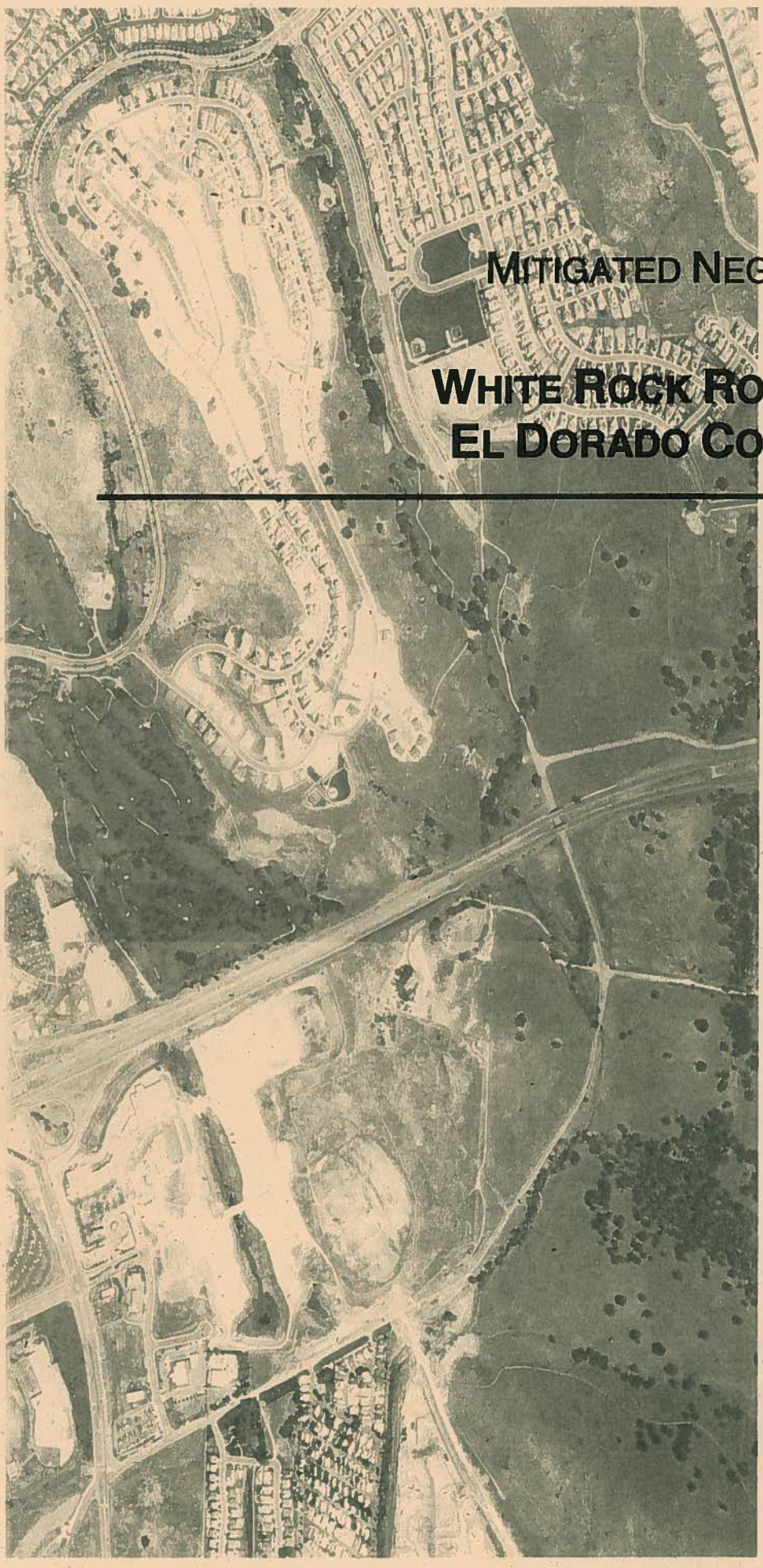

MITIGATED NEGATIVE DECLARATION

WHITE ROCK ROAD EAST PROJECT
EL DORADO COUNTY, CALIFORNIA

PREPARED FOR:

EL DORADO COUNTY
2850 FAIRLANE COURT
PLACERVILLE, CALIFORNIA 95667

PREPARED BY:

PMC
PACIFIC MUNICIPAL CONSULTANTS

NOVEMBER 2002

MITIGATED NEGATIVE DECLARATION
FOR THE
WHITE ROCK ROAD EAST PROJECT
EL DORADO COUNTY, CALIFORNIA

Prepared for:

EL DORADO COUNTY
2850 Fairlane Court
Placerville, CA 95667

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NOVEMBER 2002

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1.0 Introduction

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study and Mitigated Negative Declaration (MND) prepared pursuant to the California Environmental Quality Act (CEQA), for the proposed modifications to the White Rock Road East Project. This MND has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000 *et seq.*, and the CEQA Guidelines.

An initial study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, Section 15064, an environmental impact report (EIR) must be prepared if the initial study indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and, therefore, why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

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

b) *The initial study identified potentially significant effects, but:*

(1) *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*

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

If revisions are adopted into the proposed project in accordance with the CEQA Guidelines Section 15070(b), a mitigated negative declaration is prepared.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on these criteria, El Dorado County will serve as lead agency for the proposed modifications to the White Rock Road East Project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study and draft Mitigated Negative Declaration is to evaluate the potential environmental impacts of the proposed modifications to the White Rock Road East Project.

This document is divided into the following sections:

- **1.0 Introduction** - Provides an introduction and describes the purpose and organization of this document;
- **2.0 Project Description** - Provides a detailed description of the proposed project;
- **3.0 Environmental Setting, Impacts and Mitigation Measures** - Describes the environmental setting for each of the environmental subject areas, evaluates a range of impacts classified as "no impact," "less than significant," or "potentially significant unless mitigation incorporated" in response to the environmental checklist, and provides mitigation measures, where appropriate, to mitigate potentially significant impacts to a less than significant level;
- **4.0 Cumulative Impacts** - Includes a discussion of cumulative impacts of this project.
- **5.0 Determination** - Provides the environmental determination for the project;
- **6.0 Report Preparation and Consultations** - Identifies staff and consultants responsible for preparation of this document, persons and agencies consulted, and references.
- **7.0 References** – List of references use by the MND.
- **Appendices** – Air Quality Analysis, Plant and Wildlife Species and Archaeological Investigations for the White Rock Road Project.

2.0 Project Description

2.1 PROJECT LOCATION

The White Rock Road East project (proposed project) is located in western El Dorado County and within the unincorporated community of El Dorado Hills (see **Figures 2-1** and **2-2**).

White Rock Road is located south of U.S. Highway 50 (US 50) and has a road classification of Rural Minor Arterial. Latrobe Road, which is a primary transportation corridor in El Dorado County, provides regional access from White Rock Road to US 50.

The project is located along portions of White Rock Road and Silva Valley Road (herein referred to as White Rock Road East). The proposed project would occur on White Rock Road beginning at the intersection of Latrobe Road and White Rock Road, which is located approximately 0.4 miles south of US 50, continuing northeast to Joeger Cutoff Road, north under the Clarksville Underpass of US 50, and terminating at the intersection of Silva Valley Parkway and Silva Valley Road, which is approximately 0.25 miles north of Highway 50. The total length of the project is approximately 1 mile.

2.2 BACKGROUND

The proposed project would respond to present congestion, decreasing levels of service, and anticipated future demands of motor vehicle traffic on White Rock Road East and surrounding roadways in the general vicinity of Serrano, Town Center East, and Creekside Greens. A map of other surrounding developments in the vicinity of the proposed project is provided in **Figure 2-3**.

PREVIOUS ENVIRONMENTAL STUDIES AND DOCUMENTS

Portions of White Rock Road have been previously evaluated in the following environmental documents:

- Latrobe Road Realignment, Widening and Bridge Project Mitigated Negative Declaration (2001);
- Valley View Specific Plan Environmental Impact Report (1998);
- Town Center East Mitigated Negative Declaration (1995);
- Creekside Greens Mitigated Negative Declaration (1995);
- Silva Valley Parkway Interchange with U.S. Highway 50 Environmental Impact Report (1990); and,
- El Dorado Hills Specific Plan Environmental Impact Report (1987).

Related traffic improvement projects in the vicinity of White Rock Road East include Latrobe Road and Silva Valley Parkway Interchange. The *Silva Valley Parkway Interchange with U.S. Highway 50 EIR* and the *Latrobe Road Realignment, Widening and Bridge Project MND* evaluated the environmental impacts associated with the Latrobe Road and Silva Valley Parkway Interchange projects. A summary of these projects and how they relate to White Rock Road is provided below.

- The *Latrobe Road Realignment, Widening and Bridge Project Mitigated Negative Declaration* (2001) evaluated the widening of White Rock Road between Town Center Boulevard and Dunlap Ranch Road. The section of White Rock Road that was evaluated in the Mitigated Negative Declaration includes 0.75 miles west of Latrobe Road, improvements to the intersection of White Rock Road East and Latrobe Road, and the portion of roadway located within 0.33 miles east of the intersection. The document evaluated widening the previously described portion of White Rock Road to a four-lane divided roadway, intersection improvements at Latrobe Road, Class II bike lanes, median drainage improvements, and realignment west of its intersection with Latrobe Road. Improvements have already been made to this portion of White Rock Road.

- The *Silva Valley Parkway Interchange with U.S. Highway 50 EIR* (1990) evaluated two alternatives for the alignment of the Silva Valley Parkway Interchange, including the Underpass Design and the Ridge Design. The Underpass Design would effect a portion of White Rock Road East from south of US 50 at the alignment of Joeger Cutoff Road to the proposed alignment with Silva Valley Parkway. Whereas, the Ridge Design would impact the stretch of White Rock Road between the curve (at the corner where the Valley View Specific Plan area and Creekside Greens meet) and the US 50 underpass. The Ridge Design would also require reconstructing a portion of the roadway south of the freeway to provide access to private property. The Ridge Design was selected as the preferred design for the approved interchange.

The mitigated negative declarations for the approved development projects of Town Center East and Creekside Greens evaluated the segment of White Rock Road between Latrobe Road and their eastern property lines, including the environmental impacts on Dusty Creek and the ultimate 130-foot right-of-way of White Rock Road East.

The *Town Center East Mitigated Negative Declaration* evaluated improvements to White Rock Road, including construction of six travel lanes and the box culvert crossing at White Rock Road and adjacent to Town Center East (El Dorado County, Town Center East Mitigated Negative Declaration, 1995).

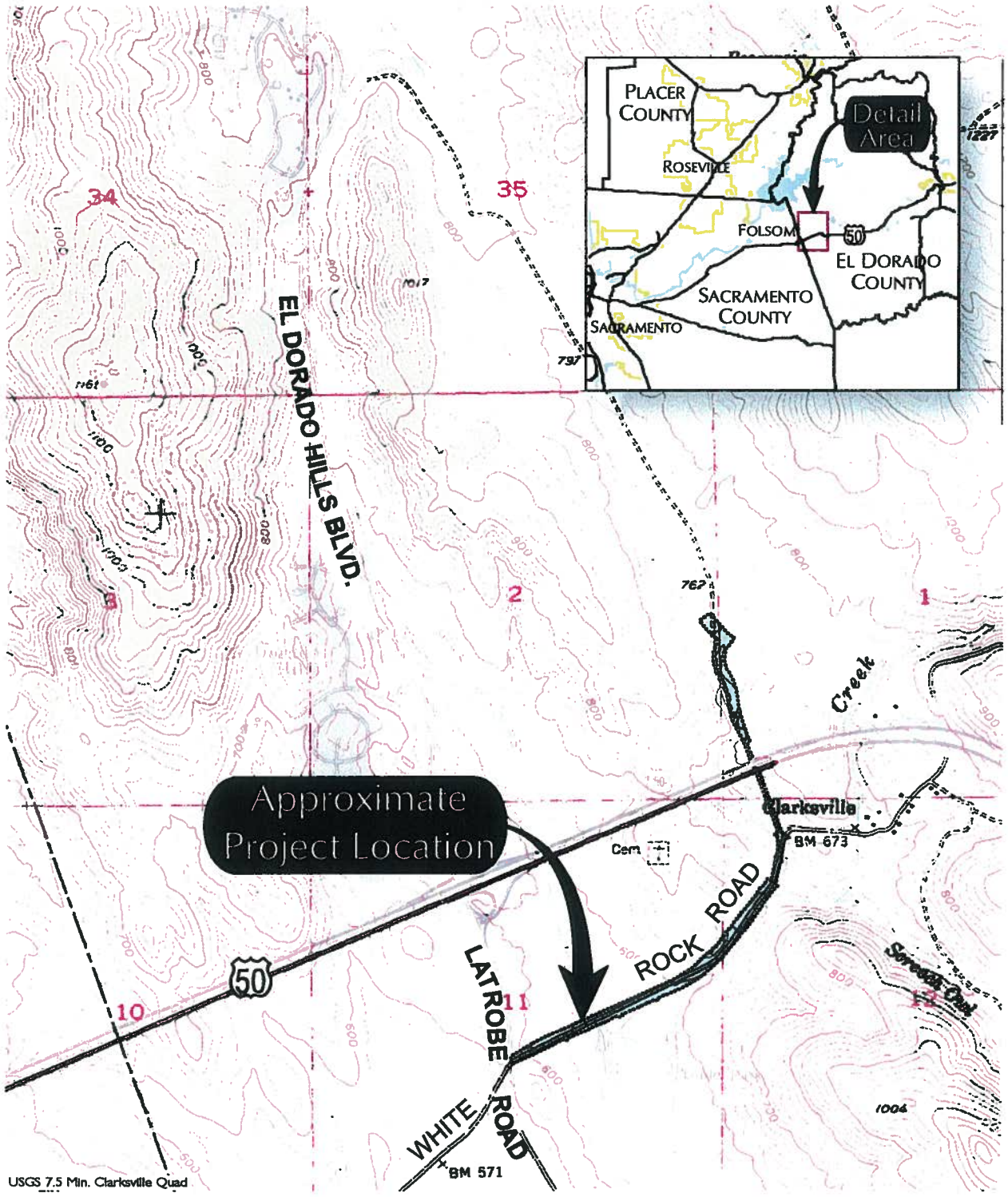


FIGURE 2-1.CDR 08/20/02

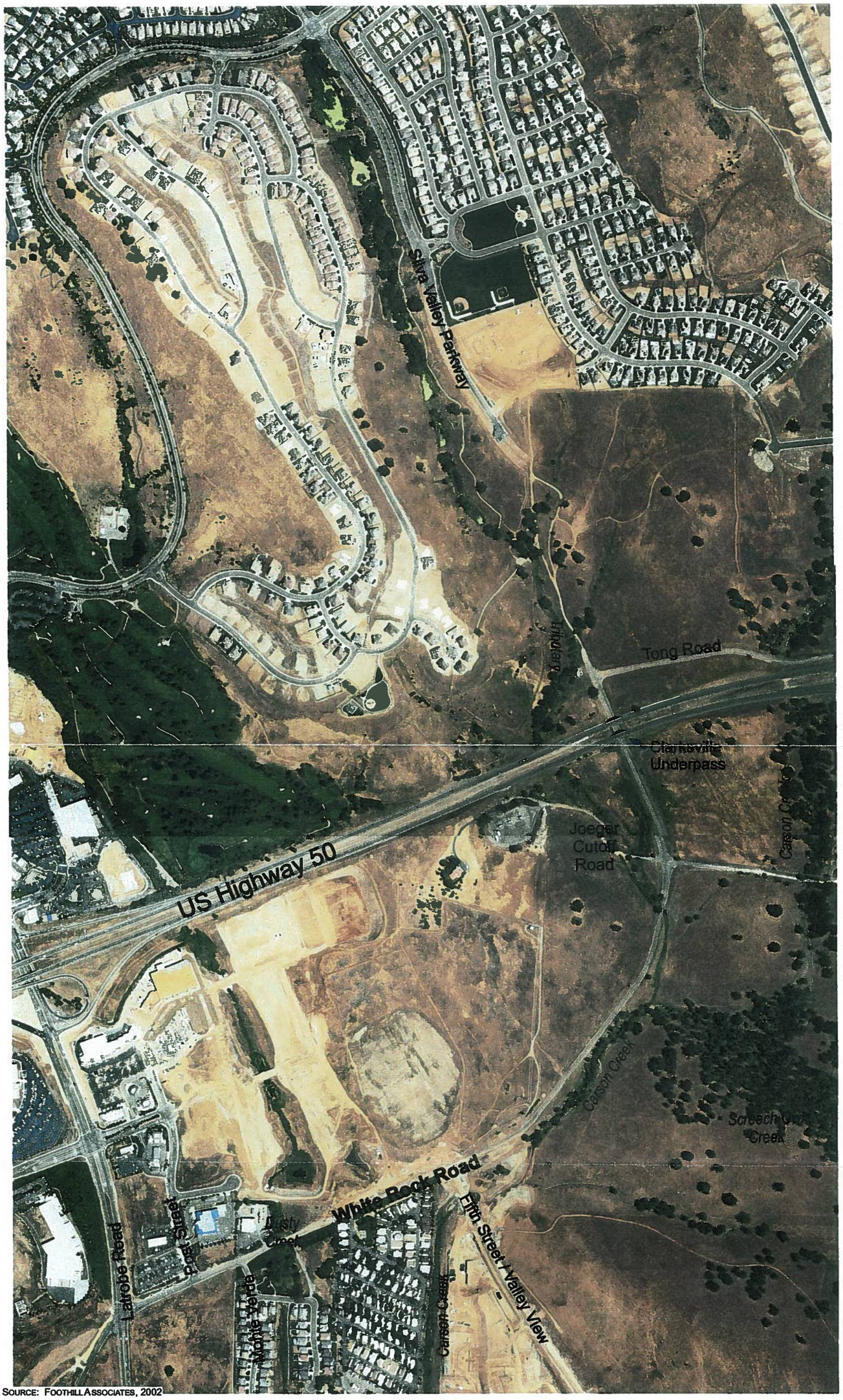
SOURCE: FOOTHILL ASSOCIATES, 2002

0 3.5
SCALE IN MILES
N

FIGURE 2-1

SITE AND VICINITY MAP

PMC



SOURCE: FOOTHILL ASSOCIATES, 2002

NO SCALE

N

FIGURE 2-2
AERIAL PHOTO

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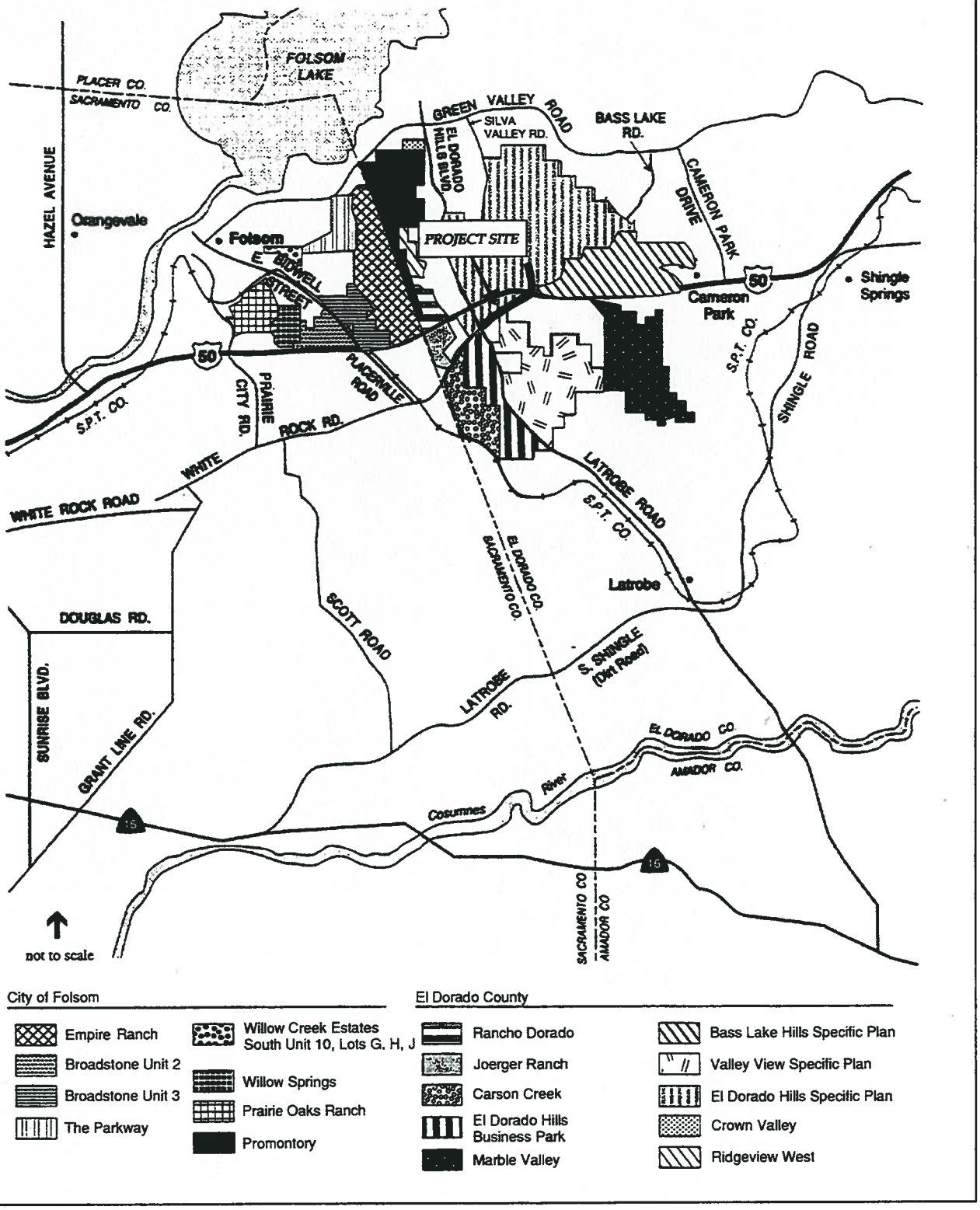

SOURCE: EL DORADO COUNTY, 2001

NO SCALE

FIGURE 2-3

SURROUNDING PROJECTS

PMC

PACIFIC MUNICIPAL CONSULTANTS

- The *Creekside Greens Mitigated Negative Declaration* evaluated widening White Rock Road to include two through-traffic lanes and a two-way left-turn lane from the east property line to the intersection between Latrobe Road and White Rock Road, as well as a deceleration lane to the proposed point of access, including an ultimate right-of-way of 130 feet for White Rock Road (El Dorado County, Creekside Greens Mitigated Negative Declaration, 1995).

RECENT DEVELOPMENTS AND EFFECTS ON TRAFFIC LEVELS

Two major events have occurred since 1998 that will likely affect transportation and circulation issues in the El Dorado Hills area. These include the issuance of a Writ of Mandate by the El Dorado County Superior Court in 1999 as part of a lawsuit that challenged the validity of the General Plan and EIR, and the passage of Measure Y by El Dorado County voters in 1998.

Writ of Mandate

The validity of the 1996 El Dorado County General Plan was legally challenged. The Court ultimately ruled in 1999 that the substance of the General Plan complied with the state planning law, but invalidated the plan due to inadequacies in the environmental review that accompanied its adoption. The Court issued a Writ of Mandate that governs the County's consideration and approval of land use development applications, while the County addresses the legal deficiencies identified by the Court. The proposed project is an allowed project under Subparagraph 6 (capital improvement projects) of Paragraph 5 in the Writ of Mandate, subject to satisfaction of the following findings set forth within Subparagraph 8 of Paragraph 5 in the Writ:

(a) The approval or project will not significantly impair the County's ability to adopt and implement a new General Plan after complying with CEQA;

(b) The approval or project complies with all other requirements of law; and,

(c) *The approval or project is consistent with the text and maps of the 1996 General Plan as amended through February 4, 1999, or such other general plan text and maps as may be vested through a development agreement or vesting tentative map, though in all other respects that General Plan will cease to have legal standing after the Board of Supervisors, pursuant to this Writ, sets aside its approval thereof.*

The proposed project is consistent with the text and maps of the 1996 El Dorado County General Plan, as amended through February 4, 1999. The proposed project also appears to be generally consistent with other requirements of law that apply to the project, its design, and implementation. Additionally, the proposed project would not significantly impair the County's ability to adopt and implement a new General Plan. Paragraph 6 of the Writ of Mandate allows the County to process, approve, and carry out capital improvement projects that otherwise comply with the Writ of Mandate provisions. The proposed project would provide necessary roadway facilities to support development allowed under the Writ.

Measure Y

In 1998, County voters approved Measure Y, The Control Traffic Congestion" initiative, which added traffic-related policies to the 1996 General Plan. Due to the fact that this initiative was passed prior to the enforcement of the Writ of Mandate discussed above, conformance with these additional General Plan policies is required for applicable development projects. As stated in the Initiative, Measure Y was designed "for the purpose of protecting public health and safety by requiring new development to fully pay its way to prevent traffic congestion from worsening."

Capital improvement projects such as the White Rock Road East project are consistent with Measure Y, as they are not development projects that would increase traffic. The proposed project would assist in improving roadway level of service in order to accommodate approved development and the future of Silva Valley Interchange with US 50. In addition, funding for the White Rock Road East widening project comes directly from developer paid impact fees.

2.3 PROJECT PURPOSE AND OBJECTIVES

In anticipation of additional traffic and circulation demands in the area, El Dorado County is proposing to widen and improve a segment of White Rock Road between Latrobe Road and Silva Valley Parkway. The project involves both interim and ultimate improvements, which are required to support existing and approved development in the area. The Area of Potential Effect (APE) for the proposed interim improvements to White Rock Road East would consist of approximately 16.22 acres and the ultimate improvements would consist of an additional 7.24 acres (see **Figures 2-5, Sheets 1 through 3**). The Area of Potential Effect encompasses the project site and surrounding areas that may be impacted by construction and operation activities related to the proposed project. The APE Map covers both the interim and ultimate improvements associated with the project. **Figure 2-5, Sheet 1** also portrays the portions of roadway that were evaluated in previous environmental reviews. The proposed widening and improvements are consistent with the El Dorado County General Plan, the El Dorado Hills Specific Plan, Valley View Specific Plan, and the County's Capital Improvement Program.

The following objectives have been identified for the project:

- To improve White Rock Road in a manner consistent with the General Plan and the Capital Improvement Program;
- Improve safety along the roadway; and
- Meet the current and future traffic needs of the citizens of El Dorado County.

Weekday traffic volumes were measured in April and December 2001 over a five-day period. In April 2001, the average daily traffic (ADT) volumes, measured at 250 feet east of Monte Verde Drive (milepost 1.35), were 911. In December 2001, the average daily traffic volumes along White Rock Road, measured 100 feet east of Latrobe Road (milepost 1.15), were 3,177. Traffic volumes along White Rock Road, between Latrobe Road and the future Silva Valley Parkway Interchange, have been evaluated in the General Plan, which is currently being updated. The 1996 General Plan projected a peak hour traffic volume of 3,620 for the Year 2025. The "No Plan" Alternative in the updated General Plan projects a peak hour traffic volume of 3,140, whereas the 2001 General Plan Alternative, which has a reduced land use density from the 1996 General Plan, projects 3,050 (Collins, 2002).

Implementation of the proposed project would assist in improving existing and future roadway service levels in order to accommodate approved development in the project area.

2.4 PROJECT CHARACTERISTICS

ROADWAY CONSTRUCTION AND IMPROVEMENTS

The proposed project would involve widening and realigning the 1-mile stretch of roadway between Latrobe Road and Silva Valley Parkway. This would improve the circulation flow along White Rock Road and accommodate future traffic associated with the Valley View Specific Plan area and Serrano.

The project would occur in two phases, including interim and ultimate improvements.

