migrant.
Swainson's hawk (<i>Buteo swainsoni</i>)	—	T	Lower Sacramento and San Joaquin Valleys, Klamath Basin, and Butte Valley; the state's highest nesting densities occur near Davis and Woodland, in Yolo County	Nests in oaks, cottonwoods, and other native and nonnative trees in riparian habitats, roadside trees, and lone trees; forages in grasslands, irrigated pastures, and grain fields	Moderate—suitable nesting habitat (large trees in the vicinity of Pleasant Grove Creek) and foraging habitat (annual grassland) is present within the study area. Closest documented nesting is 1.5 miles west of study area along Pleasant Grove Creek (CNDDDB 2013).
Western burrowing owl (<i>Athene cunicularia hypugea</i>)	—	SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Rodent burrows in sparse grassland, desert, and agricultural habitats	None—burrowing owls are not expected to occur within the study area based on the large number of trees (perching sites for avian predators) and high degree of existing disturbance from recreational use.
California yellow warbler (<i>Dendroica petechia brewsteri</i>)	—	SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high elevations in the Sierra Nevada; winters along the Colorado River and in parts of Imperial and Riverside Counties; two small permanent populations in San Diego and Santa Barbara Counties	Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral; may also use oaks, conifers, and urban areas near streamcourses	Low—could migrate through the project area; riparian habitat along Pleasant Grove Creek and unnamed stream within the study area provide marginal nesting habitat based on the patchy nature of the habitat.

Table B-2. Continued

Species	Status ^a		California Distribution	Habitats	Potential for Occurrence in the Study Area
	Federal	State			
Yellow-breasted chat (<i>Icteria virens</i>)	—	SSC	Uncommon migrant; nests in a few locations with appropriate habitat, such as Sweetwater and Weber Creeks, El Dorado County; Pit River, Shasta County; Russian River, Sonoma County; Little Lake Valley, Mendocino County; and upper Putah Creek, Yolo County	Nests in dense riparian habitats dominated by willows, alders, Oregon ash, tall weeds, blackberry vines, and grapevines	Low—could migrate through the project area; riparian habitat along Pleasant Grove Creek and unnamed stream within the study area provide marginal nesting habitat based on the patchy nature of the habitat.
Tricolored blackbird (<i>Agelaius tricolor</i>)	—	SSC	Largely endemic to California; permanent residents in the Central Valley from Butte to Kern Counties and at scattered coastal locations from Marin to San Diego Counties; breeds at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; nesting habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony; requires large foraging areas, including marshes, pastures, agricultural wetlands, dairies, and feedlots, where insect prey is abundant	None—no suitable nesting habitat present in the study area.
Purple martin (<i>Progne subis</i>)	—	SSC	Coastal mountains south to San Luis Obispo County, west slope of the Sierra Nevada, and northern Sierra and Cascade ranges. Absent from the Central Valley except in Sacramento region. Isolated, local populations in southern California.	This species develops colonial nests in cavities of large trees in oak or riparian woodlands and low-elevation coniferous forests. It often nests in old woodpecker cavities in dead snags, but with the extensive loss of mature riparian trees throughout much of their range in California, martins have begun using human-made structures such as buildings, bridges, and highway overpasses. Martins forage in open areas, most often near water.	Low—large trees with woodpecker holes are present within the study area but preferential substrate (snags and concrete bridges with drain holes) are not present. Closest known nesting colony is located on the State Route 65/Interstate 80 overcrossing 4 miles southeast from the study area (CNDDDB 2013).
Pallid bat (<i>Antrozous pallidus</i>)	—	SSC	Throughout California except the high Sierra from Shasta to Kern Counties and the northwest coast, primarily at lower and mid-elevations	Occurs in a variety of habitats from desert to coniferous forest; most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California; relies heavily on trees for roosts	Moderate—suitable tree-roosting habitat is present within the study area along Pleasants Grove Creek and an intermittent stream.
Yuma myotis (<i>Myotis yumanensis</i>)	—	CSC	Throughout California from low elevation to 5,000 feet in southern and central California, lower elevations in northern California	Roosts colonially in a variety of natural and artificial sites, including caves, mines, buildings, bridges, and trees; in northern California, maternity colonies are usually in fire-scarred redwoods, pines, or oaks; forages for insects over water bodies	Moderate—suitable tree-roosting habitat is present within the study area along Pleasant Grove Creek and an intermittent stream.

Table B-2. Continued

Species	Status ^a		California Distribution	Habitats	Potential for Occurrence in the Study Area
	Federal	State			
Western red bat (<i>Lasurus blossevillii</i>)	—	CSC	Throughout California from low elevation to 4,000 feet	Occurs in forested and riparian habitats; roosts almost exclusively in trees and is not colonial	Moderate—suitable tree-roosting habitat is present within the study area along Pleasant Grove Creek and an intermittent stream.

^a Status definitions:

Federal

- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.
- = no listing status.

State

- T = listed as threatened under the California Endangered Species Act.
- FP = fully protected under the California Fish and Game Code.
- SSC = species of special concern in California.
- CSC = Present on Draft Revised List of Species of Special Concern Published by DFG.
- = no listing status.