Phase One: Interim Improvements

The Interim Improvements would involve widening White Rock Road East from the present configuration to a two-lane roadway including realignment and widening from Latrobe Road to Silva Valley Road (see **Figure 2-5, Sheets 1 through 3**). Specifically, the Interim Improvements would include the following:

- Widen White Rock Road East from Latrobe Road to Joeger Cutoff Road for a distance of approximately 4,250 lineal feet. The roadway would include two eighteen (18) foot paved lanes with three (3) foot gravel shoulders. Additionally, the stretch between Latrobe Road and 5th Street would be a divided road with a 16-foot wide left-turn lane for a distance of approximately 2,400 lineal feet. This would require an 800-foot transition from the divided road to the undivided road located east of 5th Street.

- Overlay of the existing stretch of roadway between Joeger Cutoff Road and Tong Road, which include a width of 40 feet and a length of 1,300 lineal feet. (This improvement is also part of the Silva Valley Interchange project.)

- Construct a new stretch of roadway between Tong Road and Silva Valley Parkway for a distance of approximately 1,400 lineal feet. The roadway would include two eighteen (18) foot paved lanes with three (3) feet of graveled shoulders. (This improvement is also part of the Silva Valley Interchange project.)

Phase Two: Ultimate Improvements

The Ultimate Improvements would involve widening White Rock Road East from Latrobe Road to the future Silva Valley Interchange and abandoning existing and interim right-of-way from that ultimate widening north of Joeger Cutoff Road (see **Figure 2-5, Sheets 1 through 3**). Specifically, the Ultimate Improvements would include the following:

- Widen White Rock Road East from Latrobe Road to the future Silva Valley Interchange (south of US 50), for a total distance of 4,300 lineal feet. The roadway would include six lanes of traffic on a divided roadway with a 130-foot right-of-way.

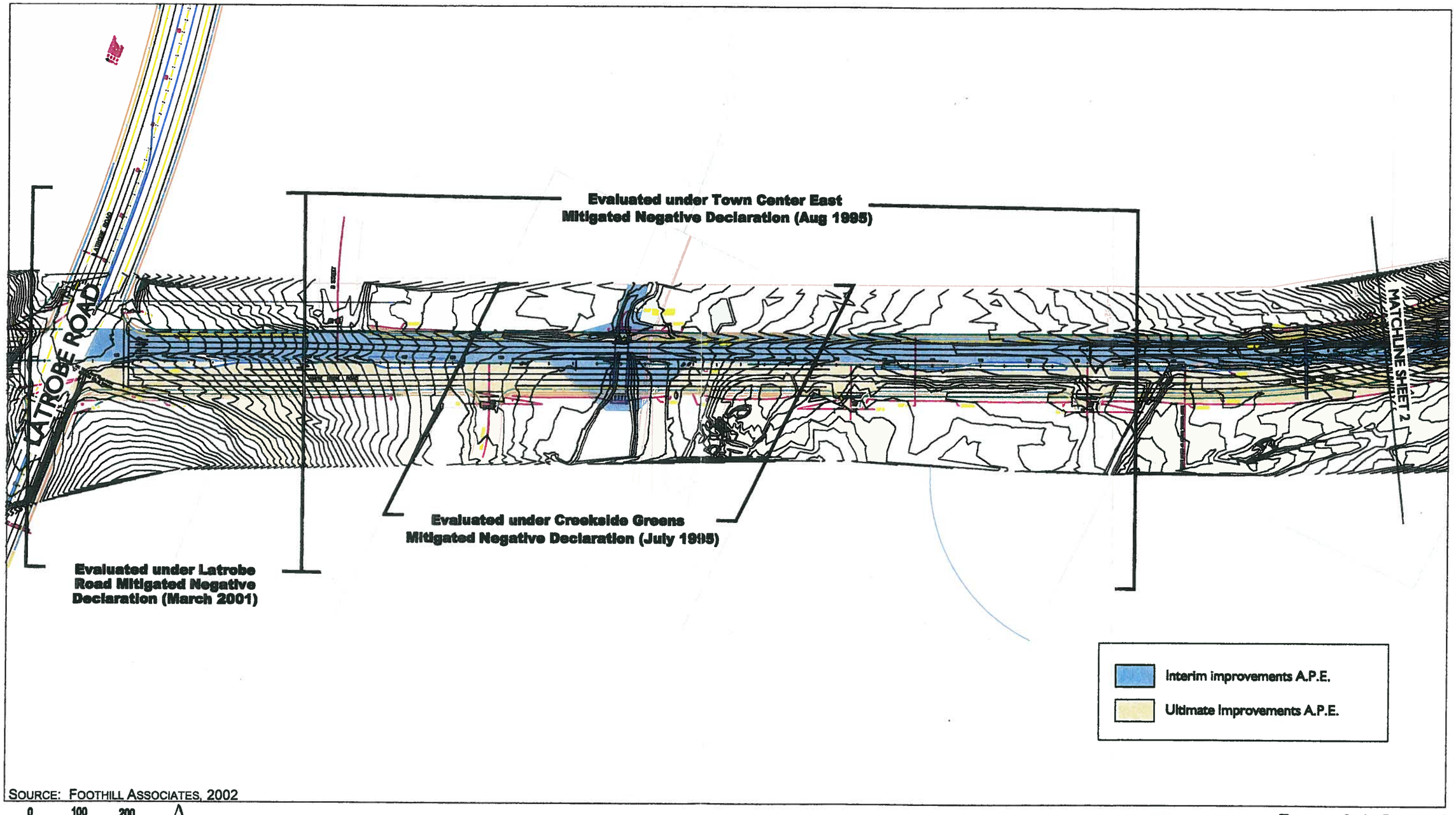

FIGURE_2-4_SHEET_1.CDR 08/23/02

SOURCE: FOOTHILL ASSOCIATES, 2002

0 100 200
SCALE IN FEET

N

FIGURE 2-4, SHEET 1
AREA OF POTENTIAL EFFECTS

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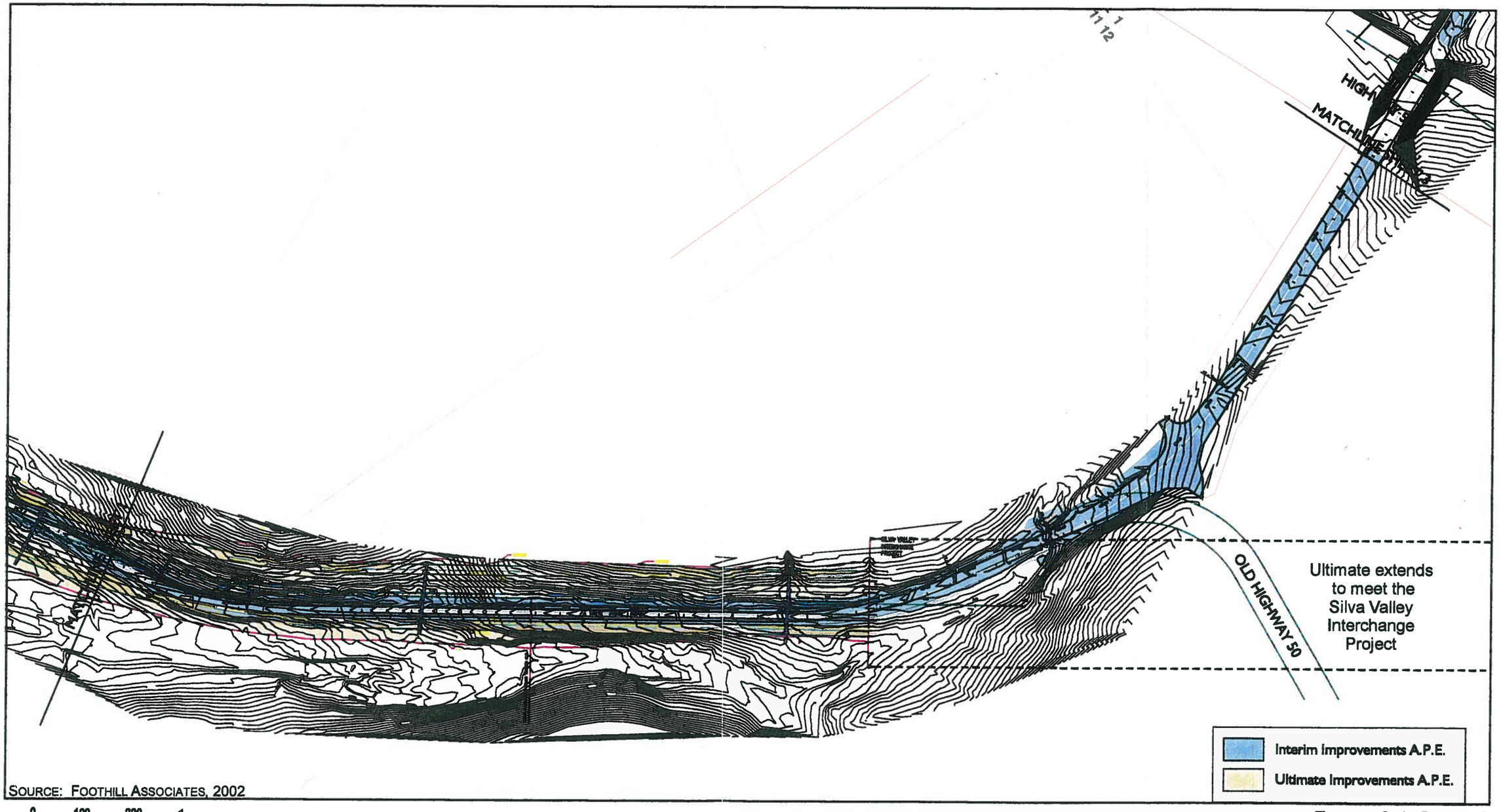

SOURCE: FOOTHILL ASSOCIATES, 2002

0 100 200
SCALE IN FEET

FIGURE 2-4, SHEET 2
AREA OF POTENTIAL EFFECTS

PMC
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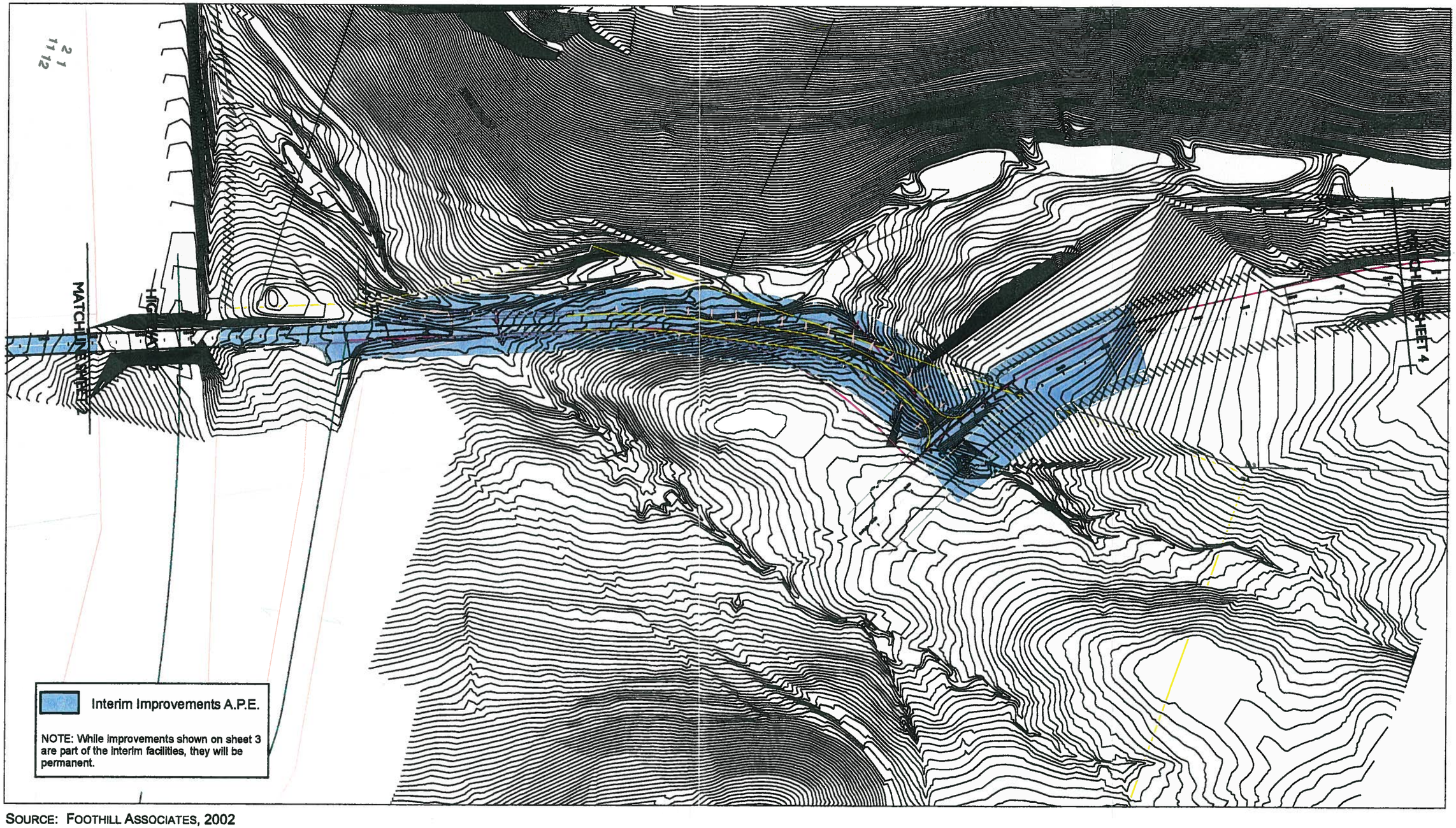

FIGURE_2-4_SHEET_3.CDR 08/23/02

SOURCE: FOOTHILL ASSOCIATES, 2002

0 100 200
SCALE IN FEET

N

FIGURE 2-4, SHEET 3
AREA OF POTENTIAL EFFECTS

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DRAINAGE AND UTILITY IMPROVEMENTS/RELOCATION

Drainage for the proposed project would be directed to existing stream and drainage courses within the project area, including Dusty Creek, Carson Creek, and Screech Owl Creek. Existing culverts would be replaced or widened and new culverts constructed, when required, to support the new roadway. Existing utility facilities may be relocated and/or placed underground as a result of the project. Specifically, the project will require improvements to the culvert at Dusty Creek, which is located adjacent to Town Center East and Creekside Greens, and the box culvert located south of US Highway 50, approximately 300 feet south of Joeger Cutoff Road. The existing Dusty Creek culvert needs to be lengthened from its current 30-foot length to the ultimate 130-foot road right-of-way. As part of interim improvements, the Dusty Creek culvert will be lengthened to 70 feet, in order to accommodate two lanes of traffic and a left turn lane. It is anticipated that the ultimate improvements would require approximately 1,400 cubic yards of fill with an estimated depth of 4 feet along the southern edge of White Rock Road. Additionally, the box culvert located south of US 50 will be extended to the east as part of the interim improvements and road widening (Collins, 2002).

RIGHT-OF-WAY ACQUISITION

The County will need to acquire additional right-of-way as part of the proposed project. According to preliminary engineering calculations, approximately 84,900 square feet (1.94 acres) of additional right-of-way would be required for the Interim improvements and an additional 70,950 square feet (1.63 acres) would be required for the ultimate improvements (see **Table 2-1**). The project's ultimate improvements may also result in the relocation of existing mobile homes located along White Rock Road.

TABLE 2-1
RIGHT-OF-WAY ACQUISITION ESTIMATES

Location	Interim Improvements		Ultimate Improvements	
	Acquisition (Square Feet)	Assessor's Parcel Number(s)	Acquisition (Square Feet)	Assessor's Parcel Number(s)
Dusty Creek Culvert	8,100	107-130-13	--	--
Latrobe Road to 5th Street	--	--	25,900	107-611-13; -63 and -90 through -93
	--	--	6,800	107-130-20
5th Street to Silva Valley Parkway	8,100	107-130-21	23,800	107-130-21
	68,700	107-130-01	14,450	108-030-12
Total	***84,900***		***70,950***	

2.5 PROJECT CONSTRUCTION

The proposed project is part of El Dorado County's Capital Improvement Program (CIP), which is locally funded by the County's Road Impact Fee Program (RIF). The approved developments of Town Center East, Creekside Greens, Serrano, and Valley View have paid into the CIP as part of development agreements. The RIF Improvements List includes the following improvements to White Rock Road (El Dorado County; Valley View Specific Plan Draft EIR, 1998):

- Widening of White Rock Road between Latrobe Road and Highway 50, initially from two lanes (existing) to four lanes (by the year 2010), and ultimately from four lanes to six lanes (by the year 2015); and,
- Construction of Silva Valley Parkway, a northern extension of White Rock Road, north of Highway 50 from the highway to Green Valley Road, initially two lanes (before the year 2010) and eventually to 4 lanes (by the year 2015).

Construction would include grubbing/clearing, grading, paving, and striping, using both heavy-duty and light-duty construction equipment. Specific equipment to be utilized may include, but is not limited to, track-mounted excavators, dump trucks, backhoes, paving equipment, graders, compactors, concrete trucks, dozers and rollers. Construction activities are expected to commence in Spring 2003, beginning with improvements to Dusty Creek culvert.

Temporary fencing may be installed around some of the staging areas in order to avoid disturbance of adjoining areas and/or contain construction equipment after-hours. Construction traffic controls and signage would be placed to control and direct traffic.

EARTHWORK

Cut and fill associated with the project would be balanced and slopes would not exceed 2:1. It is anticipated that interim improvements to White Rock Road East would require 30,000 cubic yards of cut and 30,300 cubic yards of fill. Ultimate improvements would require approximately 20,000 cubic yards of cut and 20,000 cubic yards of fill. Earthwork would be divided into three locations, including the Dusty Creek culvert, White Rock Road between Latrobe Road and 5th Street, and between 5th Street and Silva Valley Parkway.

Dusty Creek Culvert

It is estimated that the Dusty Creek culvert would receive 400 cubic yards of fill with an estimated depth of 4 feet as part of the initial box culvert extension to the south. This would occur as part of the interim improvements. Additionally, the improvements would require an additional 1,000 cubic yards of fill as part of the ultimate improvements to the Dusty Creek culvert. The culvert improvements would require a total of 1,400 cubic yards of fill.

TABLE 2-2
DUSTY CREEK CULVERT EARTHWORK ESTIMATES

Interim Improvements (Cubic Yards)		Ultimate Improvements (Cubic Yards)	
Cut	Fill	Cut	Fill
0	400	N/A	1,000

Latrobe Road to 5th Street

The portion of roadway between Latrobe Road and 5th Street would require approximately 10,000 cubic yards of cut and 10,000 cubic yards of fill for interim improvements and an additional 10,000 cubic yards of fill as part of the ultimate improvements. The interim improvements would generally follow the existing roadway, whereas the ultimate improvements would require fill along the south side of the roadway to meet the 130-foot ultimate right-of-way. Fill for the ultimate widening is expected to come from the slope cut associated with the improvements between 5th Street and Silva Valley Parkway.

TABLE 2-3
LATROBE ROAD TO 5TH STREET EARTHWORK ESTIMATES

Interim Improvements (Cubic Yards)		Ultimate Improvements (Cubic Yards)	
Cut	Fill	Cut	Fill
10,000	10,000	0	10,000

5th Street and Silva Valley Parkway

The interim improvements for White Rock Road between 5th Street and Silva Valley Parkway would require 20,000 cubic yards of cut and fill. The deepest cut associated with interim improvements would be approximately 7 feet deep, which would result in a 13-foot slope face east of 5th Street. The deepest fill associated with the interim improvements would be approximately 15 feet deep and would be located just west of the intersection of the White Rock Road Extension with Silva Valley Parkway. The interim improvements would follow the existing alignment, whereas the ultimate improvements would include cutting the slope along on the north side of the roadway, just east of 5th Street, to straighten out the curve and filling the area along the south side of roadway using fill from the cut. The deepest cuts associated with the ultimate widening would be located just east of 5th Street.

TABLE 2-4
5TH STREET TO SILVA VALLEY PARKWAY EARTHWORK ESTIMATES

Interim Improvements (Cubic Yards)		Ultimate Improvements (Cubic Yards)	
Cut	Fill	Cut	Fill
20,000	20,000	20,000	10,000

PERMITS

Culvert improvements associated with the project are expected to require Army Corps of Engineers permits (Nationwide Permit 14), California Department of Fish and Game agreements (Streambed Alteration Agreement), and either water quality certificates or waivers from the Regional Water Quality Control Board. The Creekside Greens developer is seeking the Nationwide Permit 14 associated with the interim improvements at Dusty Creek culvert. The Dusty Creek box culvert is being widened to a 70-foot right-of-way to accommodate the interim improvements, which will include two lanes of traffic and a left turn lane. The County will be responsible for acquiring the permits associated with the future improvements at Dusty Creek culvert and the other culverts along White Rock Road East that are necessary to accommodate the 130-foot ultimate right-of-way.

2.6 REQUIRED PROJECT APPROVALS

In addition to the approval of the proposed project by the El Dorado County Board of Supervisors, the following agency approvals may be required (depending on the final project design):

- Acquisition of properties for right-of-way by the El Dorado County Board of Supervisors.
- Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers for the placement of fill into jurisdictional waters of the U.S.
- Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) statewide stormwater discharge permit for general construction activities (involving grading, and excavation that results in five or more acres of disturbed area) from the Regional Water Quality Control Board, Central Valley Region (RWQCB).
- Approval of a Streambed Alteration Agreement with the California Department of Fish and Game, pursuant to Section 1601 and 1603 of the Fish and Game Code.
- Water Certification or Waiver from RWQCB under Section 401 of the Clean Water Act.
- Approval of easements and/or right-of-way dedications from private property owners.

3.0 Environmental Setting, Impacts And Mitigation Measures

INTRODUCTION

This section provides an evaluation of the potential environmental impacts of the proposed project, including the CEQA Mandatory Findings of Significance. There are 14 specific environmental issues evaluated in this chapter. Other CEQA considerations are evaluated in Chapter 4.0. The environmental issues evaluated in this chapter include:

- Land Use Planning, Population, and Housing
- Geophysical (Earth)
- Water
- Air Quality
- Transportation/Circulation
- Biological Resources
- Energy and Mineral Resources
- Hazards
- Noise
- Public Services
- Utilities and Services Systems
- Aesthetics
- Cultural Resources
- Recreation

For each issue area, one of three conclusions is made:

- **No Impact:** No project-related impact to the environment would occur with project development.
- **Less than Significant Impact**: The proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
- **Potentially Significant Unless Mitigation Incorporated:** The proposed project would result in an environmental impact or effect that is potentially significant, but the incorporation of mitigation measure(s) would reduce the project-related impact to a less than significant level.

A detailed roadway improvement design has yet to be completed for the project. Thus, for the purposes of this analysis, an approximate 100 feet corridor on either side of White Rock Road east of Latrobe Road could be potentially affected as a result of construction activities (temporary impacts) and the project itself (permanent impacts) (see **Figure 2-4, Sheets 1 through 3**). This analysis includes a separate discussion of interim and ultimate improvements associated with the project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.1 LAND USE PLANNING, POPULATION, AND HOUSING *Will the proposal:*				
a. Conflict with general plan designations?	☐	☐	■	☐
b. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☐	■	☐
c. Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☐	■	☐
d. Disrupt or divide the physical arrangement of an established community?	☐	☐	■	☐
e. Be incompatible with existing or planned land use in the vicinity?	☐	■	☐	☐
f. Cumulatively exceed official regional or local population projections?	☐	☐	■	☐
g. Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	■	☐
h. Displace existing housing, especially affordable housing?	☐	☐	■	☐

A. ENVIRONMENTAL SETTING

The El Dorado County General Plan was adopted January 23, 1996, and serves as the overall guiding policy document for the unincorporated areas of the County. As a result of recent litigation over the General Plan and its EIR, the County is currently operating under a Writ of Mandate (El Dorado County Superior Court Case No. 96C501290) that allows specified projects (e.g., certain types of capital improvement projects) to be approved as long as they are consistent with the General Plan and other requirements of law, and will not impair the County's ability to comply with the Writ of Mandate. It should also be noted that the County is currently updating the General Plan per the Writ of Mandate.

The current General Plan and zoning land use designations in the immediate area of White Rock Road East include Residential, Commercial, Mobile Home Park, Open Space, and Approved Plan (Valley View Specific Plan area, which includes residential, commercial, research and development, schools, and open space).

Existing development in the project area includes the Town Center East commercial and office development, located along the northern edge of White Rock Road East adjacent to Latrobe Road, which includes an El Dorado Transit Park and Ride lot, a post office, and commercial services; the Dusty Creek Lumber company, located south of Town Center East; and the Fuller Sunset Mobile Home Park, which is between Creekside Greens and Valley View Specific Plan Area along the southern edge of White Rock Road East; and single-family residential uses associated with Creekside Greens (Creisleigh El Dorado), Serrano, and private land owners within Marble Mountain Area. Additionally, the Valley View Specific Plan area, which is located along the southern edge of White Rock Road East, is currently under construction. The portion of the project area between Valley View Specific Plan Area and Silva Valley Parkway contains dry land cattle grazing, agricultural preserve land, a cemetery, a Pacific Gas and Electric (PG&E) substation, a pump station for wastewater, and the remains of the historic Albert Fitch house.

The projects currently under construction in the project area include: Serrano; the apartments at 5th Street (part of the Valley View Specific Plan area); and development associated with Town Center East.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The proposed project may result in significant impacts if it physically divides an established community, conflicts with existing off-site land uses, causes substantial adverse change in the types or intensity of existing or planned land use patterns, or conflicts with any applicable County land use plan, policy or regulation. The project may result in significant impacts if it induces substantial growth, displaces a large number of people, or contributes to a job-housing imbalance.

CHECKLIST DISCUSSION

3.1a and b

Conflict with the General Plan and Other Policies

Interim Improvements

The interim improvements associated with the proposed widening and improvement project would be consistent with the 1996 El Dorado County General Plan and the County's Capital Improvement Plan. The White Rock Road East project would generally follow the existing roadway alignment and would be consistent with the Rural Minor Arterial designation. The project is not expected to conflict with the existing General Plan land use designations or zoning. Additionally, the project is not expected to conflict with the 1996 General Plan policies.

Based on the 2015 projections in the 1996 General Plan, the level of service standard for White Rock Road East would be LOS C east of Latrobe Road (El Dorado County, Latrobe Road Mitigated Negative Declaration, 2001). The White Rock Road East Project is consistent with

Policy 3.5.1.1, as it would assist in improving existing and future roadway service levels. Thus, this impact is considered to be ***less than significant.***

Ultimate Improvements

The ultimate improvements would also be consistent with the 1996 General Plan policies and land use designations. Additionally, these improvements would not conflict with existing zoning designations. This impact would be ***less than significant.***

3.1c and d

Conflicts with Agricultural Uses/Disruption of an Established Community

Interim Improvements

A small area of the proposed project area contains agricultural resources. Properties located between US 50 and the Valley View Specific Plan area, as identified on **Figures 2-2 and 2-3,** are classified as *Farmland of Local Importance* and *Grazing Land* under the State of California Department of Conservation's Farmland Mapping and Monitoring Program. Additionally, this stretch of roadway contains agricultural preserves. The interim improvements associated with the proposed project would have a minimal impact on agricultural resources located within the project area. Therefore, the impact would be considered ***less than significant.***

The interim improvements would not divide the physical arrangement of an established community. Therefore, the project would have ***no impact***.

Ultimate Improvements

The project's ultimate improvements located between US 50 and the Valley View Specific Plan area are expected to have a minimal impact on agricultural uses located along White Rock Road East. This would be a ***less than significant*** impact.

The ultimate improvements would not divide the physical arrangement of an established community. Therefore, the project would have ***no impact***.

3.1 e

Land Use Conflicts

Impact 3.1.1 Construction activities associated with the interim and ultimate improvements would produce short-term adverse effects on adjacent residential areas along White Rock Road. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

As shown in **Figure 2-2**, existing residential areas abut White Rock Road East. Project construction (noise, dust, roadway closures, traffic, etc.) associated with interim improvements may affect adjacent residences.

Ultimate Improvements

The ultimate improvements would result in the same land use conflicts during construction activities as the interim improvements.

Mitigation Measures

In addition to the dust control mitigation measures identified in Section 3.4 and the construction traffic control measures in Section 3.5, the following mitigation measures are identified:

MM 3.1.1a Prior to completion of project improvement plans and the commencement of construction activities, construction staging areas shall be located at least 800 feet from residential areas in order to reduce construction noise to 65 dBA at exposed residences. Construction staging areas shall be identified on project improvement plans and provided as a requirement in construction contracts.

MM 3.1.1b During construction activities, the amount of daily construction equipment traffic shall be limited by staging construction equipment and vehicles on the project site at the end of each work day rather than removing them. This measure shall be included in construction contracts.

MM 3.1.1c Prior to any construction activities requiring complete or partial closure of area roadways, the following tasks shall be performed:

- Provide written notice to property owners along affected roadways one week prior to roadway closures.
- To ensure public safety, clearly mark and secure construction areas.
- Steel plates or other appropriate measures shall be placed over open trenches at the end of each workday to restore vehicle access.

Implementation of the above mitigation measures as well as those specified in Sections 3.4, 3.5 and 3.9 of this document would mitigate the impact to ***less than significant.***

3.1f through h

Growth Inducement/Housing Impacts

Interim Improvements

The proposed project would improve existing roadway conditions, and would not extend urban services to an area not already served with such services. Improvements to White Rock Road East have been designed to accommodate existing and planned future populations and development, consistent with El Dorado County growth projections currently anticipated under the General Plan and Writ of Mandate, including Serrano, El Dorado Hills, Valley View, Town Center East, and Creekside Greens. Current land use and zoning designations for the project area would not change. While the project would provide additional roadway capacity that

could support existing conditions and approved growth, the County will control land use and development in the vicinity through the General Plan and the Writ of Mandate. Thus, the interim improvements associated with the project are anticipated to have a ***less than significant*** impact regarding growth inducement.

While the proposed project would involve the acquisition of property for roadway right-of-way, the property takings are not expected to impair the use of any land areas or displace any housing. Thus, ***no impact*** is expected for interim improvements.

Ultimate Improvements

The project's ultimate improvements may result in the loss of several mobile homes located along the southern edge of White Rock Road. However, this would depend on the actual width of the roadway and the number of travel lanes required. If the project were to result in the loss of any residence, the property owner would be fairly compensated. Therefore, the ultimate improvements are expected to result in ***less than significant*** impacts related to growth inducement and use of land areas.

C. CONCLUSION REGARDING LAND USE, PLANNING, POPULATION, AND HOUSING

With the implementation of the above mitigation measures, the proposed project (including both interim and ultimate improvements) would not create land use, planning, population and/or housing impacts.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.2 GEOPHYSICAL (EARTH) *Will the proposal result in or expose people to potential impacts involving:*				
a. Seismicity (fault rupture, ground shaking, or liquefaction)?	☐	☐	■	☐
b. Seiche, tsunami, or volcanic hazard?	☐	☐	☐	■
c. Landslides or mudslides?	☐	■	☐	☐
d. Subsidence of the land?	☐	■	☐	☐
e. Expansive soils?	☐	■	☐	☐
f. Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?	☐	■	☐	☐
g. Destruction, covering, or modification of any unique geologic or physical features?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

NATURAL HAZARDS

The western portion of El Dorado County includes branches of the Bear Mountains Fault Zone and the Melones Fault Zone, with the western branch of the Bear Mountains Fault located beneath White Rock Road approximately 2,100 feet east of the intersection of White Rock Road and Latrobe Road. These faults are considered to be potentially active. Except for potential seismic hazards from ground-shaking, the project area is not located near any coastline or volcanic hazards, or any areas known to be susceptible to land slide hazards.

SOIL CONDITIONS

According to the Valley View Specific Plan EIR (Wagstaff and Associates, 1998), soils in the project area consist of the Argonaut and Auburn soil series.

- Auburn very rocky silty loam (AxD)

- Auburn silt loam (AwD)
- Argonaut very rocky loam (AmD)

Auburn Series soils are considered fair with gravelly loam, silt loam, and silty clay loam over very gravelly silt loam. These soils types are considered fair to good as road fill, although construction limitations exist because of very low to moderate shear strength, moderate to low stability and moderate to low shrink-swell potential.

Soils in areas adjacent to White Rock Road are characterized as disturbed due to previous road construction activities and vehicle traffic on roadways shoulders. As shown on **Figure 3.2-1**, the soil types located along the project site include Auburn silt loam (AwD), Placer Diggings (PrD), and Tailings (TaD).

Rocks in the vicinity of the project site consist of metavolcanics. The metavolcanic rocks are a member of the Foothills Melange-Ophiolite Terrane. These rocks have undergone low-grade metamorphism, and are generally dark colored, and may locally contain massive quartz lenses. Serpentine bodies of rock have been associated with the Bear Mountains Fault; however, no serpentine bodies have been identified within the project vicinity.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant earth impacts if it causes substantial erosion or siltation; exposes people and structures to geologic hazards or risk from faults, landslides, unstable soil conditions, etc.; or substantially alters the natural topography or a unique geological or physical feature. Grading that disturbs large amounts of land or sensitive grading areas (e.g. slopes in excess of 20 percent, intermittent drainages) may cause substantial erosion or siltation.

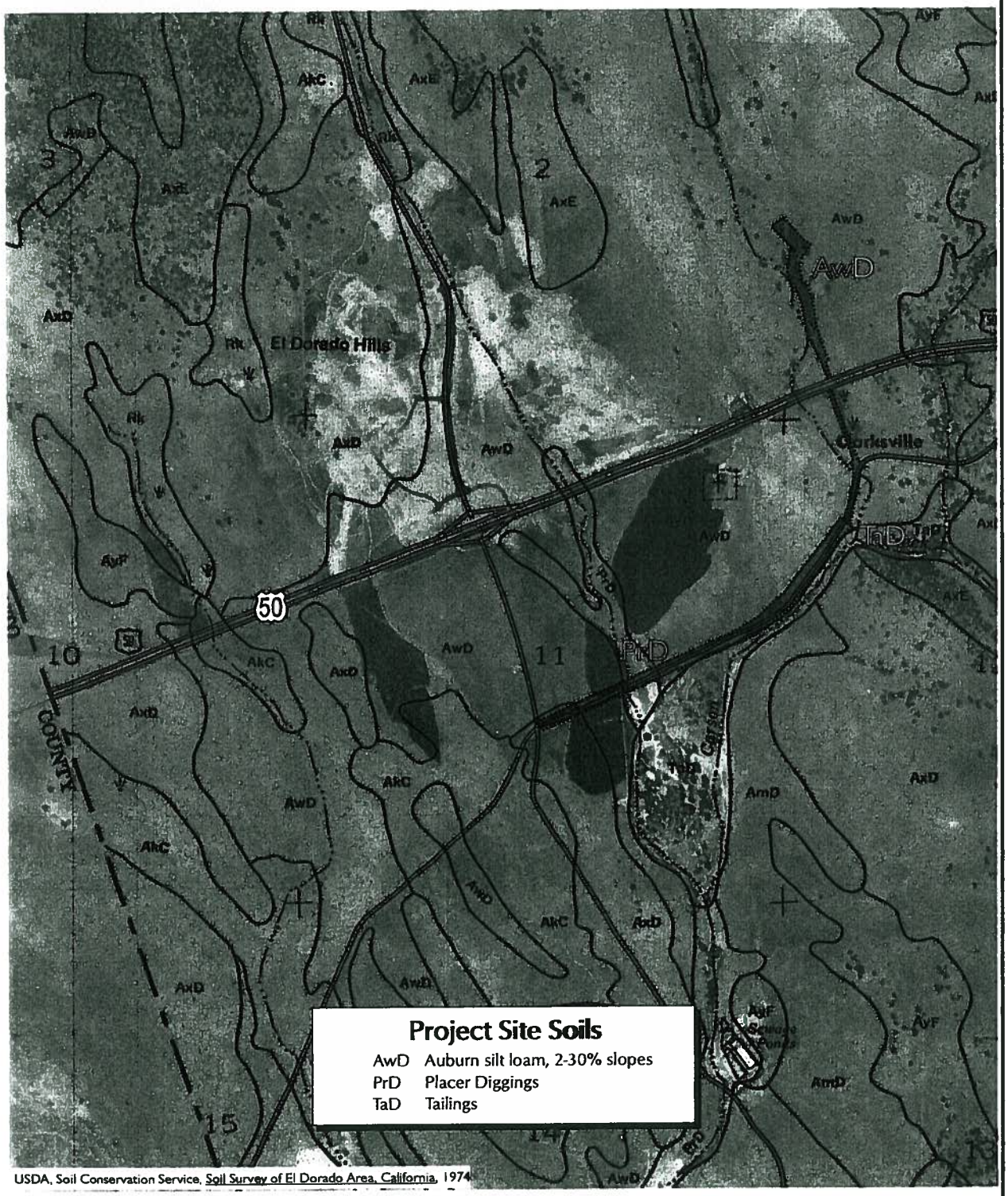
CHECKLIST DISCUSSION

3.2a

Seismicity Hazards

Interim Improvements

The most likely damage to the project area would result from earthquake activity in the Sierra Nevada foothills. Because the western branch of the Bear Mountain Fault crosses White Rock Road, the project area is potentially susceptible to ground shaking, depending on the magnitude of an earthquake in the area. The Bear Mountains fault is associated with the Foothills Fault System, which is considered to be potentially active in the project area (Wagstaff and Associates, 1998). However, this fault system is estimated to have a very long recurrence level (every 65,000 years) and a low slip rate (less than 0.005 millimeters per year). Seismic hazards that the proposed project would be exposed to would be limited to ground-shaking, with fault ruptures and liquefaction not expected to occur based on fault location and shallow bedrock conditions in the project area (El Dorado County, 1998).



USDA, Soil Conservation Service, Soil Survey of El Dorado Area, California, 1974

SOURCE: FOOTHILL ASSOCIATES, 2002

0 3.5
SCALE IN MILES

N

FIGURE 3.2-1
SOILS MAP

PMC

Other than the potential for local distortion of loose soil near surface fill soils, no soil defects associated with seismic loading are likely to cause substantial damage to project roadways or facilities that would be irreparable. Ground rupture is feasible, but unlikely, along the Bear Mountain Fault. It would require an earthquake with a Richter Magnitude range of 5 or greater (Wagstaff and Associates, 1998). Overall seismic hazards in the El Dorado Hills area is considered relatively low. Therefore, impacts involving seismicity (fault rupture, ground-shaking, or liquefaction) would be ***less than significant*** for interim improvements.

Ultimate Improvements

Ultimate improvements to White Rock Road would also result in less than significant impacts related to Seismicity (fault rupture, ground-shaking, or liquefaction).

3.2b

Seiche Tsunami and Volcanic Hazards

The project area is not located near any ocean coast, volcanic disturbance areas or seiche hazard areas and would not involve the development of residential or other sensitive land uses. Therefore, the project would not expose people to potential impacts involving seiche, tsunami, or volcanic hazards. ***No impact*** is expected.

3.2c through f

Geologic/Soil Stability

Impact 3.2.1 Implementation of the proposed project would result in the disruption of existing soil conditions that could result in soil stability impacts and soil erosion. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

Roadway improvements and construction activities associated with the proposed project would involve grading and other activities that would disturb project site soils and area topography. Construction activities could result in slope instability. In addition, construction could expose the project roadway to damage as a result of the shrink-swell potential of area soils associated with Argonaut and Auburn soil series. In addition, project construction activities would disturb soils that could result in water and wind erosion. The grading details, including the location of improvements and estimated cut and fill, for the interim improvements is included in Section 2.0 (Project Description).

Ultimate Improvements

The earthwork and grading associated with the ultimate improvements will be substantially different than the interim improvements (refer to Section 2.0, Project Description). However, the ultimate improvements would result in similar impacts on soil stability and soil erosion.

Mitigation Measures

MM 3.2.1a Prior to the commencement of grading for the proposed project, a detailed erosion and sediment control plan shall be prepared, as required in Section 15.14.630 of the El Dorado County Grading, Erosion and Sediment Control Ordinance. The erosion and sediment control plan shall include measures to minimize soil erosion during and after construction activities and include the following measures:

- Limit ground disturbance to areas immediately planned for grading activities.
- Preservation of existing natural features that provide erosion control.
- Placement of hay bales, silt fences and/or other appropriate erosion control measures to prevent siltation of area tributaries.
- Revegetation of disturbed areas immediately upon completion of construction activities.
- Incorporation of any additional water quality requirements set forth by the Regional Water Quality Control Board as part of the project's Water Certification under Section 401 of the Clean Water Act.

The details of the erosion and sediment plan shall be incorporated into the final project improvement plans and be implemented prior to and during construction activities. The project site shall be routinely monitored to ensure implementation of the erosion control measures and the effectiveness of the measures.

MM 3.2.1b As part of roadway improvement plan development, a detailed geotechnical study shall be conducted to determine the suitability of project soil and slope areas for roadway development. The study shall include recommendations involving geotechnical earthwork for areas of instability to be incorporated in roadway improvement plans in conformance with the County of El Dorado Design and Improvement Standards Manual and the Uniform Building Code.

MM 3.2.1c All grading activities shall be conducted in accordance with County standards (County of El Dorado Design and Improvement Standards Manual). These practices shall include, but not limited to:

- Determination of the suitability of excavated material as engineered fill, topsoil, or other type of reuse onsite by an engineering geologist or equivalent professional.
- The height and extent of cuts and fills will be minimized and balanced as nearly as possible.
- Use of engineered retaining walls where necessary.
- There will be no major changes in drainage pattern that would affect the course of streams.

MM 3.2.1d As part of the soil stability determination identified in Mitigation Measure MM 3.2.1b, a determination of the soil's shrink-swell potential shall also be conducted. If excessive shrink-swell properties are identified, appropriate engineering mitigation measures shall be conducted as recommended by an engineering geologist or equivalent professional. This may include importation of non-expansive materials, treatment of expansive soils or other appropriate methods consistent with County standards.

MM 3.2.1e New fill covering previously disrupted soils shall be revegetated to protect the soil from further disturbance or erosion.

Implementation of the above mitigation measures would reduce the potential soil and slope stability impacts to ***less than significant***.

3.2 g

Unique Geologic Features

Interim Improvements

There are no known unique geologic or physical features in the project area. The proposed project is not expected to result in the loss of any unique geologic features. Thus, ***no impact*** would occur as a result of interim improvements.

Ultimate Improvements

Ultimate improvements would also not result in the loss of any unique geological features. **No impact** would occur as a result of ultimate improvements.

C. CONCLUSIONS RELATING TO GEOPHYSICAL (EARTH)

The proposed project could create impacts involving soil and geologic stability as a result of construction and grading activities. However, impacts resulting from those activities would be reduced to a less than significant level through the implementation of mitigation measures identified above.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3 WATER				
Will the proposal result in:				
a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	☐	■	☐	☐
b. Exposure of people or property to water related hazards such as flooding?	☐	■	☐	☐
c. Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen, or turbidity)?	☐	■	☐	☐
d. Changes in the amount of surface water in any water body?	☐	■	☐	☐
e. Changes in currents, or the course or direction of water movements?	☐	■	☐	☐
f. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	☐	☐	■	☐
g. Altered direction or rate of flow of groundwater?	☐	☐	■	☐
h. Impacts to groundwater quality?	☐	☐	■	☐
i. Substantial reduction in the amount of groundwater otherwise available for public water supplies?	☐	☐	■	☐

A. ENVIRONMENTAL SETTING

The White Rock Road East project is located within the 1,265-square mile Cosumnes River watershed, which encompasses the southern region of El Dorado County, extending from its headwaters at the Iron Mountain Ridge in the Sierra Nevada, west to its confluences with the Sacramento River in Sacramento County (El Dorado County, 1998). The project site is specifically located within the Carson Creek watershed.

Mean annual precipitation within the Carson Creek Watershed ranges from 24 to 26 inches (Goodrich, J.D., El Dorado County Design Rainfall, 1989) with 100-year depth (maximum rainfall within a 24 hour period) estimated from 4.9 to 5.3 inches (Goodridge, 1989). Precipitation is the leading source of runoff in the project area.

The Carson Creek Watershed is bounded on the west by Carpenter Ridge in Sacramento County, on the east by Bass Lake area of Cameron Park, on the north by El Dorado Hills, and on the south by Ben Bolt Ridge and Deer Creek. Carson Creek traverses south into the western valley of the northwest region of the Valley View Specific Plan area and continues southward where it crosses under Latrobe Road in an eight-foot by 37-foot reinforced concrete box culvert. Approximately 1.5 miles downstream of White Rock Road, Carson Creek crosses under Gold Foothill Parkway through a triple nine-foot by a 28.5-foot box culvert and continues south toward the El Dorado/Sacramento County line. Intermittent tributaries collect runoff from the upper ridge slopes northwest of White Rock Road and east of Latrobe Road and discharge into Carson Creek at the El Dorado County line. Carson Creek and its tributaries flow under the Southern Pacific Railroad (SPRR) bridge and southwest into Sacramento County toward Deer Creek. (El Dorado County, 1998).

There are numerous existing corrugated metal pipes (CMPs) ranging in size from 16 to 48 inches under Latrobe Road allowing continued southeastward flow of the tributary drainages to Carson Creek (Wagstaff and Associates, 1998).

According to the Carson Creek Regional Drainage Study, flow in Carson Creek is seasonal depending on precipitation. Additionally, treated wastewater from the El Dorado Irrigation (EID) El Dorado Hills Wastewater Treatment Plant is discharged into Carson Creek downstream of Latrobe Road. Currently, EID is discharging treated wastewater into Carson Creek only during the winter months (November 1 through April 30), due to the operations of an extensive reclaimed water system that supplies irrigation water in the El Dorado Hills area. However, the RWQCB discharge permit allows year-round discharges.

A portion of White Rock Road in the vicinity of the Tributary 2 crossing is located within the 100-year floodplain. As shown in floodplain mapping provided in the Carson Creek Regional Drainage Study (CCRDS), areas along Carson Creek adjacent to White Rock Road (including CCRDS Stations 147 upstream through 150) are located within the 100-year floodplain. The reach of Carson Creek is not flooded by failure of the levee, or by overflow from area tributaries, but by normal creek flows during storm events. Detailed flood studies have not yet been completed for portions of Carson Creek located adjacent to White Rock Road.

El Dorado County does not contain any defined groundwater basins. Additionally, no known contiguous aquifers are located within 40 feet of the ground surface. Groundwater in the County lies within hard rock aquifers in the Central Sierra Nevada geomorhphic province (Wagstaff and Associates, 1998). Due to the varying conditions of subsurface hydrology within the project area, groundwater is thought to perch seasonally on bedrock during the winter and

form seeps as it drains. Groundwater seeps are located in various locations in the vicinity of the project (Jones and Stokes, 1989).

There are a few springs located within the project vicinity, including a spring on the Tong property at the outlet of Carson Creek culvert under U.S. 50 and two additional springs at culvert outlets where streams cross under U.S. 50. There is also a drain in the culvert near White Rock Road, which removes water from the highway foundation. The drain discharges above the water surface level. It is thought that local groundwater conditions were altered by the construction of the U.S. 50 foundation (Jones and Stokes, 1989).

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The proposed project may result in significant impacts if it would substantially degrade surface water quality; substantially degrade or deplete groundwater resources; cause substantial flooding or expose people or structures to flood hazards; generate substantial increases in surface runoff; or significantly alter the course, direction, or volume of surface water flows.

CHECKLIST DISCUSSION

3.3a, b, d and e

Drainage/Flooding Impacts

Impact 3.3.1 Widening and paving associated with the proposed project would increase the amount of impervious surfaces, which would alter the existing drainage patterns, increase water surface elevations, increase stormwater runoff, and potentially increase flooding conditions.. The project also has the potential to encroach into the Carson Creek floodplain. These improvements could impact the proper operation of drainage facilities in the project area. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

As described above, the proposed project would result in the alteration of drainage patterns associated with widening and extension of White Rock Road East. The project's interim improvements would create new impervious surfaces and create additional stormwater runoff in the project area that could exacerbate existing flooding conditions in Carson Creek and Screech Owl Creek. The increase in impervious surfaces associated with the 42-foot interim right-of-way would result in an increase in project area drainage flow rates. The interim improvements may also encroach into the Carson Creek floodplain.

Ultimate Improvements

The project's ultimate improvements would also alter drainage patterns. It is expected that this may occur as part of the realignment of the roadway near the Valley View Specific Plan area, where the road would be shifted northwest from its current alignment. As part of these improvements, the existing slope would be cut to accommodate the new alignment. The increased impervious surfaces associated with the 130-foot ultimate right-of-way would result in an increase in project area drainage flow rates and patterns The alteration of drainage patterns

is expected to result in increased stormwater runoff conditions, increased surface water elevations, and potentially increased flooding conditions in Carson Creek and Screech Owl Creek. The ultimate improvements have the potential to encroach into the floodplain of Carson Creek.

Mitigation Measure

MM 3.3.1 All storm drainage designs within the project area shall be in compliance with the El Dorado County Drainage Manual (Resolution #67-95) and will ensure no increase in severity of flooding conditions up-stream or down-stream of the project area. Storm drainage improvements shall be coordinated with planned drainage improvements for the Valley View Specific Plan to ensure adequate capacity is provided prior to final approval of the project roadway improvement plans.

With the above mitigation measure, this project would have a ***less than significant*** impact on drainage.

3.3c

Construction Water Quality Impacts

Impact 3.3.2 Construction of the proposed project and installation of new culverts would result in increased sedimentation associated with removing vegetation, which would impact surface water quality. This would be ***potentially significant unless mitigation incorporated***.

Interim Improvements

Potential water quality impacts could occur during grading and construction activities associated with the interim improvements, including increased sediment loads due to erosion at the construction site, installation of new culverts along White Rock Road East, and soil disturbance from the site during storm events. The expanded sediment load could increase stream turbidity, creating an adverse effect on aquatic life and surface water quality.

The Federal Clean Water Act requires El Dorado County to develop and implement a Stormwater Management Plan (SWMP). The County will also be required to obtain a permit under the National Pollutant Discharge Elimination System (NPDES) for small municipalities by March 2003 in order to operate storm drain facilities (NPDES Phase 2). Negotiations between the County and the Central Valley Regional Water Quality Control Board in combination with the components of the SWMP will determine what permanent facilities will be required as part of the proposed project and the type of maintenance activities that will be required County-wide.

Ultimate Improvements

Construction activities associated with the project's ultimate improvements would also increase the sediment load in area waterways as a result of erosion, installation of new culverts, and soil disturbance. This may impact water quality through an increase in stream turbidity resulting from expanded sediment load.

Mitigation Measures

MM 3.3.2a The County shall obtain coverage under the most appropriate National Pollutant Discharge Elimination System (NPDES) permit, develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and install temporary BMPs to prevent or reduce pollutant discharges from construction activities to the Maximum Extent Practicable (MEP).

MM 3.3.2b A Project Stormwater Pollution Plan (SWPPP) shall be prepared for the project, which emphasizes stormwater best management practices (BMPs) and that is in conformance with the El Dorado County Grading Ordinance.

Implementation of the above mitigation measures as well as Mitigation Measures MM 3.2.1a, b and e would reduce potential impacts on surface water quality by limiting sediment loading from entering waterways. Thus, the project's construction activities would have a ***less than significant*** impact on surface water quality.

Long-Term Water Quality Impacts

Impact 3.3.3 Operation of the proposed project would result in an increase in surface water pollutants, including increased particulate hydrocarbon matter, heavy metals, oils, and grease.. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

Long-term water quality impacts could occur as a result of increased particulate hydrocarbon matter, heavy metals, oil and grease associated with the increased number of vehicles on White Rock Road East as a result of the project's interim improvements. These pollutants would be transported from the project site through culverts and storm drain systems to the area waterways. Many of these pollutants are water-soluble and form oil films on the water surface. This can affect oxygen diffusion rates and result in potentially harmful effects on fish and other aquatic organisms.

Ultimate Improvements

The project's ultimate improvements could also result in long-term water quality impacts resulting from increased particulate hydrocarbon matter, heavy metals, oil and grease that would be transported to area waterways from the project site. The ultimate improvements would result in a larger number of vehicles due to the 6 lanes of traffic and the connection with U.S. 50 at the Silva Valley Parkway Interchange. Therefore, the ultimate improvements could contribute more pollutants to the area waterways than the interim improvements.

Mitigation Measure

MM 3.3.3 The County shall implement BMP's consistent with the County of El Dorado Stormwater Management Plan (SWMP), or the State Water Resources Control Board NPDES Statewide General Permit for Small Municipalities (NPDES Phase 2).

Implementation of the above mitigation measure as well as Mitigation Measures MM 3.3.2a and b would reduce potential impacts on surface water quality by preventing urban pollutants from

entering waterways. Thus, the project's long-term operations would have a ***less than significant*** impact on surface water quality.

3.3f through l

Groundwater Impacts

Interim Improvements

Impacts on groundwater would be dependent on the depth of groundwater, flow direction and flow rate (Jones and Stokes, 1989). The quantity and quality of groundwater within the vicinity of the proposed project is dependent on the percolation of water through natural recharge areas. Recharge is normally found in areas where soils have high permeability rates. The soils within the project vicinity are Type D, which have little potential for infiltration (Spiegelberg, 2002). Therefore, the road paving associated with the proposed project is not expected to reduce infiltration. The project would not involve the utilization of groundwater resources; however, excavation activities may encounter groundwater due to the high groundwater levels in the area (Spiegelberg, 2002). Additionally, construction activities associated with interim improvements have the potential to create new springs or remove existing springs within the vicinity of U.S. 50 (Jones and Stokes, 1989). If construction activities associated with the project's interim improvements hit groundwater, the County is subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for construction dewatering activities. Construction dewatering activity is defined as pumped or drained discharges of groundwater and/or stormwater from excavations or other points of accumulation associated with a construction activity (EPA, 2002). If the project hits groundwater, additional drainage facilities may be needed to handle the perched groundwater. Such drainage facilities would be addressed at the design stage. Therefore, the interim improvements associated with this project would have a ***less than significant*** *impact* on groundwater resources.

Ultimate Improvements

The ultimate improvements would not involve the utilization of groundwater resources; however, like the interim improvements, the project's excavation activities may encounter groundwater and create new springs or eliminate existing springs located near U.S. 50. If construction activities associated with the project's ultimate improvements hit groundwater, the County would be subject to the NPDES General Permit for construction dewatering activity. If the ultimate improvements hit groundwater, they may also require additional drainage facilities, which would be addressed at the design stage. Therefore, the ultimate improvements would have *a* ***less than significant*** *impact* on groundwater resources.

C. CONCLUSIONS RELATING TO WATER

The proposed project would involve construction activities that could affect runoff quantity and quality. With implementation of the above mitigation measures, the impacts would be reduced to less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.4 AIR QUALITY *Will the proposal:*				
a. Violate any air quality standards or contribute to an existing or projected air quality violation?	☐	■	☐	☐
b. Expose sensitive receptors to pollutants?	☐	■	☐	☐
c. Alter air movement, moisture, or temperature, or cause any change in climate?	☐	☐	☐	■
d. Create objectionable odors?	☐	■	☐	☐

A. ENVIRONMENTAL SETTING

The Air Quality Impact Analysis for White Rock Road East, which was conducted by Don Ballanti, formed the basis of this analysis. **Appendix A** contains the Air Quality Impact Analysis. The analysis included consultation with the El Dorado County Air Pollution Control District.

AIR POLLUTION CLIMATOLOGY

The project is located in the western Sierra Nevada foothills adjacent to U.S. Highway 50 south of El Dorado Hills.

The project is within the Mountain Counties Air Basin (MCAB). From an air quality perspective, the topography and meteorology of the MCAB combine such that local conditions predominate in determining the effect of emissions in the basin. During daylight hours, uphill westerly winds predominate. In the evening hours "drainage" flows along watercourses predominate.

Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground. During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between

reactive organic compounds (ROG) and oxides of nitrogen (NOx) that results in the formation of ozone (O_3).

In the summer air flowing into the basin from the Central Valley to the west transports ozone precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin valleys into the MCAB. These transported pollutants predominate as the cause of ozone in the MCAB and are largely responsible for the exceedances of the state and federal ozone standard in the MCAB.

AMBIENT AIR QUALITY STANDARDS

The federal and California state ambient air quality standards for important pollutants are summarized in **Table 3.4-1.**

TABLE 3.4-1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	0.12 ppm 0.08 ppm	0.09 ppm –
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.05 ppm –	– 0.25 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm –	– 0.05 ppm 0.5 ppm
PM_{10}	Annual 24-Hour	50 ug/m^3 150 ug/m^3	30 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	15 ug/m^3 65 ug/m^3	– –
Lead	30-Day Avg. Month Avg.	– 1.5 ug/m^3	1.5 ug/m^3 –

Source: California Air Resources Board, "Ambient Air Quality Standards," January 25, 1999.
ppm = parts per million
ug/m^3 = Micrograms per Cubic Meter

The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM_{10}.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The existing 1-hour ozone standard of 0.12 ppm microns or less has also been established for 24-hour and annual averaging periods.

The current PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. Toxic Air Contaminants (TACs) are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants.

Regional Air Quality Planning

Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. These areas must develop regional air quality plans to eventually attain the standards. Under the Federal Clean Air Act, the El Dorado County portion of the Mountain Counties Air Basin is a severe non-attainment for ozone and PM_{10}, and attainment or unclassified for other pollutants.

With respect to the Federal Clean Air Act requirements, the El Dorado County portion of the MCAB is part of the Sacramento Ozone Nonattainment Area, comprised of Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer and Sutter counties. The nonattainment area is required under state and federal law to meet the federal ozone standard by 2005, or face significant consequences that range from the imposition of financial penalties and permit bans to the adoption of even more stringent federal air emission control requirements.

The California Legislature, when it passed the California Clean air Act in 1998, recognized the relative intractability of the PM_{10} problem with respect to the state ambient standard and excluded it from the basic planning requirements of the Act. The Act did require the CARB to prepare a report to the Legislature regarding the prospect of achieving the State ambient air quality standard for PM_{10} This report recommended a menu of actions, but did not recommend imposing a planning process similar to that for ozone or other pollutants for achievement of the standard within a certain period of time.

Current Air Quality

The California Air Resources Board operates a monitoring site in Placerville. The Placerville monitoring site measures ozone, carbon monoxide and PM_{10}. A summary of air quality data from this monitoring site is shown in **Table 3.4-2**. As shown, federal/state standards for ozone are frequently exceeded in Placerville.

TABLE 3.4-2
AMBIENT AIR QUALITY IN PLACERVILLE – 1999-2001

Pollutant	Year	Days exceeding standards at Placerville Monitoring Site
Ozone/State 1-Hour	1999	21
	2000	19
	2001	10
Ozone/Federal 1-Hour	1999	2
	2000	0
	2001	0
Ozone/Federal 8-Hour	1999	23
	2000	15
	2001	7
Carbon Monoxide/State/Federal 8-Hour	1999	0
	2000	0
	2001	0
PM_{10}/State-Hour	1999	0
	2000	0
	2001	1
PM_{10}/Federal 24-Hour[1]	1999	0
	2000	0
	2001	0

[1] El Dorado County APCD, Guide to Air Quality Assessment, February 2002.
Source: Air Resources Board Aerometric Data Analysis and Management System (ADAM), 2002.

Sensitive Receptors

The El Dorado County APCD defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses or others who are especially sensitive to the effects of air pollutants such as hospitals, schools, and convalescent facilities. There are residential uses adjacent to the southern end of the project corridor.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The El Dorado County Air Pollution Control District (EDCAPCD) recognizes both qualitative and quantitative thresholds of significance for air quality.

Qualitative thresholds include:

- Land use conflicts and exposure of sensitive receptor.
- Compliance with District rules and regulations.
- Potential to generate nuisance odors.

Quantitative thresholds established by the El Dorado County APCD are:

- A project results in new direct or indirect emissions of ozone precursors (ROG or NO_x) in excess of 82 pounds per day.
- A project will cause or significantly contribute to a violation of the applicable ambient air quality standard for other criteria pollutants, including carbon monoxide, PM_{10}, SO_2 and NO_2.
- For toxic air contaminants a lifetime probability of contracting cancer greater than one in one-million (10 in one-million if Toxic-Best Available Control Technology is utilized); or the ground level concentration of non-carcinogenic toxic air contaminants would result in a Hazard Index of greater than 1.

CHECKLIST DISCUSSION

3.4a, b and d

Construction Air Pollutant Emissions/Objectionable Odors

Ozone Precursors and PM_{10}

Impact 3.4.1 Construction activities associated with the proposed project would result in temporary increases in air pollutants exceeding the EDAPCD's significance thresholds and having the potential to cause nuisance. This would be ***potentially significant unless mitigation incorporated***.

The proposed project would generate air pollutants during construction. Construction-related emissions would be temporary in duration, but have the potential to adversely affect air quality. Construction emissions will vary greatly depending on the level of activity, the specific activity taking place, the equipment being operated, local soils, weather conditions and other factors. Particulate emissions from construction, if uncontrolled, can lead to adverse health effects as well as nuisance complaints.

The El Dorado County APCD's *Guide to Air Quality Assessment* recommends the use of a roadway construction emissions model developed by the Sacramento Metropolitan AQMD, for estimating emissions from construction of roads. The model is a spreadsheet that estimates emissions based on numerous parameters regarding the type of construction, area to be disturbed, the period of construction and year of construction. Version 3.0 of the program was applied to the various phases of the project. Inputs were the length of the improvement, the type of improvement (new roadway or road widening), the year of construction and area of construction. Interim improvements were assumed to take place in 2004, while the ultimate improvements were assumed to occur in 2010. The area disturbed was based on the length of the improvement multiplied by a width that included the roadway corridor and 30 feet on either side of the roadway. The model outputs are provided in Appendix A.

The roadway construction emissions model estimates emissions from vehicle and equipment exhaust, fugitive dust and off-gassing emissions during all phases of construction.

Interim Improvements

Table 3.4-3 shows model results for interim improvements (ROG, NO_x and PM_{10}). Maximum emissions shown in **Table 3.4-3** exceed the El Dorado APCD's quantified threshold of significance for NO_x (82 pounds per day). PM_{10} emissions, while substantially less, would have the potential to create a nuisance. These emissions would represent a potentially significant impact.

TABLE 3.4-3
CONSTRUCTION EMISSIONS FOR INTERIM IMPROVEMENTS BY PHASE IN POUNDS PER DAY

Construction Phase	ROG	NO_x	PM_{10}
Grubbing/Land Clearing	10	73	8
Grading/Excavation	10	68	8
Drainage/Utilities/Sub Grade	13	98	4
Paving	8	54	2
Maximum	13	98	8

Ultimate Improvements

Table 3.4-4 shows results for ultimate improvements by construction phase for regionally significant pollutants (ROG, NO_x and PM_{10}). Maximum emissions shown in **Table 3.4-4** exceed the El Dorado APCD's quantified threshold of significance for NO_x (82 pounds per day). PM_{10} emissions, while substantially less, would have the potential to create a nuisance. These emissions would represent a potentially significant impact.

TABLE 3.4-4
CONSTRUCTION EMISSIONS FOR THE ULTIMATE IMPROVEMENTS BY PHASE IN POUNDS PER DAY

Construction Phase	ROG	NO_x	PM_{10}
Grubbing/Land Clearing	12	69	7
Grading/Excavation	11	69	7
Drainage/Utilities/Sub Grade	15	91	3
Paving	10	58	2
Maximum	15	91	7

Mitigation Measures

MM 3.4.1a Require the construction contractor to provide an approved plan demonstrating that heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any subcontractor, will achieve, at a minimum, a fleet averaged 20 percent NO_x reduction compared to the most recent CARB fleet average. The contractor shall submit a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the construction project. The inventory should include the horsepower rating, engine production year and hours of use or fuel throughput

for each piece of equipment. The inventory list is to be updated and submitted monthly throughout the duration of construction activity.

As an alternative to the above, the prime contractor may establish and utilize a maximum daily diesel fuel throughput that equates to 82 pounds per day of NOx. The methodology and assumptions for the calculation and enforcement of the maximum daily diesel fuel usage will be submitted to and approved by the El Dorado County Air Pollution Control District.

MM 3.4.1b Contractors shall implement the following dust control measures:

Onsite

- Apply water on material stockpiles and during excavation, grading, sweeping, or clearing of land (all exposed soils shall be kept visibly moist during grading).
- Cover or wet at all times loads within open-bodied trucks, trailers or other vehicles transporting materials.
- Remove daily earth or other material carried onto paved streets and parking surfaces.
- Water all haul roads a minimum of twice daily and more often in hot and/or dry weather.
- Enforce a speed limit of 15 mph on unpaved roads and surfaces.
- Exposed soils on the project site shall be watered at least twice daily, and a fully operational water truck shall be required on-site at all times during grading and excavation when soils are exposed. Watering shall be increased in frequency when winds exceed 15 miles per hour.
- All unpaved roads, parking areas, and staging areas shall be watered at least three times daily, or treated with non-toxic soil stabilizers.
- All soil stockpiles or other materials that could be blown by wind shall be enclosed, covered, and/or watered at least twice daily, or treated with non-toxic soil stabilizers.
- All paved access roads, parking areas, and staging areas shall be swept at least once daily.
- Grading and excavation activities shall be suspended when winds exceed 25 miles per hour.
- Sandbags or other erosion control devices shall be used to prevent silt runoff to public roadways.
- The project operator/applicant is responsible for contacting appropriate agencies to evaluate safe use of dust palliative prior to application. A

material data safety sheet will be forwarded to the Air Pollution Control District for review prior to application. Alternatively, inactive construction areas may be hydroseeded.

- Ground cover removed during construction shall be revegetated as soon as possible, and no later than 30 days after the completion of grading and site stabilization activities.
- If available, the County shall utilize or contract with contractors who utilize reduced-emissions engines and reduced-emission alternative fuels during construction of roadway improvements.

Offsite

- Trucks hauling dirt or other loose materials shall be covered.
- All trucks and equipment shall be washed off prior to leaving the site.
- Street sweeping shall be conducted (preferably with water sweepers) at least once daily where visible soil material is carried onto adjacent public streets.
- Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions.
- Equipment idling shall be kept to a minimum when equipment is not in use. No piece of equipment shall be left to idle in one place for more than 30 minutes.
- Construction truck trips for trucks using nearby roadways shall be scheduled during non-peak traffic hours so as not to cause additional traffic congestion.

The above mitigation measures would reduce ozone precursors by 20 percent and bring the project into compliance with the El Dorado County Air Pollution Control District's standards. The PM_{10} mitigation could reduce emissions by half, thus resulting in a minimal increase in the regional emissions of PM_{10}. Therefore, the construction impacts would be reduced to a ***less than significant*** level.

Naturally Occurring Asbestos

Interim Improvements

The project site is not known to contain serpentine rocks. However, a concern associated with construction activities in western El Dorado County is the potential presence of natural-occurring serpentine rock and soils, which contain asbestos. Asbestos is classified as a known human carcinogen by state and federal health agencies. Asbestos fibers are freed from the rock or soil when it is crushed or broken and through natural weathering processes. Limited monitoring by the California Air Resources Board indicates that elevated levels of asbestos in the ambient air do not appear to be wide-spread in El Dorado County. However, concern over asbestos has resulted in the adoption of County Ordinance No. 4548, which addresses the use of serpentine rock as a road surface and contains general requirements for grading, excavation and

construction activities in areas with asbestos-bearing rock or soil.

The requirements of Ordinance 4548 for construction apply to properties identified on the Potential Asbestiform Minerals Map; the map identifies the project area as possibly containing tremolite asbestos due to the presence of known faults. Ordinance 4548's requires preparation of an Asbestos Hazard Dust Mitigation Plan for construction. This plan must be submitted to the El Dorado County Environmental Management Department. The plan shall include practices to be followed to eliminate, to the greatest extent possible, the emission of fugitive dust from grading, excavation, and construction activity.

The Director the El Dorado County Environmental Management Department may require additional mitigation and/or air monitoring procedures to be included in the Asbestos Hazard Dust Mitigation Plan whenever he/she finds that such measures are necessary to protect and/or demonstrate the protection of public health and safety.

The interim improvements for the project would be required to comply with County Ordinance 4548 which would mitigate potential exposure to naturally-occurring asbestos to a ***less than significant*** level.

Ultimate Improvements

The ultimate improvements for the project would be required to comply with County Ordinance 4548 which would mitigate potential exposure to naturally-occurring asbestos to a ***less than significant*** level.

Operational Air Quality Impacts

The proposed project itself would not generate traffic or the associated air pollutants. Approved development projects in the project area will generate the traffic volumes and stationary sources responsible for increases in regional air pollutants. The air quality impacts of these projects have already been addressed in their associated environmental documents (e.g., Carson Creek Specific Plan EIR and the Valley View Specific Plan EIR). However, the discussion below provides an analysis of the project's direct contribution to operational air quality impacts.

Carbon Monoxide "Hot Spot" Issues

Interim Improvements

The project's interim improvements would affect concentrations of local pollutants in two ways. The geometrical changes to the roadways would improve traffic movement in the project area, and the project would modify the operating conditions of vehicles (average speed, delay, etc.). The effects of both these factors would be generally positive in that at a given location the project is likely to result in a lower concentration of carbon monoxide after construction compared to the no project alternative. Carbon monoxide "hot spots" occur as a result of a build up of carbon monoxide emissions from idling vehicles, which can reach levels that exceed state and federal air quality standards. The project's air quality improvement associated with

carbon monoxide is due to improved movement of traffic along project area roadways and intersections (i.e., reduced idling time of vehicles).

El Dorado County is in attainment for carbon monoxide (state and federal standards are attained) and the project is located in an area expected to have very low background levels of carbon monoxide. Previous studies of carbon monoxide levels near Latrobe Road were conducted as part of the Valley View Specific Plan (south of Highway 50) (1998). The Valley View Specific Plan analysis predicted concentrations of carbon monoxide adjacent the Latrobe Road/White Rock Road, Latrobe Road/US 50 eastbound Ramps and El Dorado Boulevard/US 50 westbound Ramps intersections. The Pedregal analysis predicted concentrations at the El Dorado Hills Blvd./US 50 westbound Ramp and Latrobe Road/White Rock Road intersections. Both analyses showed that existing concentrations and future concentrations of carbon monoxide at these locations were predicted to be well below the state/federal standards. Thus, no significant carbon monoxide air emission impacts were identified and the proposed project would assist in maintaining low carbon monoxide concentration levels.

As described above, the overall effect of the interim improvements on local carbon monoxide concentrations is expected to be positive. No violations of any state or federal ambient air quality standard is predicted due to the low background levels in the project vicinity. The interim improvements' impacts on local air quality associated with carbon monoxide would be ***less than significant***.

Ultimate Improvements

As described above, the overall effect of the ultimate improvements on local carbon monoxide concentrations is expected to be positive. No violations of any state or federal ambient air quality standard is predicted due to the low background levels in the project vicinity. The ultimate improvements' impacts on local air quality associated with carbon monoxide would be ***less than significant***.

Regional Air Pollutant Impacts

Interim Improvements

Regional air pollutants of importance in El Dorado County are ozone precursor (ROG and NO_x) and PM_{10}. The project's interim improvements would affect emissions of these pollutants by changing operating conditions for vehicles using White Rock Road and the roads it connects with.

The project would improve levels of service for traffic, resulting in reduced delay and higher average speeds. Reducing delay (and idling) would have a beneficial impact on emissions of all regional pollutants. A slightly higher average speed would be expected to reduce the ROG emission rate and slightly increase the emission of NO_x and PM_{10}. Given the volume of traffic on the affected roads, the magnitude of these changes would be quite small.

In addition, the proposed project itself does not generate traffic and the associated air pollutants. Approved development projects in the project area will generate the traffic volumes

and stationary sources responsible for increases in regional air pollutants. The air quality impacts of these projects have already been addressed in their associated environmental documents (e.g., Carson Creek Specific Plan EIR (1996), the Valley View Specific Plan EIR(1998), El Dorado Hills Specific Plan EIR (1987), Town Center East Mitigated Negative Declaration EIR (1995), and Creekside Greens EIR(1995).

The proposed project's interim improvements would only facilitate improved traffic circulation as well as improved facilities for bicyclists, which would provide some improvement in air quality emissions. Thus, project impacts on regional air quality are considered to be ***less than significant***.

Ultimate Improvements

The project's ultimate improvements would affect emissions of these pollutants by changing operating conditions for vehicles using White Rock Road and the roads it connects with. The ultimate improvements would only facilitate improved traffic circulation as well as improved facilities for bicyclists, which would provide some improvement in air quality emissions. Thus, project impacts on regional air quality are considered to be ***less than significant***.

3.4c

Changes in Climate Conditions

Interim Improvements

The scale of the interim improvements in relation to existing regional transportation infrastructure is minor, and the project would not have a significant impact on the air movement, moisture, or temperature of the project area or any other location. In addition, the project would not cause any change in climate. Therefore, the project's interim improvements would have ***no impact*** on the climate.

Ultimate Improvements

The scale of the ultimate improvements in relation to existing and planned regional transportation infrastructure will be minor. The project would not have a significant impact on the air movement, moisture, or temperature of the project area or any other location. In addition, the project would not cause any change in climate. Therefore, the ultimate improvements would have ***no impact*** on the climate.

CONCLUSION REGARDING AIR QUALITY

The proposed project would not create severe air quality impacts with the implementation of the mitigation measures identified above.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.5 TRANSPORTATION/CIRCULATION *Will the proposal result in:*				
a. Increased vehicle trips or traffic congestion?	☐	■	☐	☐
b. Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	■	☐
c. Inadequate emergency access or access to nearby uses?	☐	■	☐	☐
d. Insufficient parking capacity on-site or off-site?	☐	☐	☐	■
e. Hazards or barrier for pedestrians or bicyclists?	☐	☐	■	☐
f. Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	■	☐
g. Rail, waterborne, or air traffic impacts?	☐	☐	■	☐

A. ENVIRONMENTAL SETTING

The circulation system for El Dorado County consists of a roadway network that until recently was primarily rural in character but is rapidly urbanizing in the western portion of the County. U.S. Highway 50 is the primary transportation corridor connecting the County's major population centers. Other State highways, County arterials, and a network of local public and private roads constitute the remainder of the roadway system. White Rock Road is an integral component of the County roadway system, serving as major transportation arterial carrying a significant amount of traffic into and out of the western portion of El Dorado County. In addition, White Rock Road serves as the primary access to major existing and approved developments in the area, including but not limited to the El Dorado Hills Business Park, Valley View Specific Plan area, Carson Creek Specific Plan area, Town Center East and West, and residential uses along White Rock Road such as Springfield Meadows, Shadow Hills, and a mobile home park (east of Latrobe Road).

P.M. traffic volumes on White Rock Road for 1999 were 496 with an associated LOS of "B" west of Latrobe Road and 222 with an associated LOS of "A" east of Latrobe Road (Crain, 2000). Weekday traffic volumes were measured in April and December 2001 over a five-day period. In April 2001, the traffic volumes, measured at 250 feet east of Monte Verde Drive (milepost 1.35), were 911. In December 2001, the traffic volumes along White Rock Road, measured 100 feet east of Latrobe Road (milepost 1.15), were 3,177 (Collins, 2002). By year 2020, average daily traffic (ADT) volumes on White Rock Road are expected to be 30,410 west of Latrobe Road and 44,590 east of Latrobe Road (McKibbin, 2001). Currently, White Rock Road East does not provide access to the north or east beyond the Valley View Specific Plan area and private lands along its alignment.

In more general terms, **Table 3.5-1** presents a summary of 1999 traffic volumes and levels of service derived from an ongoing count program by the El Dorado County Department of Transportation. The traffic counts, normally taken for a few days at a time, are samples rather than true average daily traffic.

TABLE 3.5-1
DEPARTMENT OF TRANSPORTATION TRAFFIC COUNT ANNUAL SUMMARY
RELATIVE TO THE PROJECT AREA
(1999)

Road Name	Mile Post	Location	Count	Count Period	Road Functional Classification	LOS
White Rock Road	0.00	At County Line	2,491	December	Rural Minor Arterial	C
White Rock Road	1.11	100 ft. W of Latrobe Road	2,672	December	Rural Minor Arterial	C
White Rock Road	1.15	100 ft. E of Latrobe Road	2,063	December	Rural Minor Arterial	B
White Rock Road	0.00	100 ft. S of US 50	71	December	Rural Minor Arterial	A

Source: McKibbin, 2001

Roadways that currently intersect, or are planned to intersect with White Rock Road East include Post Street, Silva Valley Parkway, Tong Road, Joeger Cutoff Road, Hidden River Way and Monte Verde Road. In addition, 5th Street will intersect with White Rock Road East.

Limited transit service is available in the area. A Park and Ride facility is located along White Rock Road East and Post Street. This parking lot, which is owned by El Dorado Transit, contains approximately 59 parking spaces. Seven buses provide pickup and drop-off services to this lot as part of the Placerville to Downtown Sacramento transit route. The 40-foot buses are equipped with bike racks that are capable of holding two bicycles (Norton, 2002).

In addition to automotive use, bicyclists utilize White Rock Road.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant transportation/circulation impacts if it:

- Causes an increase in traffic which is substantial in relation to the existing traffic loads and capacity of the road system that are inconsistent with County standards;
- Creates traffic conditions which expose people to traffic hazards;
- Substantially interferes or prevents emergency access to the site or surrounding properties;
- Does not provide sufficient parking for the project uses or affects existing or future parking for surrounding uses; or interferes with existing or planned bicycle or pedestrian facilities.

CHECKLIST DISCUSSION

3.5a and c

Traffic Congestion and Access Limitations

Construction Impacts

Impact 3.5.1 Construction activities associated with the roadway improvements could result in damage to adjacent roadways as well as temporary access impacts to area residences and businesses. This would be ***potentially significant unless mitigation incorporated***.

Interim Improvements

Implementation of the interim improvements would involve extensive construction activities along White Rock Road in the vicinity of existing residential areas (mobile home park and single-family residences) and businesses (e.g. the post office). While construction traffic is expected to be temporary and minor and would not substantially impact levels of service, construction activities could restrict access throughout the project area. As shown in **Figure 2-1** and **Figure 2-4 (Sheets 1 through 3)**, White Rock Road is the sole access roadway to several residences and businesses in the project area. Improvement plans shall include a traffic control plan to direct traffic through construction areas.

In addition to restricting access, construction activities could damage project area roadways as a result of the use and movement of heavy construction equipment.

Ultimate Improvements

Implementation of the project's ultimate improvements would have the potential as the interim improvements to result in impacts to adjacent roadways and adjacent residences and businesses.

Mitigation Measures

MM 3.5.1a The construction contractor shall notify El Dorado County Department of Transportation about the schedule for project construction. The purpose of this notification will be to postpone any planned roadway resurfacing and/or improvement projects in the project area and coordinate such improvement projects with project construction schedule.

MM 3.5.1b Following the completion of construction activity, the construction contractor shall repair any project-related roadway damage, including new overlays on affected roadways.

MM 3.5.1c The contractor shall be required to minimize access disruptions to business and residential properties and accesses to White Rock Road in all phases of project construction. Roadway closures shall be allowed only in the event that an alternate route is provided using appropriate signage. The contractor shall be required to prepare a Traffic Management Plan (TMP) in consultation with El Dorado County DOT. The TMP provides measures to ensure the least amount of inconvenience to businesses and local residents during Project construction.

Implementation of the above mitigation measures would reduce construction-related traffic impacts to ***less than significant***.

Operational Traffic Impacts

Interim Improvements

The interim improvements are designed to improve current traffic circulation movements and reduce traffic congestion in western El Dorado County until the Silva Valley Parkway Interchange is constructed, at which time the ultimate improvements to White Rock Road East will occur. P.M. traffic volumes on White Rock Road for 1999 were 496 with an associated LOS of "B" west of Latrobe Road and 222 with an associated LOS of "A" east of Latrobe Road. By year 2020, average daily traffic (ADT) volumes on White Rock Road are expected to be 30,410 west of Latrobe Road and 44,590 east of Latrobe Road (. Widening and intersection improvements are necessary in order to maintain and improve appropriate levels of service as approved development projects build out.

In addition, the project goals and objectives call for improving LOS conditions in the project area to a level consistent with the goals, objectives, and policies of the El Dorado County General Plan (1996) as well as the current LOS standard interpretation of Measure Y.

Thus, implementation of the interim improvements would have a ***less than significant*** impact on traffic congestion.

Ultimate Improvements

The ultimate improvements are designed to improve circulation movement and to respond to forecasted traffic counts and patterns in western El Dorado County associated with the planned buildout of Serrano, the El Dorado Hills Specific Plan area, and Valley View Specific Plan area.

The proposed roadway improvements were specifically identified in the following adopted cumulative traffic mitigation from the Valley View Specific Plan EIR (El Dorado County, 1998):

> ***Mitigation Measure T-10.*** *[The White Rock Road and Latrobe Road] intersection is projected to operate at LOS F in the peak hours for the base (cumulative-without-project) scenario. To mitigate the project impacts: widen Latrobe Road to provide two northbound and southbound through lanes, one northbound and southbound left turn lane, and one northbound and southbound right turn lane; widen White Rock Road east of Latrobe Road to become a four-lane divided roadway as discussed under Mitigation Measure T-14.*
>
> ***Mitigation Measure T-14.*** *Mitigate this condition (increased delay on roadway segment) by widening [White Rock Road] to become a four-lane divided roadway with median. Such a widening would make the roadway consistent with the already approved plans for White Rock Road west of Latrobe Road. The RIF currently includes, and is periodically revised to fully fund this County roadway improvement. The project is subject to County RIF requirements. All future project development will be required to make RIF payments.*

The ultimate improvements would include six lanes of traffic on a divided roadway with a 130-foot right-of-way, which would exceed the requirements in the Valley View Specific Plan EIR's Mitigation Measures MM T-10 and T-14. Thus, implementation of the ultimate improvements would have a ***less than significant*** impact on traffic congestion.

3.5b

Traffic Safety Issues

Interim Improvements

The project's interim improvements would improve transportation and traffic circulation in the vicinity of the project area by increasing capacity, improving traffic safety, and improving emergency access. The proposed project is consistent with the County's Capital Improvement Program. During construction, impacts could occur due to temporary traffic diversions, delays, or surface damage. Truck delivery of heavy equipment and supplies to and from the construction site could damage the roadbed of nearby streets.

This potentially significant impact would be mitigated with mitigation measures MM 3.5.1a through c. The contractor is required to repair any project-related roadway damage. With implementation of the above mitigation measures, the interim improvements' impacts on traffic safety would be reduced to ***less than significant***.

Ultimate Improvements

Ultimate improvements to White Rock Road East would improve transportation and traffic circulation in the vicinity of the project area by increasing capacity, improving traffic safety, and improving emergency access. The ultimate improvements would be timed with the construction of the Silva Valley Parkway Interchange. This would provide a direct connection to US 50, which would improve circulation patterns in the project area. Additionally, mitigation measures MM 3.5.1a through c would reduce potential impacts to roadways and traffic safety to ***less than significant***.

3.5d

Parking Capacity Impacts

Interim Improvements

The project's interim improvements would not create the need for parking onsite or offsite. Therefore, the proposed project would have ***no impact*** on parking.

Ultimate Improvements

Likewise, the project's ultimate improvements would not create the need for parking onsite or offsite. Therefore, the proposed project would have ***no impact*** on parking.

3.5e

Bicyclist/Pedestrian Impacts

Interim Improvements

The interim improvements to White Rock Road East include plans for four Class II bike lanes, but not pedestrian facilities. White Rock Road East will connect with Silva Valley Parkway, which includes plans for Class I bike lanes and sidewalks. Once improvements are made along both roadways, bicyclists will be able to ride uninterrupted from the Serrano community to Latrobe Road, thus avoiding traffic at the Latrobe/U.S. 50 intersection. Construction activities associated with the interim improvements would temporarily restrict both bicycle and pedestrian movement along White Rock Road. The project's interim improvements would result in designated bike lanes along both sides of the road, which would improve bicycle safety and increase commuting opportunities along White Rock Road East. Therefore, the interim improvements would result in a **less *than significant*** impact on bicycle and pedestrian safety.

Ultimate Improvements

While final design of White Rock Road widening has yet to be completed, the ultimate improvements will include Class I bike lanes. The project would ultimately improve bicycle safety and increase opportunities for commuting on bicycles along White Rock Road East by including designated bike lanes along both sides of the road. Therefore, the ultimate improvements to White Rock Road would result in a ***less than significant*** impact on bicycle and pedestrian safety.

3.5f and g

Alternative Transportation Impacts

Interim Improvements

The interim improvements will be limited to widening and extending an existing roadway and improving drainage in the project area. Construction of the interim improvements may temporarily restrict bicycle and pedestrian travel along White Rock Road (see discussion for 3.5e) and may temporarily block access to the Park-N-Ride lot from White Rock Road and Post Street, but would not contribute to any long-term impacts on alternative modes of

transportation. The project would have a ***less than significant*** impact on adopted policies supporting alternative transportation, and ***no impact*** on rail, waterborne, or air traffic.

Ultimate Improvements

The ultimate improvements will be limited to widening, realigning and extending an existing roadway and improving drainage in the project area. Like the interim improvements, construction activities associated with the ultimate improvements may temporarily restrict bicycle and pedestrian travel and block access to the Park-N-Ride lot. However, these impacts would only be temporarily in nature. The project would ultimately improve opportunities for alternative modes of transportation along White Rock Road East. The project would have a ***less than significant*** impact on adopted policies supporting alternative transportation, and ***no impact*** on rail, waterborne, or air traffic.

C. CONCLUSIONS RELATING TO TRANSPORTATION/CIRCULATION

The proposed project would not result in significant traffic impacts with the implementation of the above mitigation measures.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.6 BIOLOGICAL RESOURCES *Will the proposal result in impacts to:*				
a. Endangered, threatened, rare, or special status species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	☐	■	☐	☐
b. Locally designated species (e.g. heritage trees)?	☐	■	☐	☐
c. Natural communities or wildlife habitat (e.g. oak forest, coastal habitat, etc.)?	☐	■	☐	☐
d. Wetland habitat (e.g. marsh, riparian, and vernal pool)?	☐	■	☐	☐
e. Wildlife dispersal or migration corridors?	☐	☐	■	☐

A. ENVIRONMENTAL SETTING

The biological resources assessment provided below was prepared by Foothill Associates, and included field and document review as well as consultation with resource agencies (e.g., U.S. Fish and Wildlife Service).

PROJECT AREA SETTING

Habitat types occurring on the study area include annual grassland, horticultural/landscaped, intermittent drainage, riparian woodland, and seasonal marsh.

BIOLOGICAL COMMUNITIES

The plant communities occurring along the proposed White Rock Road widening project are discussed below. Common wildlife and plant species observed, or expected to occur, in these areas and special-status species and sensitive plant habitats expected, or known to occur, in these areas are also addressed below. **Figure 3.6-1** illustrates the vegetation communities located in the study area. Habitat types occurring on the study area include annual grassland, horticultural/landscaped, intermittent drainage, riparian woodland, riverine perennial marsh, and seasonal marsh, as shown in **Table 3.6-1**. A list of wildlife and plant species observed or known to occur within the study area is presented in **Appendix B**.

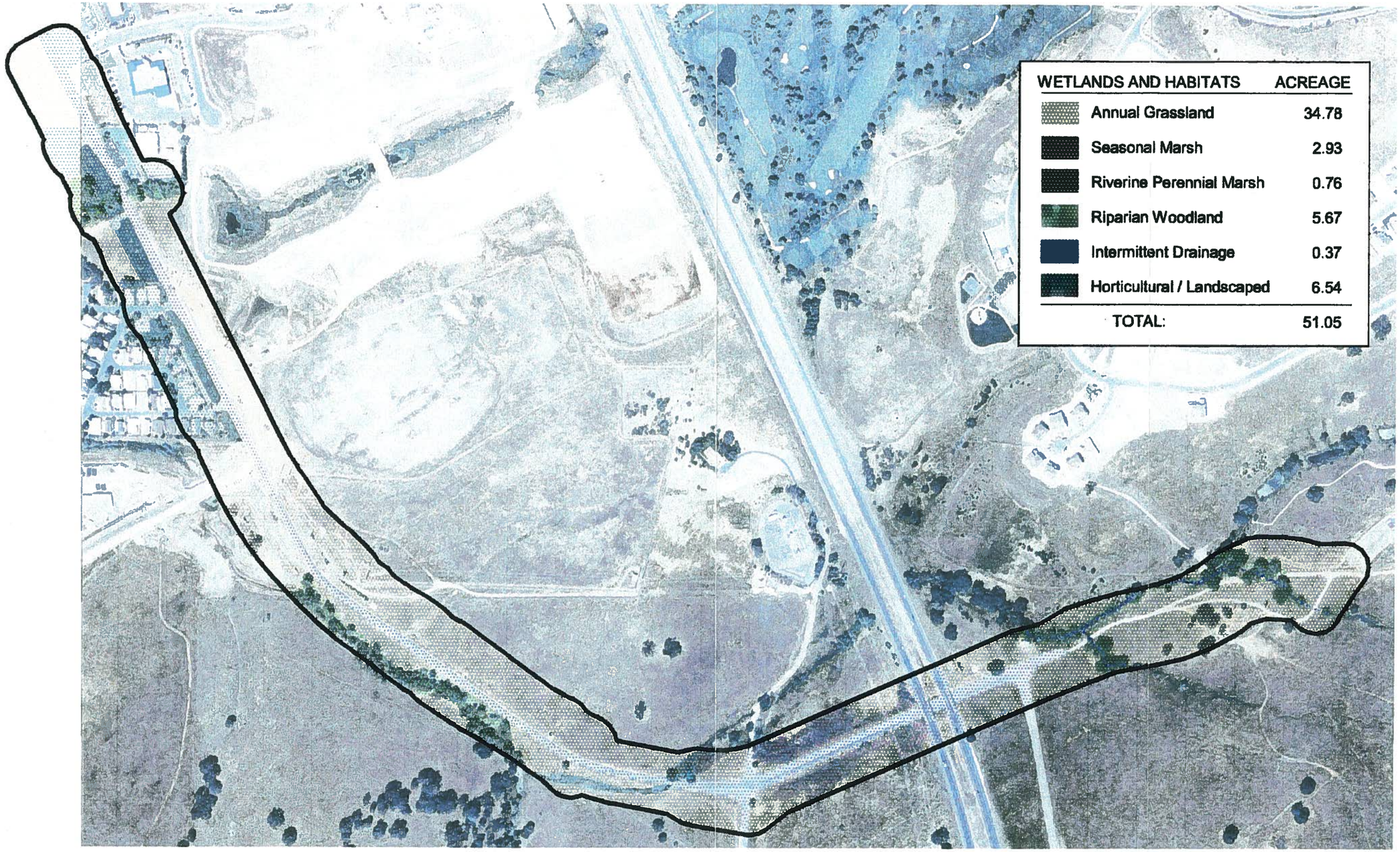


FIGURE_3.6-1.CDR 08/12/02

SOURCE: FOOTHILL ASSOCIATES

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SCALE IN FEET

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FIGURE 3.6-1
VEGETATION COMMUNITIES

PMC
PACIFIC MUNICIPAL CONSULTANTS

TABLE 3.6-1
ACREAGE OF COMMUNITY/HABITAT TYPES IN THE STUDY AREA

Habitat Type	Acreage Present
Annual Grassland	39.77
Seasonal Marsh	2.93
Riverine Perennial Marsh	0.76
Riparian Woodland	5.43
Intermittent Drainage	0.79
Horticultural / Landscaped	7.29
Total	**56.97**

Annual Grassland

Annual grassland habitat interspersed with sparse blue oaks (*Quercus douglasii*) and interior live oaks (*Quercus wislizenii*) occurs along the majority of the proposed widening project. Common grassland species observed in this habitat include non-native grasses such as Italian ryegrass (*Lolium multiflorum*), ripgut brome (*Bromus diandrus*), soft chess brome (*Bromus mollis*), and wild oat (Avena sp.); weedy herbaceous species such as rose clover (*Trifolium hirtum*), smooth cat's-ear (*Hypochaeris glabra*), spring vetch (*Vicia sativa*), and yellow star thistle (*Centaurea solstitialis*); and native herbaceous species such as brodiaea (Brodiaea sp.) and tarweed (*Hemizonia fitchii*). Additional plant species observed or expected to occur in this habitat include deergrass (*Muhlenbergia rigens*), filaree (*Erodium botrys*), rancher's fireweed (*Amsinckia menziesii*) and Vulpia (*Vulpia myuros*).

Several areas along White Rock Road are composed of gravel substrate and support sparse vegetation. These areas are highly disturbed, providing marginal plant habitat. Highly invasive herbs such as yellow star thistle and ripgut brome were the only plant species observed in these areas.

Annual grassland habitat supports breeding, cover, and foraging habitat for numerous species of wildlife. Bird species expected to forage and/or nest in this habitat include American crow (*Corvus brachyrhynchos*), northern harrier (*Circus cyaneus*), rock dove (*Columba livia*), savannah sparrow (*Passerculus sandwichensis*), turkey vulture (*Cathartes aura*), and western meadowlark (*Sturnella neglecta*). Additional wildlife species expected to occur in this habitat include gopher snake (*Pituophis melanoleucus*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*), deer mouse (*Peromyscus maniculatus*), mule deer (*Odocoileus hemionus*), and striped skunk (*Mephitis mephitis*).

Intermittent Drainages

Several intermittent drainages occur along the proposed widening project. These drainages primarily occur in the northern portion of the project area, north of Carson Creek. This habitat type also includes Carson Creek and an unnamed perennial tributary to Carson Creek. Carson Creek is approximately a 5 to 15-foot wide channel that flows southwest along the eastern

boundary of the project area. Within the project area, sparse to moderately dense riparian woodland vegetation occurs along the edges of Carson Creek. Additionally, bands of narrow-leaved cattails (*Typha angustifolia*) and tule (*Scirpus* sp.) occur within the creek channel. The unnamed perennial tributary to Carson Creek flows south along the western boundary of the

project area. This unnamed tributary is approximately 2 to 5 feet wide with vegetation similar to Carson Creek. The intermittent drainages north of Carson Creek are tributaries to the unnamed tributary of Carson Creek that flow southwest on the eastern portion of the project site. These intermittent drainages are narrow (approximately 1 to 5 feet wide) with similar vegetation as Carson Creek.

The wildlife species associated with the intermittent drainage habitat in the project area includes primarily aquatic species such as pacific chorus frog (*Pseudacris regilla*) and bullfrog (*Rana catesbeiana*). Numerous avian and mammal species forage in this habitat including belted kingfisher (*Ceryle alcyon*), mallard (*Anas platyrhynchos*), and raccoon (*Procyon lotor*).

Riparian Woodland

Riparian woodland habitat supports a diversity of plant species that have adapted to the wet soil conditions found alongside waterways. Within the study area this habitat is found adjacent to Carson Creek, the unnamed tributary to Carson Creek, and along portions of the intermittent drainages. Vegetation along these areas are dominated by Fremont's cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), and red willow (*Salix laevigata*). Additional plant species expected to occur in this habitat include coffeeberry (*Rhamnus* sp.), buckeye (*Aesculus californica*), and narrow-leaved cattail.

Riparian habitat provides substantial breeding, cover, and foraging habitat for a wide variety of resident and migratory wildlife species. Additionally, riparian habitats provide a sheltered corridor for wildlife movement. Species expected to occur in this habitat include Anna's hummingbird (*Calypte anna*), belted kingfisher, lesser goldfinch (*Carduelis psaltria*), scrub jay (*Aphelocoma californica*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculates*), mule deer, raccoon, and striped skunk. Species observed include great blue heron (*Ardea herodias*), red-wing black bird (*Agelaius phoeniceus*), bullfrog, and Pacific chorus frog.

Perennial Marsh

*Perennial marsh habitat occurs within the unnamed tributary to Carson Creek, south of Hwy 50. Perennial marsh habitat is supported by surface water and pond water long enough to support hydric soils and hydrophytic vegetation. Hydrophytic vegetation, plants that can tolerate saturated soil conditions, was observed in this habitat. Marshes support such species as Baltic rush (*Juncus balticus*), narrow-leaved cattail, and spike rush (*Elocharis sp.*). Areas of seasonally wet marsh habitat occur adjacent to the project area, along the unnamed tributary to Carson Creek on the western boundary of the study area, south and north of Joeger Cuttoff Road, and adjacent to the eastern boundary of the study area, north of Joeger Cuttoff Road.*

Wildlife species utilize perennial marsh habitat for temporary water sources and cover. Species expected to occur in this habitat include black phoebe (*Sayornis nigricans*), great blue heron (*Ardea herodias*), great egret (*Casmerodius albus*), red-winged blackbird (*Agelaius phoeniceus*), bullfrog, and Pacific chorus frog.

Oak Woodland

Oak woodland habitat occurs adjacent to the study area. This habitat is dominated primarily by blue oaks (*Quercus douglasii*) and interior live oak (*Quercus wislizenii*). Additional tree species expected to occur in this habitat include Hinds black walnut (*Juglans hindsii*) and Fremont's cottonwood. Understory plant species expected to occur in this habitat include farmer's foxtail (*Hordeum murinum*), Italian ryegrass, ripgut brome, and wild oats.

Oak woodland habitat provides breeding, cover, and foraging habitat for numerous wildlife species. Bird species expected to forage and/or nest in this habitat include acorn woodpecker (Melanerpes formicivorus)*, Bewick's wren* (Thryomanes bewickii)*, bushtit* (Psaltriparus minimus)*, California quail* (Callipepla californica)*, European starling* (Sturnus vulgaris)*, plain titmouse* (Baeolophus inornatus)*, red-shoulder hawk* (Buteo lineatus)*, and scrub jay. Additional wildlife species expected to occur in this habitat include mule deer and western gray squirrel* (Sciurus griseus)*.*

Horticultural/Landscaped

Horticultural vegetation is found associated with residential and commercial lots adjacent to the project area. Typically non-native plant species are incorporated into landscape design in residential and commercial areas. Species commonly associated with these areas include agapanthus (Agapanthus africanus)*, Italian cypress* (Cupressus sempervirens)*, and sweet gum* (Liquidambar styraciflua)*.*

Horticultural vegetation provides marginal habitat for avian and terrestrial wildlife species. Common species observed in these areas includes American crow, scrub jay, Brewer's blackbird (*Euphagus cyanocephalus*), rock dove (*Columba livia*).

Annual Grassland

Annual grassland habitat interspersed with sparse blue oaks (*Quercus douglasii*) and interior live oaks (*Quercus wislizenii*) occurs along the majority of the proposed widening project. Common grassland species observed in this habitat include non-native grasses such as Italian ryegrass (*Lolium multiflorum*), ripgut brome (*Bromus diandrus*), soft chess brome (*Bromus mollis*), and wild oat (Avena sp.); weedy herbaceous species such as rose clover (*Trifolium hirtum*), smooth cat's-ear (*Hypochaeris glabra*), spring vetch (*Vicia sativa*), and yellow star thistle (*Centaurea solstitialis*); and native herbaceous species such as brodiaea (Brodiaea sp.) and tarweed (*Hemizonia fitchii*). Additional plant species observed or expected to occur in this habitat include deergrass (*Muhlenbergia rigens*), filaree (*Erodium botrys*), rancher's fireweed (*Amsinckia menziesii*) and Vulpia (*Vulpia myuros*).

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(*Peromyscus maniculatus*), mule deer (*Odocoileus hemionus*), and striped skunk (*Mephitis mephitis*).

Intermittent Drainages

Several intermittent drainages occur along the proposed widening project. These drainages primarily occur in the northern portion of the project area, north of Carson Creek. This habitat type also includes Carson Creek and an unnamed perennial tributary to Carson Creek. Carson Creek is approximately a 5 to 15-foot wide channel that flows southwest along the eastern boundary of the project area. Within the project area, sparse to moderately dense riparian woodland vegetation occurs along the edges of Carson Creek. Additionally, bands of narrow-leaved cattails (*Typha angustifolia*) and tule (*Scirpus* sp.) occur within the creek channel. The unnamed perennial tributary to Carson Creek flows south along the western boundary of the project area. This unnamed tributary is approximately 2 to 5 feet wide with vegetation similar to Carson Creek. The intermittent drainages north of Carson Creek are tributaries to the unnamed tributary of Carson Creek that flow southwest on the eastern portion of the project site. These intermittent drainages are narrow (approximately 1 to 5 feet wide) with similar vegetation as Carson Creek.

The wildlife species associated with the intermittent drainage habitat in the project area includes primarily aquatic species such as pacific chorus frog (*Pseudacris regilla*) and bullfrog (*Rana catesbeiana*). Numerous avian and mammal species forage in this habitat including belted kingfisher (*Ceryle alcyon*), mallard (*Anas platyrhynchos*), and raccoon (*Procyon lotor*).

REGULATION OF SPECIAL-STATUS SPECIES

Federal Endangered Species Act/California Endangered Species Act

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984.

The state and federal Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The United States Fish and Wildlife Service (USFWS) is responsible for implementation of the FESA, while the California Department of Fish and Game (CDFG) implements the CESA. During project review, each agency is given the opportunity to comment on the potential of the project to affect listed plants and animals.

Other Statutes, Codes, and Policies Affording Limited Species Protection

In addition to formal listing under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFG. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

List 1A: Plants Believed Extinct.

List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.

List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.

List 3: Plants About Which We Need More Information - A Review List.

List 4: Plants of Limited Distribution - A Watch List.

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Listed and Special-Status Plants and Animals

Table 3.6-2 identifies the species listed in the USFWS species list for the Clarksville, Folsom, Folsom SE, and Shingle Springs 7.5-minute USGS quadrangles, all of which have once occurred in the project vicinity. Species listed as having no potential for occurrence are species either a) not expected to occur in the project area based on the known range of the species or b) not expected to occur due to lack of suitable habitat within the project area. Additionally, species listed in the CNDDB as occurring within 5 miles of the proposed project area are included in **Table 3.6-2** as shown on **Figure 3.6-2.** Species that potentially occur within the project area are listed in **Table 3.6-2** and further addressed in the following pages.

TABLE 3.6-2
LISTED AND SPECIAL STATUS SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT AREA OR IN THE PROJECT VICINITY

Common Name	Scientific Name	Regulatory Status	Potential for Occurrence
Plants			
BISBEE PEAK RUSH-ROSE	*Helianthemum suffrutescens*	--;--;3;SCL	No
EL DORADO BEDSTRAW	*Galium californicum* ssp. *sierrae*	FE;CR;1B	No
EL DORADO COUNTY MULE EARS	*Wyethia reticulata*	SC;--;1B	No
LAYNE'S RAGWORT	*Senecio layneae*	FT;CR;1B	No
PINCUSHION NAVARRETIA	*Naverretia myersii myersii*	SC;--;1B	No
PINE HILL CEANOTHUS	*Ceanothus roderickii*	FE;CR;1B	No
PINE HILL FLANNELBUSH	*Fremontodendron californicum* ssp. *decumbens*	FE;CR;1B	No
RED HILLS SOAPROOT	*Chlorogalum grandiflorum*	SC;--;1B	No

Common Name	Scientific Name	Regulatory Status	Potential for Occurrence
SACRAMENTO ORCUTT GRASS	*Orcuttia viscida*	FE;CE;1B	No
STEBBINS' MORNING GLORY	*Calystegia stebbinsii*	FE;CE;1B	No
TUOLUMNE COYOTE-THISTLE	*Eryngium pinnatisectum*	SC;--;1B	No
VALLEY SPEARSCALE	*Atriplex joaquiniana*	SC;--;1B	No
Wildlife			
Invertebrates			
CALIFORNIA LINDERIELLA	*Linderiella occidentalis*	SC;--;--	No
SOUTH FORKS GROUND BEETLE	*Nebria darlingtoni*	SC;--;--	No
VERNAL POOL FAIRY SHRIMP	*Branchinecta lynchi*	FT;--;--	No
VERNAL POOL TADPOLE SHRIMP	*Lepidurus packardi*	FE;--;--	No
VALLEY ELDERBERRY LONGHORN BEETLE	*Desmocerus californicus dimorphus*	FT;--;--	Yes
Amphibians/Reptiles			
CALIFORNIA HORNED LIZARD	*Phrynosoma coronatum frontale*	SC; CSC (Protected);--	Yes
CALIFORNIA RED-LEGGED FROG	*Rana aurora draytonii*	FT; CSC (Protected);--	Yes
CALIFORNIA TIGER SALAMANDER	*Ambystoma californiense*	SC;--;--	No
FOOTHILL YELLOW-LEGGED FROG	*Rana boyii*	SC; CSC (Protected);--	Yes
GIANT GARTER SNAKE	*Thamnophis gigas*	FT;CT;--	No
NORTHWESTERN POND TURTLE	*Clemmys marmorata marmorata*	SC; CSC (Protected);--	Yes
WESTERN SPADEFOOT TOAD	*Scaphiopus hammondii*	SC; CSC (Protected);--	No
Fish			
CENTRAL VALLEY SPRING-RUN CHINOOK SALMON	*Oncorhynchus tshawytscha*	FT (PX); CT;--	No
CENTRAL VALLEY FALL/LATE FALL-RUN CHINOOK SALMON	*Oncorhynchus tshawytscha*	SC; CSC;--	No
CENTRAL VALLEY STEELHEAD	*Oncorhynchus mykiss*	FT;--;--	No
DELTA SMELT	*Hypomesus transpacificus*	FT; CT;--	No
GREEN STURGEON	*Acipenser medirostris*	SC; CSC;--	No
LONGFIN SMELT	*Spirinchus thaleichthys*	SC; CSC;--	No
SACRAMENTO SPLITTAIL	*Pogonichthys macrolepidotus*	FT; CSC;--	No
WINTER-RUN CHINOOK SALMON	*Oncorhynchus tshawytscha*	FE; CE;--	No

Common Name	Scientific Name	Regulatory Status	Potential for Occurrence
Birds			
ALEUTIAN CANADA GOOSE	*Branta canadensis leucopareia*	D;–;– (WINTERING)	No
AMERICAN PEREGRINE FALCON	*Falco peregrinus anatum*	D; CE;– (NESTING)	No
BALD EAGLE	*Haliaeetus leucocephalus*	FT; CE;– (NESTING AND WINTERING)	No
BANK SWALLOW	*Riparia riparia*	–;CT;– (NESTING)	No
BLACK SWIFT	*Cypseloides niger*	SC; –; – (NESTING)	No
BLACK TERN	*Chlidonias niger*	SC; CSC; – (NESTING COLONY)	No
BREWER'S SPARROW	*Spizella breweri*	SC; –; – (NESTING)	No
CALIFORNIA THRASHER	*Toxostoma redivivum*	SC; –; –	Yes
FERRUGINOUS HAWK	*Buteo regalis*	SC;CSC;– (WINTERING)	No
GRASSHOPPER SPARROW	*Ammodramus savannarum*	SC; –; – (NESTING)	Yes
GREAT BLUE HERON	*Ardea herodias*	–;(Sensitive);– (ROOKERY)	No
GREAT EGRET	*Casmerodius albus*	–;(Sensitive);– (ROOKERY)	No
LAWRENCE'S GOLDFINCH	*Carduelis lawrencei*	SC; –; – (NESTING)	Yes
LEWIS' WOODPECKER	*Melanerpes lewis*	SC; –; – (NESTING)	Yes
LITTLE WILLOW FLYCATCHER	*Empidonax traillii brewsteri*	SC;–;– (NESTING)	No
LOGGERHEAD SHRIKE	*Lanius ludovicianus*	SC; CSC; – (NESTING)	Yes
LONG-BILLED CURLEW	*Numenius americanus*	SC; –; – (NESTING)	No
MOUNTIAN PLOVER	*Charadrius montanus*	PT;CSC;– (WINTERING)	No
NUTTALL'S WOODPECKER	*Picoides nuttallii*	–; –; –; SLC	Yes
OAK TITMOUSE	*Baeolophus inornatus*	–; –; –; SLC	Yes
RUFOUS HUMMINGBIRD	*Selasphorus rufus*	SC; –; – (NESTING)	No

Common Name	Scientific Name	Regulatory Status	Potential for Occurrence
SHORT-EARED OWL	*Asio flammeus*	SC; --; -- (NESTING)	Yes
SWAINSON'S HAWK	*Buteo swainsonii*	SC;CT;-- (NESTING)	Yes
TRICOLORED BLACKBIRD	*Agelaius tricolor*	SC; CSC;-- (NESTING COLONY)	Yes
VAUX'S SWIFT	*Chaetura vauxi*	SC; CSC; -- (NESTING)	No
WESTERN BURROWING OWL	*Athene cunicularia hypugea*	SC;CSC;-- (BURROWING SITES)	Yes
WHITE-FACED IBIS	*Plegadis chihi*	SC;CSC;-- (ROOKERY)	No
WHITE-TAILED KITE	*Elanus caeruleus*	SC;(Fully Protected);-- (NESTING)	Yes
Mammals			
FRINGED MYOTIS BAT	*Myotis thysanodes*	SC;--;--	No
GREATER WESTERN MASTIFF BAT	*Eumops perotis californicus*	SC; CSC;--	Yes
LONG-EARED MYOTIS BAT	*Myotis evotis*	SC;--;--	Yes
LONG-LEGGED MYOTIS BAT	*Myotis volans*	SC;--;--	No
PACIFIC WESTERN BIG-EARED BAT	*Corynorhinus townsendii townsendii*	SC; CSC;--	Yes
SAN JOAQUIN POCKET MOUSE	*Perognathus inornatus*	SC;--;--	No
SMALL-FOOTED MYOTIS BAT	*Myotis ciliolabrum*	SC;--;--	Yes
SPOTTED BAT	*Euderma maculatum*	SC; CSC;--	No
YUMA MYOTIS BAT	*Myotis yumanensis*	SC; --;--	Yes

FE = federal endangered FT = federal threatened SC = federal species of concern D = delisted PX = critical habitat C = candidate PT = proposed threatened
CE = state endangered CT = state threatened CR = state rare CSC = California species of special concern C = candidate for listing 1B = CNPS list plants rare, threatened, or endangered in California or elsewhere 2 = CNPS lists plants rare, threatened, or endangered in California, but more numerous elsewhere 3 = CNPS lists plants about which we need more information
SCL= species of local or regional concern or conservation significance.
Source: Foothill Associates

Listed and special-status species that are known to occur, or may potentially occur along the proposed project area are discussed below and listed in **Table 3.6-3**. The species discussed below were considered for this analysis based on field surveys and review of the California Natural Diversity Database (CNDDB), USFWS species lists for the El Dorado County vicinity, and CNPS literature.

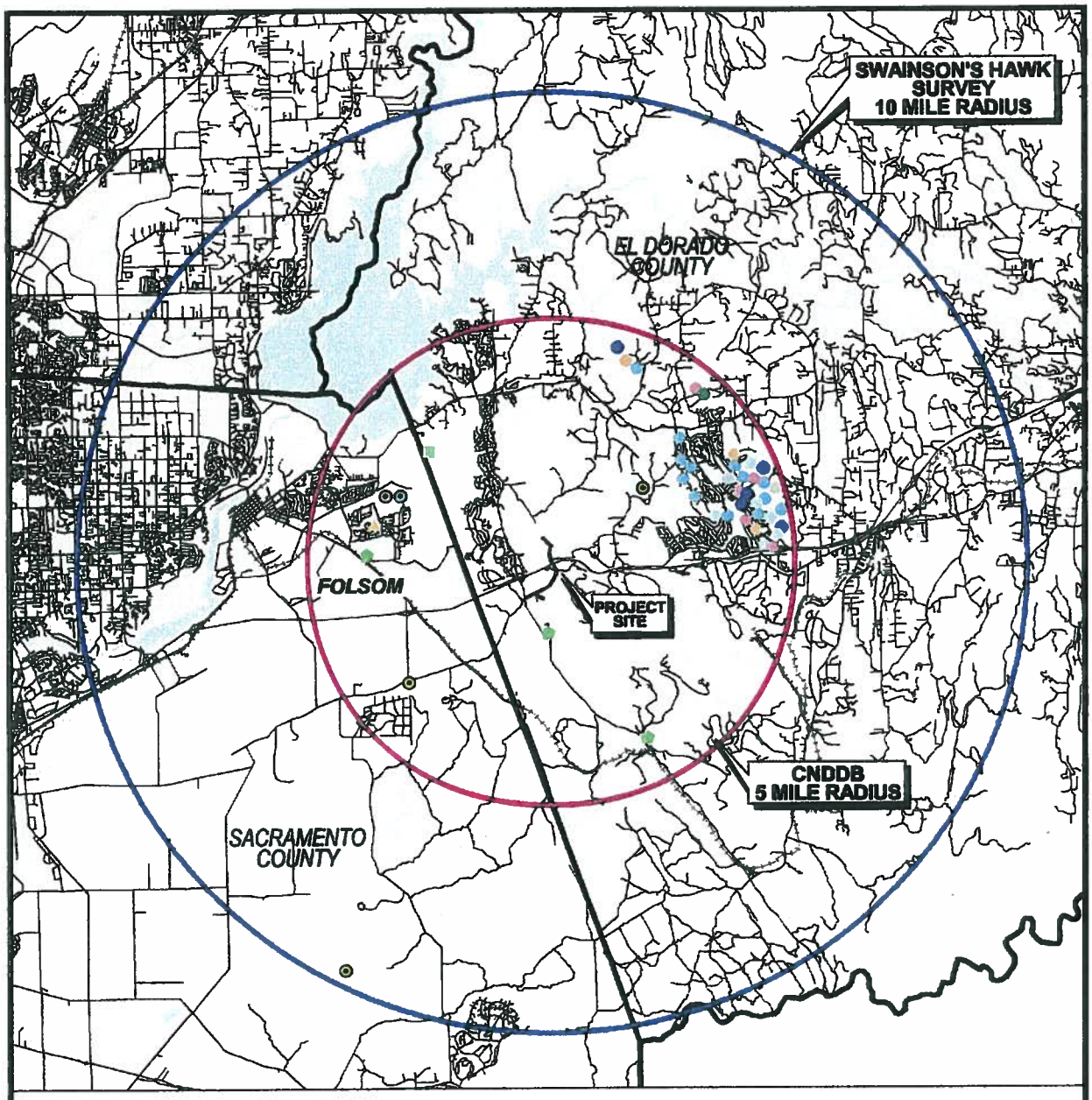

FIGURE_3.6-2.CDR 09/12/02

SOURCE: FOOTHILL ASSOCIATES, 2002

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SCALE IN MILES
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FIGURE 3.6-2

PMC

TABLE 3.6-3
LISTED AND SPECIAL STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT AREA

Species	Federal	State	CNPS [1]	Habitat	Potential for Occurrence
Wildlife					
Invertebrates					
VALLEY ELDERBERRY LONGHORN BEETLE *Desmocerus californicus dimorphus*	FT	–	–	Associated with its host plant, the elderberry (*Sambucus* spp.)	Suitable habitat exists adjacent to the project area. There is also a CNDDB record for this species approximately four miles northwest of the project area.
Amphibians/Reptiles					
CALIFORNIA HORNED LIZARD *Phrynosoma coronatum frontale*	SC	CSC Protected (Full species)	–	Occurs in several habitat types, ranging from exposed gravelly-sandy substrate containing shrubs, clearings in riparian woodlands, dry uniform chamise chaparral, or annual grassland with scattered perennial seepweed (*Suaeda fruticosa*) or saltbush (*Atriplex polycarpa*).	Suitable habitat exists on and adjacent to the project area. This species was not observed during field reconnaissance and there is not a CNDDB record for this species in this area.
CALIFORNIA RED-LEGGED FROG *Rana aurora draytonii*	FT	CSC Protected (Full species)	–	Occurs in dense shrubby riparian vegetation associated with deep,	Suitable habitat exists in Carson Creek, the unnamed tributary to Carson Creek, and intermittent drainages. This species was not observed during field

				still or slow-moving water.	reconnaissance and there is not a CNDDB record for this species in this area.
FOOTHILL YELLOW-LEGGED FROG *Rana boylii*	SC	CSC Protected	--	Inhibits perennial shallow, flowing water with cobble-base bed.	Suitable habitat exists in Carson Creek the unnamed tributary to Carson Creek, and intermittent drainages. This species was not observed during field reconnaissance and there is not a CNDDB record for this species in this area.
NORTHWESTERN POND TURTLE *Clemmys marmorata marmorata*	SC	CSC Protected (Full species)	--	Occurs in permanent ponds or streams associated with dry upland areas.	Suitable habitat exists in Carson Creek the unnamed tributary to Carson Creek, and intermittent drainages. There are CNDDB records for this species in Carson Creek along Latrobe Road.
Birds					
SWAINSON'S HAWK *Buteo swainsonii*	SC	CT	--	Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat (agricultural fields, grasslands etc.).	Species could nest within the riparian woodland and oak woodland on and adjacent to the project area.
WESTERN BURROWING OWL *Athene cunicularia hypugea*	SC	CSC	--	Open grassland habitat; often nests in abandoned ground squirrel burrows within grasslands.	Species could occur within the grassland habitat on and adjacent to the project area. This species was not observed during field reconnaissance.
RAPTORS (Birds of prey: hawks, owls, etc.- including short-eared owl and white-tailed kite) and other	MBTA	Section35 03.5 DFG Code	--	Raptors: Large trees and riparian woodlands for nesting	Foraging habitat occurs within the grassland habitat on and adjacent to the project area. Suitable

migratory and resident birds (including California thrasher, grasshopper sparrow, Lawrence's goldfinch, Lewis' woodpecker, loggerhead shrike, Nuttall's woodpecker, oak titmouse, and tri-colored blackbird)				Resident Migratory Birds: non-native grasslands, riparian woodlands, oak woodlands, and landscaped trees.	nesting trees occur on the project area north of Hwy 50 and adjacent to the project area along Carson Creek, the unnamed tributary to Carson Creek, and intermittent drainages. Suitable nesting habitat for migratory and common resident birds occurs on and adjacent to the project area. Active of swallow nests were observed under the Hwy 50 overpass.
Mammals					
BATS (including greater western, long-eared myotis bat, Pacific western big-eared bat, and small-footed myotis, and yuma myotis)	SC	Some CSC	--	Can roost in wide variety of habitats (i.e. woodland, riparian, scrub), in abandoned buildings, bridges.	Suitable habitat for these species exists within oak woodland and riparian woodland habitat on and adjacent to the project area. Additionally, these species could roost under the Hwy 50 overpass.

FE = federal endangered FT = federal threatened SC = federal species of concern D = Delisted species CE =state endangered CT = state threatened CSC = California Species of Special Concern MBTA = federal Migratory Bird Treaty Act * = CDFG "Special Animal"
Source: Foothill Associates

Listed and Special-Status Animals

Based on a records search of the USFWS species list for Clarksville, Folsom, Folsom SE, and Shingle Springs quadrangles, and the CNDDB suitable habitat for the following wildlife species occur along the project area: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), California horned lizard (*Phrynosoma coronatum frontale*), California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boyii*), Northwestern pond turtle (*Clemmys marmorata marmorata*), Swainson's hawk (*Buteo swainsoni*), and Western burrowing owl (*Athene cunicularia hypugea*). Additionally, several migratory birds, including raptors and swallows, and special-status bat could potentially occur in the project vicinity.

Valley Elderberry Longhorn Beetle

The federally-listed valley elderberry longhorn beetle is known to occur in association with its host plant, the elderberry (*Sambucus* spp.), especially for the larval stages. Because of the valley elderberry longhorn beetle dependence on its host plant, the USFWS considers the elderberry,

which is a common species of riparian and upland habitats in the Central Valley, habitat for the valley elderberry longhorn beetle. This species is recorded in the CNDDB within five miles of the project area. Additionally, an elderberry was observed adjacent to the study area, on the slope of the Hwy 50 overpass, approximately 50 feet west of the edge of the proposed ultimate improvements. No exist holes were observed. Because elderberry does not occur within the project area and improvements in this area are restricted to already paved areas of the roadway, valley elderberry longhorn beetle is not expected to be adversely affected by the proposed widening project.

California Horned Lizard

California horned lizard is a federal species of concern and is a California Species of Special Concern. In northern California, this species occurs in loose friable soils within coniferous forest, grassland, and woodland habitats below 6,500 feet. This species was not observed within the study area during field reconnaissance; however, California horned lizard is listed with the USFWS as potentially occurring within the proposed project vicinity. Suitable habitat occurs on and adjacent to the project area within riparian corridors. Therefore, California horned lizard could occur on the project area.

California Red-Legged Frog

California red-legged frog is federally listed as threatened and is a California Species of Special Concern. This species is found primarily in slow moving streams, marshes, and ponds in elevations below 4,000 ft (Zeiner *et al.*, 1988). California red-legged frog is extremely rare and declining within the Sierra Nevada. Recent surveys have found this species at only two locations in the Sierra, one population in Butte County and one population in El Dorado County (pers. comm., Mark Jennings). However, this species historically occurred throughout the lower elevations in the Sierra and isolated populations may still be extant. This species was not observed during field reconnaissance; however, suitable habitat for this species occurs on and adjacent to the project area within Carson Creek, the unnamed tributary to Carson Creek, and intermittent drainages. The closest known population of California red-legged frog is approximately 17.7 air miles from the project area and numerous geographical and physical barriers are present between the project area and the nearest known population. Focused protocol surveys (consistent with the USFWS guidelines) have been conducted for the California red-legged frog within a one-mile radius of the project area and this species was not observed. Consequently, it is unlikely that this species occurs on or adjacent to the project area. A letter is being sent to the USFWS to get concurrence with this conclusion.

If a project has not commenced within two years of the initial survey, a new set of focused surveys (conducted by a qualified biologist) are required. Additionally, if a RLF is determined to exist within the project area, the project proponent is required to write a mitigation plan for this species.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog is a federal species of concern and is a California Species of Special Concern. This species occurs in the foothills of the Sierra Nevada, up to 6,000 feet. Foothill yellow-legged frogs require shallow, flowing water with cobble-sized substrate. Additionally, this species uncommonly occupy habitat utilized by aquatic predators such as bullfrogs and various fishes (Jennings & Hayes, 1994). No records of this species were recorded with the CNDDB within five miles of the project area; however suitable habitat for this species occurs on and adjacent

to the project area within Carson Creek, the unnamed tributary to Carson Creek, and intermittent drainages. Due to the abundance of bullfrogs, which were observed during the California red-legged frog surveys, in addition to, the lack of observations of foothill yellow-legged frogs during field reconnaissance, this species is not expected to occur on or adjacent to the proposed project area.

Northwestern Pond Turtle

Northwestern pond turtle is a federal species of concern and California Species of Special Concern. This species is typically found along quiet streams and ponds, and feeds on aquatic plants, fish, and invertebrates (Zeiner *et al.*, 1988). Northwestern pond turtle nest and overwinters in uplands habitats such as annual grassland and oak woodland habitats adjacent to summer aquatic habitat. Three CNDDB records for this species occur within five miles of the project area. Although not observed during the field reconnaissance, this species could occur within slower reaches of Carson Creek and the unnamed tributary to Carson Creek on and adjacent to the project area.

Swainson's Hawk

Swainson's hawk is a federal species of concern and is state listed as threatened. This species migrates into California in the spring to establish breeding territories for the summer and typically migrates out of California by the end of September. Swainson's hawks require isolated trees or riparian woodlands for nesting and nests are typically built within close proximity to suitable foraging habitat (agricultural fields, grasslands etc.). The Central Valley provides optimal nesting habitat for this species due to the abundance of agricultural fields and riparian woodlands, which this species utilizes for foraging and nesting, respectively. El Dorado County constitutes the easternmost extent of this species range in the Central Valley. This species was not observed during field reconnaissance; however, two occurrences of this species were recorded with the CNDDB within ten miles of the project area. Suitable foraging and nesting habitat for Swainson's hawk occurs on and adjacent to the project area. Therefore, this species could forage and nest on the project area.

Western Burrowing Owl

The Western burrowing owl is a federal species of concern and is a California Species of Special Concern. Burrowing owls inhabit open grasslands of the Central Valley. Typically, they nest in small colonies in abandoned ground squirrel burrows (CDFG, 1990). This species may also be found along canal banks. Although no records of this species are listed with the CNDDB within five miles of the proposed project area and no evidence (pellets, white wash, feathers etc.) or suitable burrows were observed during field reconnaissance, this species could occur within the grassland habitat on and adjacent to the project area. Consequently, this species may utilize this habitat within the project area.

Raptors

Raptor nests including short-eared owl and white-tailed kite are protected under the MBTA and Section 3503.5 of the California Fish and Game Code. No raptors were observed during field reconnaissance; however suitable raptor nesting habitat occurs on and adjacent to the project area. Additionally, this area supports suitable raptor foraging habitat.

Other Migratory Birds

Migratory birds forage and nest in multiple habitats such as coniferous forests, grasslands, riparian woodlands, oak woodlands, and riparian. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest. Numerous migratory bird species have the potential to nest on and adjacent to the project area including California thrasher, grasshopper sparrow, Lawrence's goldfinch, Lewis' woodpecker, loggerhead shrike, Nuttall's woodpecker, oak titmouse, swallow species, and tricolored blackbird. Several active swallow nests were observed under the Hwy 50 overpass.

Bats

Special-status bat species including greater western mastiff bat, long-eared myotis bat, Pacific western big-eared bat, small-footed myotis, and yuma myotis are known to occur within El Dorado County. Due to recent population declines these species are of concern to federal and state resource agencies. Habitat for bat species consists of foraging habitat, night roosting cover, maternity roost sites, and winter hibernacula. In general, the resource agencies are most concerned about the loss of maternity roosting sites. No CNDDB records of special-status bat species are listed within five miles of the project area and no bat species were observed during field reconnaissance. However, these species could utilize the oak woodland and riparian woodland habitats on and adjacent to the project area for foraging and roosting habitat. Additionally, these species could utilize the Hwy 50 overpass for roosting.

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific policies outlined in the El Dorado County General Plan. Sensitive habitats on the site include riparian woodland and waters of the U.S., which include intermittent drainages, perennial creeks, and seasonal marsh (see **Figure 3.6-3, Sheets 1 through 4**).

Waters of the United States

The U.S. Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. Section328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

Northern portion of Carson Creek north of Hwy 50

Southern portion of Carson Creek north of Hwy 50

SOURCE: FOOTHILL ASSOCIATES, 2002

FIGURE_3.6-3_SHEET-1.CDR 09/12/02

NO SCALE

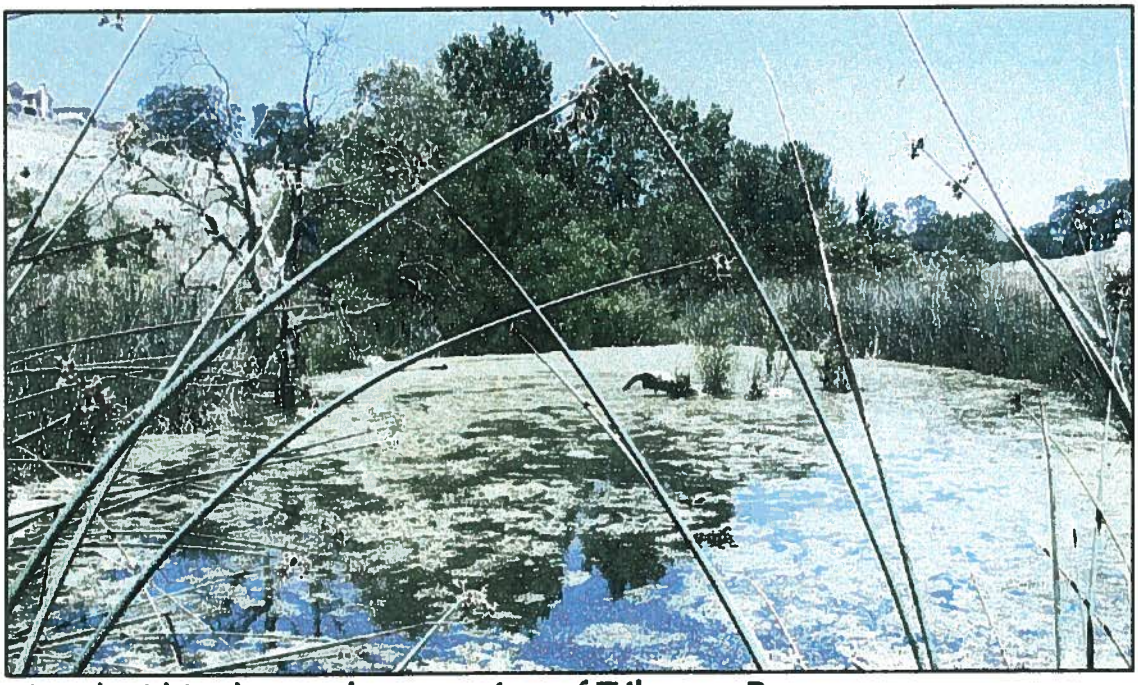
N

FIGURE 3.6-3 SHEET 1

REPRESENTATIVE HABITAT PHOTOS 1-2

PMC

Southern portion of Carson Creek south of Hwy 50



Pond within the northern portion of Tributary B

FIGURE_3.6-3_SHEET-2.CDR 09/12/02

SOURCE: FOOTHILL ASSOCIATES, 2002

NO SCALE N

FIGURE 3.6-3 SHEET 2

REPRESENTATIVE HABITAT PHOTOS 3-4

PMC

Tributary B

Tributary B below east of White Rock Road

FIGURE_3.6-3_SHEET-3.CDR 09/12/02

SOURCE: FOOTHILL ASSOCIATES, 2002

NO SCALE

N

FIGURE 3.6-3 SHEET 3

REPRESENTATIVE HABITAT PHOTOS 5-6

PMC

Northeastern portion of Tributary C

Northeastern portion of Tributary D

FIGURE_3.6-3_SHEET-4.CDR 09/12/02

SOURCE: FOOTHILL ASSOCIATES, 2002

NO SCALE

N

FIGURE 3.6-3 SHEET 4

REPRESENTATIVE HABITAT PHOTOS 7-8

PMC

- Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. Section 328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. Section328.4(c)(1)]. The OHWM is defined by the Corps as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. Section 328.3(e)].

Potential jurisdictional waters of the U.S. within the study area total approximately 4.48 acres. This acreage includes intermittent drainages (0.79 acres), seasonal marsh (2.93 acres), and riverine perennial marsh (0.76 acres). To date, potential wetland areas have not been officially delineated. Consequently, the Corps has not verified these acreages.

FISH AND GAME CODE SECTION 1600 *ET SEQ.*

The CDFG has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the state. Under Section 1603, a private party must notify the CDFG if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFG may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the party, they may enter into an agreement with the CDFG identifying the approved activities and associated mitigation measures.

B. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The project would have a significant effect on the biological resources if it would:

1) Interfere substantially with the movement of any resident or migratory fish or wildlife species;
2) Substantially diminish habitat for fish, wildlife or plants;
3) Substantially affect a rare, threatened, or endangered species of animal or plant or the habitat of the species; or
4) Result in a loss of habitat or natural resources considered locally important as identified in the 1996 El Dorado County General Plan.

CEQA Guidelines Section 15380 further provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. This includes listed species, rare species (both Federal and California), and species that could reasonably construed as rare.

METHODOLOGY

This biological analysis is based on a review of documents pertaining to the natural resources of the project area; examination of aerial photography, biological resources, and vegetation maps; and field investigations. The evaluation of whether or not an impact on biological resources would be substantial considers both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

For purposes of this impact analysis, it was assumed that existing vegetation within the project area including the area between existing edge-of-pavement and new edge-of-pavement and cut and fill areas will be removed during project construction. It was assumed that there may be both permanent and temporary impacts associated with remaining areas extending out to the outermost edge of the project area associated with parking of construction equipment, soil impaction, equipment access to construction areas, and changes in hard surface area and hydrology.

CHECKLIST DISCUSSION

3.6a

Special-Status Reptile Species

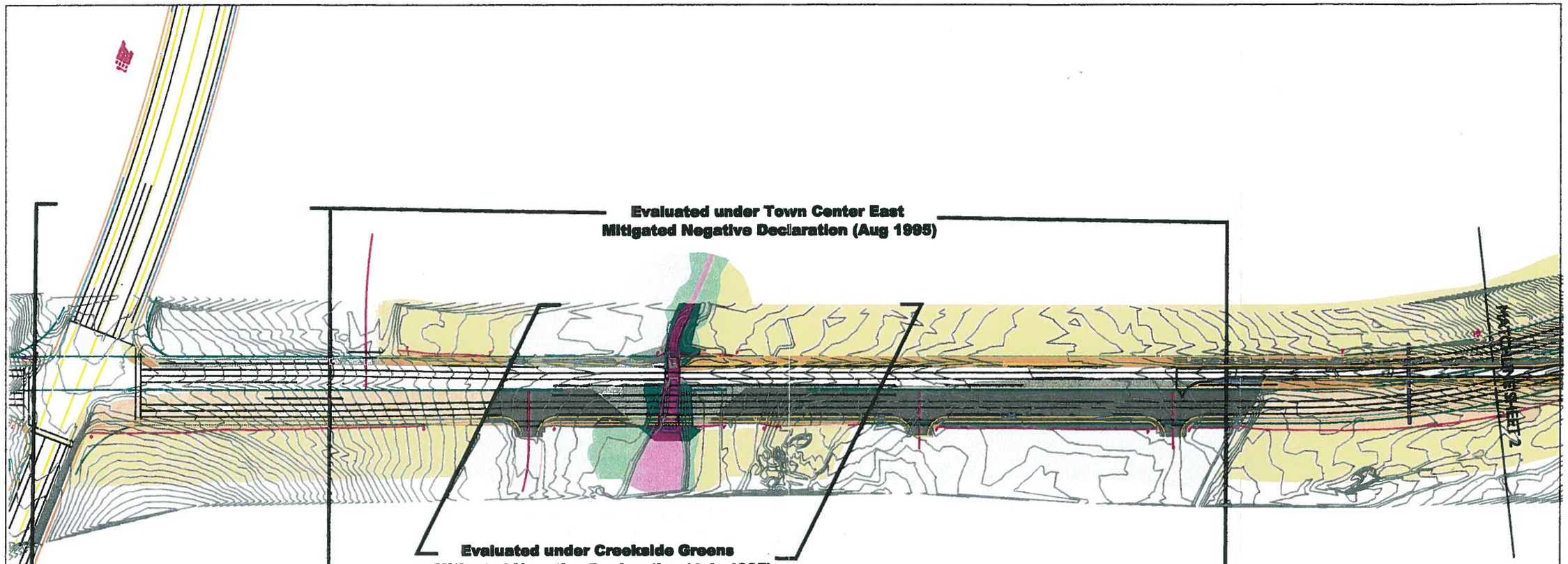
Impact 3.6.1 Implementation of the proposed project could result in removal of potential California horned lizard habitat. This would be considered a ***potentially significant impact unless mitigation incorporated.***

Interim Improvements

California horned lizards occur in loose friable soils within a wide variety of habitats including annual grasslands and oak woodlands. Interim improvements would remove approximately 6.98 acres of potential California horned lizard habitat, comprised of annual grassland (see **Figure 3.6-4, Sheets 1 through 3**). Because this species is of concern to federal and state resource agencies, and removal of potential habitat could result in a local decline of this species population, this impact is considered potentially significant and is subject to mitigation.

Ultimate Improvements

The project's ultimate improvements would remove an additional 5.49 acres of potential California horned lizard habitat, comprised of annual grassland (see **Figure 3.6-4, Sheets 1 through 3**). Because this species is of concern to federal and state resource agencies, and removal of potential habitat could result in a local decline of this species population, this impact is considered potentially significant and is subject to mitigation.



IMPACT ACREAGES FOR INTERIM AND ULTIMATE IMPROVEMENTS

INTERIM IMPACTS		ULTIMATE IMPACTS		TOTAL
CLASSIFICATION	ACREAGE	CLASSIFICATION	ACREAGE	ACREAGE
Annual Grassland	6.98	Annual Grassland	5.49	12.47
Riverine Perennial Marsh	0.11			0.11
Riparian Woodland	1.24	Riparian Woodland	0.35	1.59
Intermittent Drainage	0.33			0.33
Horticultural/Landscaped	0.79	Horticultural/Landscaped	2.21	3.00
TOTAL:	9.45	TOTAL:	8.05	17.50

HABITATS OUTSIDE IMPROVEMENT AREAS WITHIN 100 FOOT BUFFER

- Annual Grassland
- Riverine Perennial Marsh
- Riparian Woodland
- Intermittent Drainage
- Horticultural/Landscaped
- Seasonal Marsh

SOURCE: FOOTHILL ASSOCIATES, 2002

0 100 200
SCALE IN FEET

N

FIGURE 3.6-4 SHEET 1

BIOLOGICAL IMPACTS FROM INTERIM AND ULTIMATE IMPROVEMENTS

PMC
PACIFIC MUNICIPAL CONSULTANTS

IMPACT ACREAGES FOR INTERIM AND ULTIMATE IMPROVEMENTS

INTERIM IMPACTS CLASSIFICATION	ACREAGE	ULTIMATE IMPACTS CLASSIFICATION	ACREAGE	TOTAL ACREAGE
Annual Grassland	6.98	Annual Grassland	5.49	12.47
Riverine Perennial Marsh	0.11			0.11
Riparian Woodland	1.24	Riparian Woodland	0.35	1.59
Intermittent Drainage	0.33			0.33
Horticultural/Landscaped	0.79	Horticultural/Landscaped	2.21	3.00
TOTAL:	9.45	TOTAL:	8.05	17.50

HABITATS OUTSIDE IMPROVEMENT AREAS WITHIN 100 FOOT BUFFER

- Annual Grassland
- Riverine Perennial Marsh
- Riparian Woodland
- Intermittent Drainage
- Horticultural/Landscaped
- Seasonal Marsh

NOTE: CORRESPONDS WITH APE SHEET 2

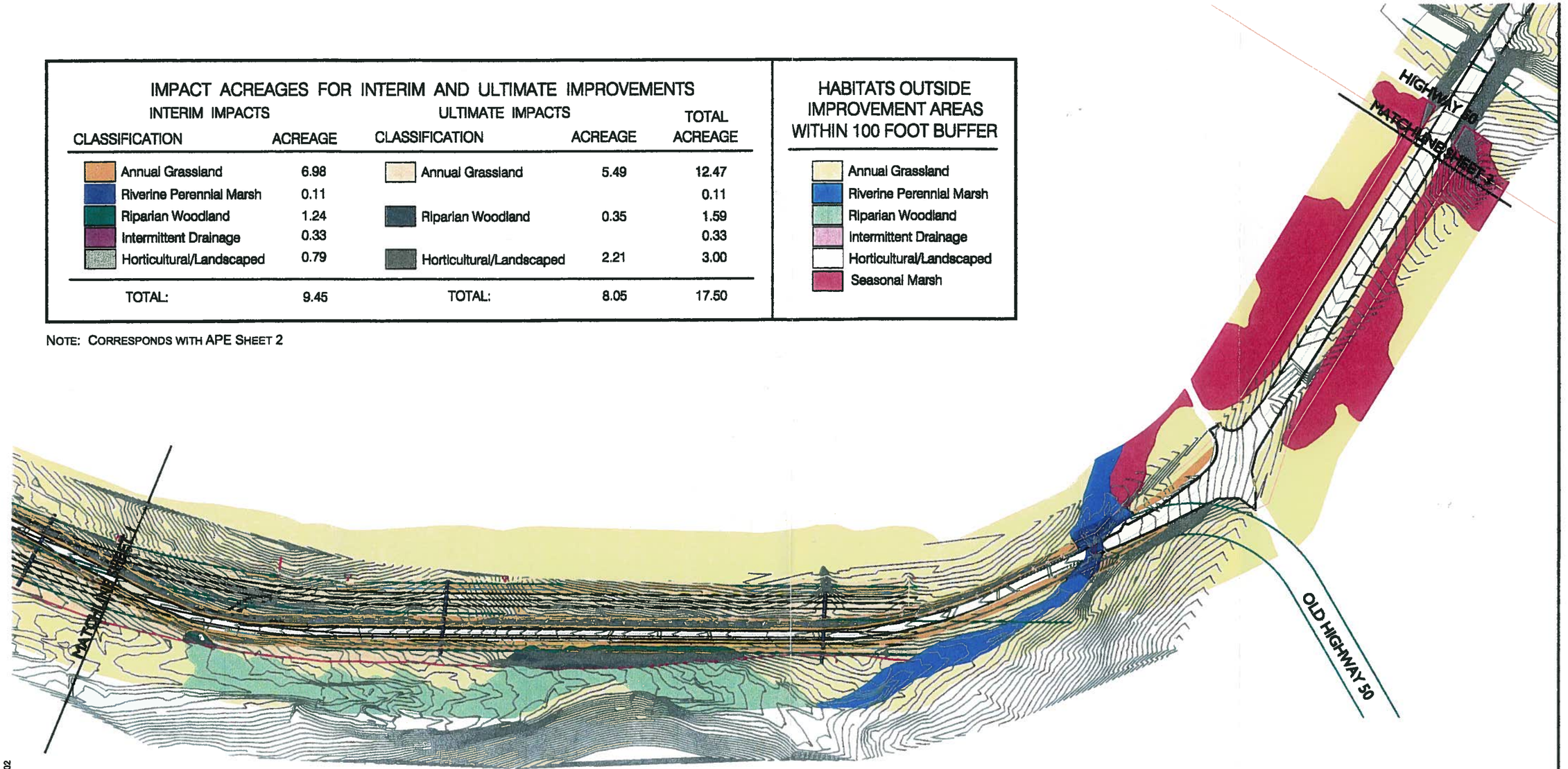


FIGURE_3.6-4_SHEET-2.CDR 09/12/02

SOURCE: FOOTHILL ASSOCIATES, 2002

0 100 200
SCALE IN FEET

FIGURE 3.6-4 SHEET 2

BIOLOGICAL IMPACTS FROM INTERIM AND ULTIMATE IMPROVEMENTS

PMC
PACIFIC MUNICIPAL CONSULTANTS

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.7 ENERGY AND MINERAL RESOURCES *Will the proposal:*				
a. Conflict with adopted energy conservation plans?	☐	☐	☐	■
b. Use non-renewable resources in a wasteful and inefficient manner?	☐	☐	☐	■
c. Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

El Dorado County is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, gold in particular, are considered the most significant extractive mineral resources.

No mineral extraction activities occur in the vicinity of the project site. Neither White Rock Road nor other roadways in the vicinity of the project serve as routes for traffic involved in mineral extraction activities.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project would create significant impacts if it conflicts with adopted energy conservation plans, uses non-renewable resources in a wasteful and inefficient manner, or results in the loss of availability of a known mineral resource with future value.

CHECKLIST DISCUSSION

3.7a through c

Energy and Mineral Resource Impacts

The proposed project would not use or extract any mineral or energy resources and would not restrict access to known mineral resource areas. Therefore, the project's interim and ultimate improvements would have ***no impact*** on energy or mineral resources.

C. CONCLUSIONS RELATING TO ENERGY AND MINERAL RESOURCES

The proposed project would have no impact on mineral and energy resources.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.8 HAZARDS *Will the proposal involve:*				
a. A risk of accidental explosion or release of hazardous substances (including but not limited to oil, pesticides, chemicals, or radiation)?	☐	☐	■	☐
b. Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	■	☐
c. The creation of any health hazard or potential health hazard?	☐	☐	■	☐
d. Exposure of people to existing sources of potential health hazards?	☐	☐	■	☐
e. Increased fire hazards in areas with flammable brush, grass, or trees?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

A "hazardous material" is a substance or combination of substances that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a potential hazard to human health or the environment when handled improperly. A "hazardous waste" is a hazardous material that: 1) has no use or reuse and is intended to be discarded; or 2) is recyclable. A hazardous waste, because of its nature, presents the same danger that hazardous materials do. Proper management of hazardous materials and hazardous wastes are integrated; both substances present the same threat to the environment when not properly managed. As identified in the Valley View Specific Plan EIR, there are two land areas adjacent to Latrobe Road that handle and/or store hazardous materials, El Dorado Hills Wastewater Treatment Plant (one-ton cylinders of chlorine gas) and the abandoned El Dorado Hills Landfill. Sampling and inspections conducted at the El Dorado Hills Landfill have not identified contamination or gas at the site.

Fire safety for residents in the unincorporated rural areas of the County is a rapidly growing concern. Wildland fires pose a threat to homeowners in the vicinity of the project site. The El Dorado County climate, with long, hot, dry summers, combined with poor road access, inadequate clearance, flammable vegetation, and steep topography, produces severe wildfire conditions annually.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant hazards if it:

- Creates potential public health hazards;
- Involves the use, production, disposal, or upset (accidents) of materials which pose a hazard to people in the area; interferes with emergency response plans or emergency evacuation plans; or,
- Violates applicable laws intended to protect human health and safety or would expose employees to working situations that do not meet health standards.

CHECKLIST DISCUSSION

3.8a, c, and d

Potential Hazards Associated With a Release of Hazardous Materials

Implementation of the proposed project would not result in the significant use, storage, or disposal of hazardous materials and is not expected to expose area residents to any existing health hazards. The use, storage, and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws including the California Occupational Health and Safety Administration requirements.

Fugitive dust resulting from construction activities located in areas where naturally occurring asbestos may occur in the environment is addressed in the County's adopted Ordinance No. 4489 as described in Section 3.4 (Air Quality). Project impacts associated with hazards would be ***less than significant***.

3.8b

Emergency Access Impacts

As described under Impact 3.5.1, project construction activities could result in the temporary restriction of access to residences (a mobile home park and single family residences on the south of White Rock Road) and businesses (a lumber yard on the north side of White Rock Road; a post office, gas station, fast food restaurant off of Post Street) in the project area. However, implementation of Mitigation Measure MM 3.5.1c would mitigate this potential emergency access issue to ***less than significant***.

3.8e

Fire Hazards

The project would involve some vegetation clearing during the construction phase of the project. The majority of clearing would be required along the portion that has not been previously paved. However, this vegetation removal is not anticipated to result in significant fire hazards. The proposed project would have ***no impact*** regarding fire hazards.

C. CONCLUSIONS RELATING TO HAZARDS

As described above, the project is not anticipated to result in any significant impacts associated with hazardous materials and fire hazards.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.9 NOISE *Will the proposal result in:*				
a. Increases in existing noise levels?	☐	■	☐	☐
b. Exposure of people to severe noise levels?	☐	■	☐	☐

A. ENVIRONMENTAL SETTING

The existing noise environment in the project area is typical of developing rural areas, with the primary noise sources originating from road traffic along White Rock Road East, Latrobe Road and to a lesser degree, US 50. Additionally, occasional aircraft overflights, and the natural sounds of birds and wind in the vegetation. Construction activities occurring on surrounding lands also create a source of noise for the area.

Noise levels were monitored for 24-hours at a point adjacent to White Rock Road as part of the environmental review for the Valley View Specific Plan. Noise measurements were taken 30 feet from the center of White Rock Road on March 27, 1995 for 15 minutes. Freeway traffic at this location was inaudible due to intervening topography. The majority of noise in the area was from birds as well as local traffic. Noise measurements were also taken at the western property boundary of the Sunset Mobile Home Park (Wagstaff and Associates, 1998). Once again, most noise in the area was from birds and wind. One general aviation plane resulted in a noise measurement of 57 dBA. At both locations, noise measurements indicated an Ldn of less than 60 dBA adjacent to the roadway. Highway noise would be audible along portions of White Rock Road East near the underpass with US 50.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant noise impacts if it substantially increases the ambient noise levels for adjoining areas, or would be inconsistent with the 1996 El Dorado County General Plan Noise Element. The 1996 El Dorado General Plan identifies the maximum allowable exterior noise exposure for residential land uses to transportation-related noise sources as 60 dB, L_{dn} and 45 dB, L_{dn} for interior spaces. The General Plan policies do not apply to construction activities.

CHECKLIST DISCUSSION

3.9a and b

Construction Noise Impacts

Impact 3.9.1 Project construction activities would expose existing and future residents to temporary but excessive noise levels. This would be ***potentially significant unless mitigation incorporated.***

Project construction noise is assessed somewhat differently from noise associated with project operation, since construction noise typically is only of short duration. Typical ranges of energy equivalent noises levels at construction sites are shown in **Table 3.9-1**.

TABLE 3.9-1
TYPICAL RANGES OF ENERGY EQUIVALENT NOISE LEVELS, L_{EQ}, IN dBA, AT CONSTRUCTION SITES AT A DISTANCE OF 50 FEET

Status[1]	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement and Recreations, Store Service Station		Public Works Roads and Highways, Sewers and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

Source: Wagstaff and Associates, 1998.
[1]Status Legend:
I – All pertinent equipment present at site
II – Minimum required equipment present at site.

The most appropriate criteria for assessing construction noise impacts are based on related potential for intermittent speech interference during daytime or sleep disturbance during nighttime. Daytime construction noise at any noise-sensitive receptor (e.g. schools, hospitals) would be considered a significant short-term noise impact if the level would exceed an hourly average L_{eq} of 60 dB during daytime hours.

The El County Board of Supervisors recently agreed to consider nighttime construction activity on a case-by-case basis. Nighttime construction is defined as 9:00 p.m. until 7:00 a.m. during the weekdays and 7:00 p.m. to 8:00 a.m. on weekends. Nighttime construction activity would result in fewer impacts on businesses, by guaranteeing access during business hours. However, like daytime construction activities, nighttime construction could result in noise impacts on sensitive uses located along the project site such as sleep disturbance.

Interim Improvements

As described in Section 3.1 (Land Use Planning, Population and Housing), there are existing and planned residential uses along White Rock Road East, with existing residents within 50 feet of the project. Construction activities associated with the interim improvements would temporarily increase project area noise levels, with construction equipment and activities anticipated to generate noise levels up to 89 dB at a distance of 50 feet. Earthmoving, grading, materials handling, paving, stationary equipment, and other sources would generate noise. The actual noise levels at any particular location would depend on a variety of factors, including the type of construction equipment or activity involved, distance to the source of the noise, obstacles to noise that exist between the receptor and the source, time of day, and similar factors. This would be a significant impact that is subject to mitigation.

Ultimate Improvements

Implementation of the ultimate improvements will also require construction activities that will result in short-term noise impacts on sensitive uses in the area. The ultimate improvements are scheduled to occur concurrently with the construction of the Silva Valley Parkway Interchange. These projects will not occur until the area is reaching buildout. Therefore, more residences and other sensitive uses will be located along the roadway. Ultimate improvements will result in significant impacts that are subject to mitigation.

Mitigation Measure

MM 3.9.1a In noise sensitive areas, construction equipment, compressors, and generators, shall be fitted with heavy duty mufflers specifically designed to reduce noise impacts.

MM 3.9.1b Construction contractors shall conduct construction activities in such a manner in order to not exceed 70 dB noise levels at residential facades during nighttime construction activities, except where existing noise conditions already exceed 70 dB at residential façade. In those cases, construction activities shall not increase existing noise conditions by more than 5 dB. Nighttime construction is defined as 9:00 p.m. until 7:00 a.m. during the weekdays and 7:00 p.m. to 8:00 a.m. on the weekends. Construction work may occur on the holidays if in compliance with these standards. The El Dorado County Department of Transportation shall be responsible for enforcing this mitigation measure.

Implementation of the above mitigation measures in addition to Mitigation Measure MM 3.1.1a would mitigate the temporary construction noise impacts to ***less than significant***.

Operational Noise Impacts

Impact 3.9.2 Implementation of the project is expected to result in increased traffic noise in the vicinity. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

Interim improvements will result in improved traffic circulation along White Rock Road East. These improvements are not expected to increase the traffic noise, as the number of trips is not expected to increase substantially.

Ultimate Improvements

The project's ultimate improvements would occur at the same time as the construction of the Silva Valley Parkway Interchange. Based on traffic volumes expected on White Rock Road in the year 2020, anticipated traffic noise were estimated utilizing the Federal Highway Administration (FHWA) Noise Prediction Model. Based on the results of this modeling, it is anticipated that the 60 dB contour along White Rock Road (east of Latrobe Road) would extend approximately 340 feet from the roadway centerline. This would result in significant increases to traffic noises that are subject to mitigation.

Mitigation Measures

The Valley View Specific Plan EIR identified cumulative traffic noise impacts on White Rock Road (east and west of Latrobe Road) resulting from development within the Valley View Specific Plan area as significant based on County noise standards. The Specific Plan included the following adopted mitigation measure (El Dorado County, 1998), which would be approved at the map stage and implemented by the developers of the Valley View Specific Plan area:

> **Mitigation Measure N-4.** *Incorporate traffic noise mitigation measures such as earthen berms, soundwalls or combination berm/walls, and setback restrictions as part of the overall program of roadway widening improvements already planned along White Rock Road to accommodate anticipated cumulative traffic increases. Incorporate fair-share funding for these noise mitigation components into the overall White Rock Road improvement program (see Mitigation Measure T-14). This traffic noise mitigation measure shall be designed to comply with the maximum allowable noise exposure standards set forth in Table 6-1 of the El Dorado County General Plan (i.e., an L_{dn} of 60 dB in outdoor activity areas at residential receptors).*

The El Dorado Hills Specific Plan EIR identified significant roadway noise impacts along portions of Silva Valley Parkway, Country Club Drive, Latrobe Road and White Rock Road as a result of development within the Specific Plan area. The EIR included the following adopted mitigation measure (Jones and Stokes, 1987), which would be approved at the map stage and implemented by the developers of the El Dorado Hills Specific Plan area:

> *Prepare An Acoustical Analysis Demonstrating Compliance With The HUD Noise Standards For Residential Developments Located Adjacent To U.S. Highway 50 And For County Roadways Having Achieved An ADT Of 13,000 Or More. Mitigation of traffic noise may be achieved by construction of barriers, reduced vehicle speeds, restriction of truck traffic, increased setbacks, and by advantageous use of natural topographic barriers.*

Implementation of the previously adopted **Mitigation Measure N-4** from the Valley View Specific Plan and the above stated mitigation measure from the El Dorado Hills Specific Plan EIR would mitigate operational and traffic noise impacts of the proposed project to ***less than significant***.

C. CONCLUSIONS RELATING TO NOISE

With implementation of the above mitigation measures and the adopted mitigation measures in the Valley View Specific Plan EIR and the El Dorado Hills Specific Plan EIR related to traffic noise would ensure that noise impacts are mitigated to a less than significant impact.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.10 PUBLIC SERVICES *Will the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:*				
a. Fire protection?	☐	■	☐	☐
b. Police protection?	☐	■	☐	☐
c. Schools?	☐	☐	☐	■
d. Maintenance of public facilities, including but not limited to roads?	☐	☐	■	☐
e. Other governmental services?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

The proposed project would construct roadway improvements on White Rock Road East that are located in the unincorporated portion of El Dorado County. The unincorporated areas of El Dorado County receive general public safety and law enforcement services from the County Sheriff's Department. The County Sheriff Department operates a single dispatch center at the County Government Center in Placerville and has an El Dorado Hills substation at the corner of El Dorado Hills Boulevard and Governor Drive (approximately 3 miles north of the project limits). The El Dorado Hills Fire Department provides fire protection services, emergency services, and hazardous materials response to the project area. The El Dorado Union High School District, Rescue Union School District, and Buckeye Union School District provide educational services to the project area. Additionally, the County provides maintenance of public facilities, including the project area roadways.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant public service impacts if it substantially and adversely alters the delivery or provision of fire protection, police protection, schools, facilities maintenance, and other governmental services.

CHECKLIST DISCUSSION

3.10a and b

Fire and Police Protection Impacts

Impact 3.10.1 Construction activities along White Rock Road East would result in temporary road closures and traffic delays that could potentially hinder emergency access to the surrounding areas. This impact is considered ***potentially significant unless mitigation incorporated***.

Interim Improvements

Project construction activities associated with the interim improvements could result in the temporary restriction of access to residences (mobile homes and single-family residences) and businesses (e.g. the post office and lumber yard) in the project area, which could impact the ability for law enforcement and emergency services to respond to an incident in the project area. This would be a significant impact that is subject to mitigation.

Ultimate Improvements

The ultimate improvements would result in the same impacts as the interim improvements, by temporarily restricting access and impacting law enforcement and emergency services. This would be a significant impact that is subject to mitigation.

Mitigation Measures

MM 3.10.1a El Dorado County DOT shall consult with fire, law enforcement and emergency services personnel during the planning phase of the project to work out any scheduling or other measures (e.g., limiting construction during rush-hour periods, etc.) that will ensure the clear passage of those services personnel during the entire construction phase of the project.

MM 3.10.1b El Dorado County Department of Transportation shall notify all emergency dispatch and emergency contact personnel of all construction sites and temporary road closures.

MM 3.10.1c El Dorado County Department of Transportation will maintain at least one open lane at all times during the construction phase of the proposed project strictly for the use of fire, law enforcement, or emergency services personnel.

These mitigation measures in addition to MM 3.5.1c (Traffic Management Plan) would mitigate this potential emergency access issue to ***less than significant***.

3.10 c and e

Other Public Service Impacts

Interim Improvements

The project's interim improvements would not create an additional need for schools or other governmental services. Therefore, the proposed project would have ***no impact*** on these services.

Ultimate Improvements

Likewise, the project's ultimate improvements would not create an additional need for schools or other governmental services. Therefore, the proposed project would have ***no impact*** on these services.

3.10d

Roadway Maintenance

Interim Improvements

The proposed project's interim improvements would require some new maintenance service by the County as the width and length of White Rock Road would increase. However, the El Dorado County Department of Transportation currently maintains White Rock Road and the proposed roadway improvements would not substantially increase maintenance responsibilities of the County. Thus, the interim improvements would have a ***less than significant*** impact.

Ultimate Improvements

The proposed project's ultimate improvements would also require some new maintenance service by the County as the width and alignment of White Rock Road would change. El Dorado County Department of Transportation would continue to maintain White Rock Road, so the proposed roadway improvements would not substantially increase maintenance responsibilities of the County. Thus, the ultimate improvements would have a ***less than significant*** impact.

C. CONCLUSIONS RELATING TO PUBLIC SERVICES

Construction and operation of the project would not require additional public services.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.11 UTILITIES AND SERVICE SYSTEMS				
Will the proposal result in the need for new systems or supplies or substantial alterations to the following utilities:				
a. Power or natural gas?	☐	■	☐	☐
b. Communications systems?	☐	■	☐	☐
c. Local or regional water treatment or distribution facilities?	☐	■	☐	☐
d. Sewer or septic tanks?	☐	■	☐	☐
e. Storm water drainage?	☐	■	☐	☐
f. Solid waste disposal?	☐	☐	☐	■
g. Local or regional water supplies?	☐	■	☐	☐

A. ENVIRONMENTAL SETTING

Utilities located in the project area include water and sewer services provided by the El Dorado Irrigation District (EID), electricity and natural gas provided by Pacific Gas and Electric (PG&E), and telephone services provided by Pacific Bell and AT&T. Solid waste services in the project area are provided El Dorado Disposal Service, Inc. Storm drainage facilities associated with White Rock Road are maintained by the County.

No water mains are located within the project site. However, EID is planning to install an 18-inch water main within the right-of-way of White Rock Road East, separate from the proposed project. The water main would extend from Latrobe Road along White Rock Road and northwest along a portion of Silva Valley Parkway, where it would connect with the existing water main located near the school in the Serrano development. It is anticipated that the new water main would be constructed in 2003 in tandem with the White Rock Road East interim improvements.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

As identified in the checklist above, the project may result in significant impacts on utilities and service systems if it substantially and adversely alters the delivery of utilities or substantially increases the demand for utilities.

CHECKLIST DISCUSSION

3.11a through e and g

Conflicts With Existing Infrastructure Facilities

Impact 3.11.1 Implementation of the proposed project would not require new infrastructure; however, it has the potential to interfere with or cause damage to existing infrastructure facilities. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

The proposed project's interim improvements would not require the installation of any new utilities or service systems. PG&E, EID and Pacific Bell have gas, electrical, wastewater, , and telephone facilities throughout the project area. These underground facilities are located at variable depths under existing paved roadways or within the associated right-of-way. In addition, storm drainage facilities (e.g., culverts and channels) are also located within and adjacent to White Rock Road East. Impacts to storm drainage facilities are addressed in Section 3.3 of this document. Construction of the proposed project, including grading specifications, may conflict with the existing facilities.

Existing gas and/or electric facilities are located at variable depths beneath existing roadways and within the associated right-of-way. In addition, overhead facilities are located adjacent to both sides of White Rock Road East. These facilities could potentially be disturbed during construction of roadway widening. Pacific Bell has existing underground conduit and fiber optic cables throughout the project area, some of which may be located beneath the existing roadway or within the right-of-way. In addition, overhead facilities are also located along White Rock Road. Construction of the project could interfere with these and other communication systems.

EID has existing underground sewer facilities throughout the project area, some of which may be located beneath the existing roadway or within the right-of-way. Construction of the project could interfere with these systems. EID plans to install an 18-inch water main within the White Rock Road East right-of-way between Latrobe Road and Silva Valley Parkway. The water main would also extend along a portion of Silva Valley Parkway to meet an existing 18-inch water main located near the school in Serrano. The water main would most likely be installed at the same time as the interim improvements to White Rock Road East. Future upgrades of the system by EID could require re-excavation and re-paving.

The interim improvements could interfere with or damage existing infrastructure facilities and result in significant impacts, thus requiring mitigation.

Ultimate Improvements

The project's ultimate improvements could interfere with or damage existing infrastructure facilities (gas, electric, fiber optic cables, and underground water and wastewater infrastructure) and result in significant impacts, thus requiring mitigation.

Mitigation Measures

MM 3.11.1a El Dorado County DOT will consult with PG&E early in the planning stages of the project in order to avoid any conflicts with existing facilities, and to allow PG&E and El Dorado County to combine construction efforts in areas where PG&E will be conducting system upgrades.

MM 3.11.1b The cost of any repair or relocation of gas lines that results from construction activities will be assumed by El Dorado County if the utility has prior title to the property.

MM 3.11.1c The Underground Service Alert (800-227-2600) will be contacted at least 48 hours prior to performing construction activities within the project area.

MM 3.11.1d El Dorado County will consult with Pacific Bell and AT&T early in the planning stages of the project in order to avoid any conflicts with existing facilities.

MM 3.11.1e The cost of any repair or relocation of telephone lines that results from construction activities will be assumed by El Dorado County if the utility has prior title to the property.

MM 3.11.1f The Underground Service Alert (800-227-2600) will be contacted at least 48 hours prior to performing construction activities within the project area.

MM 3.11.1g El Dorado County DOT shall consult with EID early in the planning stages of the project in order to avoid any conflicts with existing facilities, and to allow EID and El Dorado County to combine construction efforts in areas where EID will be conducting system upgrades.

MM 3.11.1h The cost of any repair or relocation of water or sewer lines that result from construction activities will be assumed by El Dorado County if the utility has prior title to the property.

MM 3.11.1i The Underground Service Alert (800-227-2600) will be contacted at least 48 hours prior to performing construction activities within the project area.

Implementation of the mitigation measures described above would reduce the proposed project's impact on infrastructure facilities to a ***less than significant*** level.

3.11f

Solid Waste Service Conflicts

Interim Improvements

Implementation of the proposed project's interim improvements would not result in a substantial increase in solid waste services. Project construction activities may generate some minor amounts of solid waste. However, the proposed project is anticipated to have ***no impact*** on solid waste services.

Ultimate Improvements

Likewise, the ultimate improvements are not expected to result in a substantial increase in solid waste service. Therefore, this project would have ***no impact*** on solid waste services.

C. CONCLUSIONS RELATING TO UTILITIES AND SERVICE SYSTEMS

The proposed project would not create impacts for utility systems with the implementation of the above mitigation measures.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.12 AESTHETICS *Will the proposal:*				
a. Affect a scenic vista or scenic highway?	☐	☐	☐	■
b. Have a demonstrable negative aesthetic effect?	☐	☐	☐	■
c. Create light or glare?	☐	■	☐	☐

A. ENVIRONMENTAL SETTING

The project area is located in the foothills of the northern Sierra Nevada in the western portion of El Dorado County. The region possesses a unique character consisting of rolling hills overlooking the flatlands of the Sacramento Valley to the west, and backing up to the Sierra Nevada Mountains to the east. Lands on either side of White Rock Road are either developed with residential subdivisions (e.g., Creekside Greens) or gently rolling hills with moderate tree coverage.

White Rock Road is oriented in an east-west direction veering to the northeast as it extends eastward and meanders up and down gradual slopes. The sides of the roadways are characterized by intermittent vegetation and sloped terrain. An "unnamed" drainage ditch crosses under White Rock Road, which is referred to as Dusty Creek in this analysis. Roadway shoulders are generally undeveloped with occasional gravel turnouts and street crossings.

The following developments and plan areas are located along White Rock Road, and would have a view of the project area:

Valley View Specific Plan: 2,037 acres approved for 2,840 residential units, a school site, and mixed use development. Currently, 712 multi-family apartment units are in the County Building Department for plan check, and are allowed by right. No development, except for roadway improvements, has occurred yet on this Specific Plan. Located adjacent to south of White Rock Road.

Creekside Greens: A subdivision with 201 residential lots and 8 open space parcels located on-56.23 acres along the south side of White Rock Road. This subdivision has been constructed.

El Dorado Hills Specific Plan (Serrano): Located northeast of El Dorado Hills Boulevard and US 50. This project is expected to build out at approximately 4,000 dwelling units. Approximately one-third of the area has been developed.

Town Center East and West: Commercial property located south of US 50 on the northeast and northwest corners of White Rock Road and Latrobe Road. This project is approved and partially built with additional portions currently under construction.

Sunset Mobile Home Park: Mobile home park located east of Latrobe Road along White Rock Road. The mobile home park can be accessed from two points on the south side of White Rock Road.

In addition to development adjacent to White Rock Road, the Serrano development to the north/northwest/northeast of the project would have views of proposed extension of White Rock Road.

A minimal number of signs exist along the proposed project corridor. Signs that currently exist include street, traffic control, residential community identification, and small commercial signs.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in significant aesthetic impacts if it substantially affects the view of a scenic corridor, vista, or view open to the public, causes substantial degradation of views from adjacent residences, or results in either temporary or permanent night lighting (e.g., night-time construction lighting and/or street lighting) that shines into adjacent residences. The General Plan policies do not relate to nighttime construction activities.

CHECKLIST DISCUSSION

3.12a and b

Impacts to Scenic Vistas or Roadways

Interim Improvements

White Rock Road is not designated as a scenic corridor. The proposed project's interim improvements would result in the widening of White Rock Road East between Latrobe Road and Highway 50 initially from two lanes (existing) to two lanes with a left turn lane (by year 2010). This would have minimal effect on visual resources in the area. The proposed project would have ***no impact*** in terms of scenic vistas, scenic highways, or demonstrable negative aesthetic effects.

Ultimate Improvements

The project's ultimate improvements would result in six lanes (by the year 2015) and a slight realignment of the existing roadway. These changes are expected to result in a minimal effect on visual resources in the area. Therefore, the ultimate improvements would have ***no impact*** in terms of scenic vistas, scenic highways, or demonstrable negative aesthetic effects.

3.12c

Light and Glare Impacts

Impact 3.12.1 Nighttime construction activities associated with the proposed project could result in increased light spillage and illumination of adjacent residential properties. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

The proposed project's interim improvements would not incorporate any new lighting sources or result in any new glare impacts other than new street lights along the northern portion of the roadway south of the intersection with Silva Valley Parkway. Light and glare from White Rock Road occurs due to nighttime vehicle traffic. Increased traffic associated with the expansion and extension of White Rock Road is not expected to expose additional residences to light and glare. However, nighttime construction activities associated with interim improvements may result in short-term light impacts on residents located along White Rock Road East. Construction equipment and light towers used for nighttime construction activities can result in light spillage and glare.

Ultimate Improvements

Implementation of the ultimate improvements would not incorporate any new lighting sources. It would result in increased vehicles and headlights. The expansion and realignment of the roadway as part of the ultimate improvements would not expose additional residences to light and glare. Increased traffic associated with the ultimate improvements is not expected to expose additional residences to light and glare. However, nighttime construction activities associated with the ultimate improvements may result in short-term light impacts on adjacent residences.

Mitigation Measures

MM 3.12.1a Construction operators shall implement the following measures during nighttime construction activities:

1. Direct light onto the immediate area under construction only to avoid shining lights toward residences.
2. Angle the light tower floodlights no more than 45 degrees to avoid shining lights towards residences and oncoming traffic.
3. The light tower may be raised to no more than 20 feet when construction is adjacent to residences.
4. Light shields may be used to reflect the glare back on to the construction area.

MM 3.12.1b During construction, a light survey shall be performed to determine if light readings are approaching significant levels (as compared to ambient conditions) on the property of residents adjacent to the project. If light levels are

approaching significant levels, MM 3.12.1a must be implemented until light levels fall below the significant levels.

Implementation of the above mitigation measures would reduce the light spilling on adjacent residences, and reduce impacts to ***less than significant*** levels.

C. CONCLUSIONS RELATING TO AESTHETICS

Implementation of the above mitigation measures would reduce potential project impacts to a less than significant level.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.13 CULTURAL RESOURCES *Will the proposal:*				
a. Disturb paleontological or archaeological resources?	☐	■	☐	☐
b. Affect historical resources?	☐	■	☐	☐
c. Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☐	■
d. Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

This section is based upon the cultural resources assessment provided by Pacific Legacy, Inc and the Historic American Engineering Record (HAER) for White Rock Road East that was prepared by Donald S. Napoli. The Archaeological Investigations for White Rock Road East Project is included in **Appendix C** of this MND.

CULTURAL RESOURCE OVERVIEW OF REGION

The project area is located within the "Motherlode" and was generally affected by the Gold Rush of the 1850s. The continual discovery of gold along the forks and tributaries of the American River established Green Valley Road as a major travel route into El Dorado County and the Sierra. Several small mining camps arose in the vicinity, including Mormon Island, Folsom, Salmon Falls, and Clarksville. Beginning in the 1860's, as mining activity began to diminish, agricultural communities began to develop in the area.

The El Dorado Hills community area has had several cultural resource surveys completed for development projects. Cultural resources identified in the project area include, but are not limited to, bedrock mortars, lithic scatters, hunting blinds, mining habitation sites, ranch complexes, historic roads, and rock fences.

CULTURAL RESOURCES WITHIN THE PROJECT AREA

An archaeological investigation of the project area was conducted by Pacific Legacy, Inc., in May 2002. The findings were compiled in a report entitled "*Archaeological Investigations for the White Rock Road, East Project, El Dorado County*" (Pacific Legacy Inc., 2002) are the basis for the following discussion.

Investigations conducted include a records search at the North Central Information Center at California State University, Sacramento; a sacred lands search conducted by the Native American Heritage Commission; pedestrian surface survey of the APE for both the interim and ultimate improvements associated with the project; and completion of an archaeological report documenting the results of archaeological investigations and presenting management recommendations for cultural resources within the APE for both the temporary and ultimate improvements associated with the project. Based on the results of this investigation, the following resources were identified in the project area:

Site CA-ELD-558-H. This site is the remnants of the Albert Fitch house which dates to the 1930s. Albert Fitch was an avid gardener and attempted to plant a tree from every country in the world at his house (Peak7 Associates 1998). Therefore, he built water storage facilities at the site and other features, such as a rock garden, to tend and display his various plants. Unfortunately, the house was completely destroyed by fire in the early 1950s (Peak & Associates, 1988). After the fire, Albert Fitch moved to Clarksville where he lived until his death in 1954.

Site CA-ELD-721-H. This site (present day White Rock Road) is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. Site The road has been improved (e.g., graded and paved) over time, but the alignment of the road has remained relatively unchanged. The site is important in regional and local history and seems to meet the criteria for inclusion in the CRHR. The history of White Rock Road, however, has been adequately researched and the road is adequately documented according to Historic American Engineering Record standards (cf., Napoli 2002). Therefore, the site does not require any additional archaeological investigation and/or mitigation prior to or during project implementation.

P-9-12-H. This isolated feature is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. The road is adequately documented and additional research regarding the feature would not likely yield information important to regional or local history. Therefore, P-9-12-H does not seem o meet any of the CEQA Guidelines criteria at Section15064.5 and Section 21083.2 for either a significant historical resource or a unique archaeological resource, and does not require any additional archaeological investigation and/or mitigation prior to or during project implementation.

P-9-15-H. This isolated feature is a rock wall which runs parallel to the north side of a segment of White Rock Road. The rock wall is adequately documented and additional research regarding the feature would not likely yield information important to regional or local history. Indeed, the rock wall was previously determined ineligible for inclusion in the CRHR, and does not require any additional archaeological investigation and/or mitigation prior to or during project implementation (cf., Peak & Associates 2000).

In summary, there are two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-

12-H and P-9=15-H, within project boundaries. CA-ELD-558-H does not seem to meet the criteria for inclusion in the CRHR, while CA-ELD-721-H seems to meet the criteria for inclusion in the CRHR. Both sites, however, are adequately documented and do not require any additional archaeological investigations and/or mitigation prior to or during project implementation. Isolated features P-9-12-H and P-9-15-H do not seem to meet the criteria for inclusion in the CRHR and do not require any additional archaeological investigations and/or mitigation prior to or during project implementation.

In July 2002, Donald S. Napoli prepared the Historic American Engineering Record (HAER) for Placerville Road (White Rock Road). The HAER was required as a mitigation measure in the Latrobe Road Realignment, Widening and Bridge Project Mitigated Negative Declaration (March 2001). The HAER evaluated the section of White Rock Road located 0.57 miles southwest of the junction with Latrobe Road to 0.31 miles northeast of the junction with Latrobe Road. This section of roadway is considered significant because it represents part of a state highway that served two transcontinental routes, the Lincoln Highway and U.S. Highway 50, and it provided a route for recreational travelers (Napoli, 2002). The historic roadway exemplifies rural highway construction and long-distance automobile travel that occurred between the years of 1910 and 1929. It contains inconsistent shoulders, occasional sharp and unbanked curves, a narrow width, and conformance to existing terrain (Napoli, 2002).

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may have a significant impact on cultural resources if it causes substantial adverse changes in the significance of a historical or archaeological resource as set forth by the California Register of Historic Places and Section 106 of the National Historic Preservation Act; directly or indirectly destroys a unique paleontological resource or site or unique geologic feature; or disturbs any human remains, including those interred in formal cemeteries.

CHECKLIST DISCUSSION

3.13a and b

Impacts to Known Paleontological or Archaeological Resources

Impact 3.13.1 Implementation of the proposed project could disturb known archaeological resources associated with the historic Lincoln Highway. This would be ***potentially significant unless mitigation incorporated.***

Interim Improvements

Implementation of the proposed project's interim improvements would not impact any known paleontological resources. Previous and current archaeological investigations within the boundaries of White Rock Road East project identified two sites CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H. Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. Site CA-EKD-721-H is White Rock Road which is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which from the end of the 19th century to the 1940s. Isolate P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. Isolate P-9-15-H is a rock wall which runs parallel to the north side of a segment of White

Rock Road. Sites CA-ELD-558-H and CA-ELD-721-H and isolated features P-9-12-H andP-9-15-H were previously recorded and are adequately documented. Site CA-ELD 558-H and isolated features P-9-12-H and P-9-15-H do not seem to meet the eligibility criteria for inclusion in the CRHR. Indeed, P-9-15-H was previously determined ineligible for inclusion in the CRHR.

Site CA-ELD-721-H is a segment of the original Lincoln Highway, which was the first transcontinental highway in the United States (Crespo, 2002). A portion of the proposed project follows the alignment of the Lincoln Highway from 0.57 miles west of the Latrobe Road intersection to 0.31 miles east of the Latrobe Road intersection. The site has been recorded in HAER format to mitigate effects to the road resulting from the proposed widening of another section of White Rock Road. The HAER was required as a mitigation measure in the Latrobe Road Realignment, Widening, and Bridge Project Mitigated Negative Declaration (March 2001). The El Dorado County Cultural Resources Preservation Commission (CRPC) reviewed the White Rock Road East project at their 10/8/02 meeting. They recommended placing a concrete replica of the old sign along White Rock Road East in El Dorado County.

The proposed project has the potential to impact the original Lincoln Highway. However, it would not impact the other known paleontological or cultural resources. Additionally, CA-ELD-558-H, P-9-12-H and P-9-15-H do not appear to possess the potential to provide any additional significant data relevant to regional research.

Ultimate Improvements

The project's ultimate improvements are not expected to impact any known paleontological resources. The ultimate improvements may, however, impact the archaeological resources associated with the old Lincoln Highway. .

Mitigation Measure

MM 3.13.1 The County shall install a replica of the old highway sign along White Rock Road in El Dorado County at a location deemed acceptable by DOT. The sign shall recognize that this portion of roadway was part of the Lincoln Highway system, the first transcontinental highway in the United States.

Implementation of the above mitigation measure would ensure that potential impacts to the historic Lincoln Highway would be minimized to ***less than significant***.

Impacts to Undiscovered Paleontological or Archaeological Resources

Impact 3.13.2 Construction activities could disturb undiscovered cultural resources in the project area. This would be ***potentially significant unless mitigation incorporated***.

Interim Improvements

The potential exists for project construction activities related to interim improvements to disrupt undiscovered cultural resources below the ground surface. This could result in significant impacts and is subject to mitigation.

No paleontological resources were identified or are known to occur in the project area. The project is expected to have ***no impact*** on paleontological resources.

Ultimate Improvements

Likewise, the project's ultimate improvements could disrupt undiscovered cultural resources below the ground surface, which is significant and subject to mitigation.

However, the ultimate improvements would have ***no impact*** on paleontological resources.

Mitigation Measure

MM 3.13.2 In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the County shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then the County and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes human remains, the County will coordinate with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

Implementation of the above mitigation measure would ensure that potential impacts to undiscovered cultural resources would be minimized to ***less than significant***.

3.13c and d

Impacts to Religious or Sacred Uses/Areas

Interim Improvements

There are no religious or sacred land uses within the project area. Thus, the project's interim improvements would have ***no impact*** to such uses or values.

Ultimate Improvements

Likewise, the project's ultimate improvements would have ***no impact*** to such uses or values.

C. CONCLUSIONS RELATING TO CULTURAL RESOURCES

The project area does contain known significant cultural resources that would be impacted by the project. Mitigation Measure MM 3.13.2 would ensure that cultural resources discovered during construction activities would be evaluated, documented appropriately and recovered.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.14 RECREATION *Will the proposal:*				
a. Increase the demand for neighborhood or regional parks or other recreational facilities?	☐	☐	☐	■
b. Affect existing recreational opportunities?	☐	☐	☐	■

A. ENVIRONMENTAL SETTING

The project is not located within any existing local or regional park or recreational area. However, there are approximately 77 acres in the Valley View Specific Plan planned for park/recreational uses.

B. IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may create significant impacts if it creates demand for new expanded parks and recreation facilities, or substantially affects existing recreational opportunities.

CHECKLIST DISCUSSION

3.14a and b

Recreation Impacts

Interim Improvements

The interim improvements would not create any new demand for any type of recreational facilities and. ***No impact*** to recreation resources would occur as a result of the project.

Ultimate Improvements

Likewise, the ultimate improvements would not create any new demand for any type of recreational facilities and. ***No impact*** to recreation resources would occur as a result of the project.

C. CONCLUSIONS RELATING TO RECREATION

There would be no impacts associated with recreation.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.15 MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of 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 the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	■	☐
c. 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.)	☐	☐	■	☐
d. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

3.15a

As described in Sections 3.4 (Air Quality), 3.6 (Biological Resources), 3.7 (Noise) and 3.13 (Cultural Resources), the project does have the potential to result in significant impacts to biological and cultural resources. However, implementation of mitigation measures identified in these sections would reduce potential biological resources and cultural resource impacts to ***less than significant***.

3.15b

The proposed project would result in potentially significant impacts on the environment. However, as identified in Sections 3.1 through 3.14, these impacts are primarily construction-related and are short-term effects to the environment. In addition, implementation of the

mitigation measures identified in Sections 3.1 through 3.14 would mitigate these construction impacts to ***less than significant***.

3.15c

As described in Section 4.0 (Other Considerations), implementation of the project would contribute to cumulative impacts associated with air quality, noise, biological resources, water quality, and cultural resources. However, implementation of the mitigation measures identified in Sections 3.1 through 3.14 would mitigate these impacts to ***less than significant***. In addition, these cumulative impacts have been addressed in the Valley View Specific Plan EIR and El Dorado Hills Specific Plan EIR.

3.15d

The proposed project may expose project area residential uses and businesses to excessive noise levels and temporary construction traffic impacts. If construction activities were to occur during the nighttime hours, it may result in night lighting, glare, and construction noise that may contribute to sleep disturbance of the adjacent residents. However, implementation of mitigation measures in Sections 3.1, 3.4, 3.6, 3.9 and 3.12 in addition to the adopted mitigation measures in the Valley View Specific Plan EIR and El Dorado Hills Specific Plan EIR would mitigate this temporary impact to ***less than significant***.

4.0 Cumulative Impacts

4.1 CUMULATIVE IMPACTS

INTRODUCTION

This section addresses the project's potential to contribute to cumulative impacts in the region. CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts."

CUMULATIVE SETTING

The cumulative setting for the White Rock Road East project includes the proposed roadway improvements in addition to reasonably foreseeable development in the El Dorado Hills region of El Dorado County.

The cumulative setting for Western El Dorado County, which includes El Dorado Hills, may be impacted by the Writ of Mandate that was issued in 1999 as part of a lawsuit that challenged the validity of the El Dorado County General Plan and EIR. This change in the setting and cumulative conditions in the County will likely result in the reduction of growth in Western El Dorado County than what was analyzed in the 1996 El Dorado County General Plan EIR and the Program EIR. Thus, the cumulative analysis provided in the Program EIR still provides a worst-case analysis for cumulative environmental effects.

CUMULATIVE IMPACT ANALYSIS

Land Use, Planning, Population and Housing

As described in this MND, the proposed project consists of both interim and ultimate improvements along both sides of White Rock Road between Latrobe Road and Silva Valley Parkway. Land use impacts identified for the widening, realignment (ultimate improvements only) and new culverts are site-specific and would not contribute to cumulative impacts associated with land use that were identified in the El Dorado County General Plan EIR, El Dorado Hills Specific Plan EIR, or the Valley View Specific Plan EIR. The proposed project will assist in supporting approved growth that is currently allowed to proceed under the Writ of Mandate, which has been previously evaluated under CEQA. The proposed project is anticipated to have ***no impact*** on cumulative land use conditions in the region.

Geophysical (Earth)

Project-related impacts on geology and soils would be site-specific and implementation of the proposed project would not contribute to seismic hazards or water quality impacts associated with soil erosion. Therefore, the proposed project is anticipated to have ***no impact*** on cumulative geophysical conditions in the region.

Water

The proposed improvements associated with the project (e.g., widening, realignment and drainage culverts) have the potential to impact existing drainage patterns in Carson Creek and Screech Owl Creek, as well as result in increased pollutants due to construction and operation.

However, the proposed mitigation measures contained in Section 3.3 of this MND would reduce cumulative surface water or ground water quality impacts to ***less than significant***.

Air Quality

The proposed project has the potential to result in temporary impacts to air quality related to construction activities. Mitigation measures contained in Section 3.4 of this MND would reduce the impacts. Under cumulative conditions, the project is expected to have a ***less than significant*** impact on air quality.

Transportation/Circulation

The proposed improvements to White Rock Road East would improve traffic circulation in the project vicinity. The mitigation measures contained in Section 3.5 of this MND and the previously adopted mitigation measures from the Valley View Specific Plan EIR (1998) would mitigate impacts related to temporary access from roadway construction and operation. Under cumulative conditions, the project is expected to result in ***less than significant*** *impacts* on the transportation and circulation system.

Biological Resources

Construction of the roadway and the installation of new drainage culverts would contribute to the cumulative loss of riparian woodland areas and wetland habitat, as well as impact special-status species. However, implementation of the proposed mitigation measures identified in Section 3.6 of this MND would mitigate the project's contribution to a cumulative loss of biological resources to a ***less than significant*** level.

Energy and Mineral Resources

The proposed widening, realignment and new drainage culverts are not expected to result in any site-specific significant impacts to energy and mineral resources. Additionally, the project is expected to have ***no impact*** on energy and mineral resources under cumulative conditions.

Hazards

The proposed project is not expected to result in any site-specific public health or hazard impacts, and the project is expected to have ***no impact*** on cumulative hazard conditions.

Noise

The proposed improvements to White Rock Road East are expected to result in increased noise levels related to construction and operation. However, the mitigation measures in Section 3.9 of this MND would mitigate cumulative noise impacts to ***less than significant***.

Public Services

The project is not expected to contribute to cumulative public service impacts. The project may result in impacts to fire and police protection during construction. However, these activities are temporary in nature. Additionally, mitigation measures contained in Section 3.10 of this MND would mitigate such impacts. Implementation of the proposed improvements would not result in

a cumulative increase in severity of public service impacts. Thus, ***no impact*** to public services is anticipated.

Utilities and Service Systems

Construction activities related to the proposed project may result in temporary impacts to utilities and service systems, including gas, electric, telephone, water and sewer facilities. Mitigation measures proposed in Section 3.11 of this MND would reduce cumulative impacts to ***less than significant***.

Aesthetics

Implementation of the proposed project is not expected to contribute to cumulative visual resource impacts associated with White Rock Road East. Implementation of the proposed improvements would not result in an increase in severity of visual resource impacts. Thus, *a* ***less than significant*** *impact* to aesthetics is anticipated under cumulative conditions.

Cultural Resources

Implementation of the proposed project would not result in an increase in severity of identified cultural resource impacts. Mitigation contained in Section 3.13 of this MND would reduce project-related impacts. Thus, the project would have a ***less than significant*** impact on cultural resources under cumulative conditions.

Recreation

The project is not expected to contribute to cumulative parks and recreation impacts associated with White Rock Road East. Implementation of the proposed improvements would not result in an increase in severity of cumulative recreation impacts. Thus, ***no impact*** to recreation is anticipated.

5.0 Determination

On the basis of this initial evaluation:

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

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the Project. **A NEGATIVE DECLARATION** will be prepared.

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

☐ I find that the proposed Project **MAY** have a significant effect(s) on the environment, but one or more of such significant effects: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, all potentially significant effects: (a) have been analyzed and adequately addressed in an earlier EIR pursuant to applicable standards, or (b) have been avoided or mitigated pursuant to that earlier EIR, previous Mitigated Negative Declaration, or this Subsequent Mitigated Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project.

Signature Steven D Hust Date: 11-20-02

Printed name: Steven Hust

RECEIVED BY

NOV 21 2002

PACIFIC MUNICIPAL CONSULTANTS

6.0 Report Preparation and Consultations

6.1 REPORT PREPARATION AND REFERENCES

EL DORADO COUNTY- LEAD AGENCY

Planning Department

Steven Hust	Principal Planner

Department of Transportation

Charles Collins	Associate Civil Engineer

PACIFIC MUNICIPAL CONSULTANTS – ENVIRONMENTAL IMPACT ANALYSIS

Patrick Angell, AICP	Project Director
Hilary Anderson	Project Manager
Melanie Halajian	Assistant Planner

FOOTHILL ASSOCIATES– BIOLOGICAL RESOURCES

Theresa Ward	Project Biologist

PACIFIC LEGACY – CULTURAL RESOURCES

John Nadolski	Project Archaeologist

DON BALLANTI – AIR QUALITY

Don Ballanti	Project Air Quality Specialist

6.2 PERSONS AND AGENCIES CONSULTED

Pete Bell	ECORP
Shannon Brown	ECORP
Jennifer Meffe	ECORP
Dennis Otani	El Dorado County Air Pollution Control District
Mary Norton	El Dorado County Transit
Tom Cavanaugh	U.S. Army Corp of Engineers
Shannon Ludwig	U.S. Fish and Wildlife Service

7.0 REFERENCES

Ballanti, Don, 2002. *Air Quality Impact Analysis for White Rock Road East Improvements Project.* Prepared for Pacific Municipal Consultants. September 2002.

Creisleigh Homes, 1995. *Negative Declaration for Creekside Greens.* June 1995.

Crespo, 2002. Crespo, Virginia, Chair. Cultural Resources Preservation Commission. Written correspondence to Steve Hust of El Dorado County. October 11, 2002.

Collins, 2002. Collins, Charles, P.E., Associate Civil Engineer. El Dorado County Department of Transportation, Development Services. Personal and written correspondence. April – November 2002.

EPA, 2002. U.S. Environmental Protection Agency. http://www.epa.gov/fedrgstr/EPA-Water/2001/October/Day-29/w27111.htm. October 2002.

El Dorado County, 1996. *El Dorado County General Plan, Volume I – Goals, Objectives, and Policies.* Placerville, California. January 1996.

El Dorado County, 1998. *Green Valley Road Ultimate Improvements Project: Final Environmental Impact Report.* May 1998.

El Dorado County, 1999. *Draft Environmental Impact Report/Environmental Assessment for the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road Interchange Project, Volume I.* November 1999.

El Dorado County, 1999. *Draft Environmental Impact Report/Environmental Assessment for the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road Interchange Project, Volume II: Appendices.* November 1999.

El Dorado County, 2000. *Final Environmental Impact Report/Environmental Assessment for the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road Interchange Project.* April 2000.

El Dorado County, 2001. *Latrobe Road Realignment, Widening and Bridge Project Mitigated Negative Declaration.* March 2001.

Foothill Associates, 2002. *Biological Assessment for the White Rock Road Widening Project.* Prepared for Pacific Municipal Consultants. August 2002.

Jones and Stokes, 1987. *El Dorado Hill Specific Plan Environmental Impact Report.* October 1987.

Jones and Stokes, 1990. *Silva Valley Parkway Interchange with U.S. Highway 50 Environmental Impact Report.* June 1989.

The Mansour Company, 1995. *Negative Declaration for Town Center East.* August 1995.

McKibbin, 2001. McKIbbin, Craig., Senior Traffic Civil Engineer. El Dorado County Department of Transportation. Written correspondence regarding the Latrobe Road Realignment, Widening, Bridge Replacement Project Mitigated Negative Declaration. January 5, 2001.

Napoli, Donald. *Historic American Engineering Record for Placerville Road (White Rock Road), HAER No. CA-316.* Prepared for the National Park Service, Western Region, Department of the Interior. July 2002.

Pacific Legacy, 2002. *Archaeological Investigations for the White Rock Road East Project, El Dorado County.* Prepared for Pacific Municipal Consultants. July 2002.

Spielgelberg, 2002. Spiegelberg, Dave, P.E., Senior Civil Engineer. El Dorado County Department of Transportation, Transportation Planning and Systems. Written correspondence, Interoffice Memo. October 4, 2002.

Wagstaff and Associates, 1998. *Valley View Specific Plan Environmental Impact Report.* July 1998.

APPENDIX A
AIR QUALITY IMPACT ANALYSIS

AIR QUALITY METHODOLOGY AND ASSUMPTIONS

NEW REGION AIR POLLUTANT EMISSIONS

Estimates of regional emissions generated by project construction and operation were made using a program called URBEMIS-2001.[1] URBEMIS-2001 is a program that estimates the emissions that result from various land use development projects. Land use project can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-2001 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-2001 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses were provided by the project transportation consultant. Average trip lengths and vehicle mixes for Mountain Counties were used. Average speed for all types of trips was assumed to be 35 MPH.

The URBEMIS-2001 was run to calculate daily emission during the summer months with an ambient temperature of 85 degrees Fahrenheit and for winter months with an ambient temperature of 40 degrees Fahrenheit. Analysis year was 2005. The URBEMIS-2001 output is attached.

The paved road dust emission factor values used by the URBEMIS-2001 program were modified to match the emission factors developed in the Town of Truckee Particulate Matter Air Quality Management Plan.[2]

Although the URBEMIS-2001 program will produce estimates of woodsmoke emissions they were calculated using a spreadsheet program to ensure consistency with the assumptions and methods contained in the Town of Truckee Particulate Matter Air Quality Management Plan. Because of existing county policies regarding woodstoves, it was assumed all residences would use EPA Phase-II Certified appliances. Permanent residences (assumed to represent 30% of residences) were assumed to burn 4.5 cords per year and seasonal residences (assumed to represent 70% of residences) were assumed to burn 1.5 cords per year. The resulting throughput was 2.4 cords/residence. Using the average density of wood of 1446.4 kilogram/cord, an annual average throughput of 7650.9 pounds of wood per residence was obtained. This was multiplied by

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[1] San Joaquin Valley Unified Air Pollution Control District, URBEMIS for Windows Computer Program User's Guide, Octobmer 2000.

[2] Town of Truckee, Particulate Matter Air Quality Management Plan, 1999.

emission factors developed by the U. S. Environmental Protection Agency, assuming that half of the devices use catalytic converters and half do not. The resulting emissions were divided by the assumed burning season of 155 days to obtain a daily emission. The spreadsheet printout is attached.

CALINE-4 CARBON MONOXIDE MODELING

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway. Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc..

A screening-level form of the CALINE-4 program was used to predict concentrations.[3] Normalized concentrations for each roadway size (2 lanes, 4 lanes, etc.) are adjusted for the two-way traffic volume and emission factor. The normalized concentrations developed for the Bay Area were doubled to account for an assumed worst-case wind speed of 0.5 meters per second that reflects conditions in the Martis Valley. Calculations were made for a receptor at a corner of the intersection, located 25 feet from the curb. Emission factors were derived from the California Air Resources Board EMFAC7-G computer program based on a 2002, 2005 and 2020 vehicle mix.

The screening form of the CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The 1-hour background level in was taken as 3.0 PPM. The 8-hour background concentration was taken as 1.8 PPM. Eight-hour concentrations were obtained from the 1-hour output of the CALINE-4 model using a persistence factor of 0.7

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[3] Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996.

URBEMIS 2001 For Windows 6.2.2

File Name: C:\Program Files\URBEMIS 2001 For Windows\Projects2k\hopkinswint
Project Name: Hopkins Ranch- Winter
Project Location: Mountain Counties and Rural Counties

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	PM10	SO2
Natural Gas	0.06	0.81	0.35	0.00	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.06	0.81	0.35	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	PM10	SO2
Single family housing	5.51	7.45	62.70	10.49	0.04
Golf Course	2.12	2.86	23.65	4.02	0.01
TOTAL EMISSIONS (lbs/day)	7.63	10.31	86.35	14.51	0.05

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2005 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2001 (10/2001)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	4.47 trips / dwelling units	65.00	290.55
Golf Course	7.15 trips / Hole	18.00	128.70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	61.40	4.70	94.50	0.80
Light Truck < 3,750 lbs	9.30	11.00	88.90	0.10
Light Truck 3,751- 5,750	16.70	1.80	97.60	0.60
Med Truck 5,751- 8,500	7.20	12.50	79.20	8.30
Lite-Heavy 8,501-10,000	1.10	18.20	72.70	9.10
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.10	9.10	27.30	63.60
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00
Motorcycle	1.40	90.90	9.10	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	0.70	0.00	100.00	0.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Golf Course				2.0	1.0	97.0

Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplcase option switch changed from on to off.
The area souce mitigation measure option switch changed from on to off.
Changes made to the default values for Operations

The pass by trips option switch changed from on to off.
The mitigation option switch changed from on to off.
The operational emission year changed from 2002 to 2005.
The operational winter temperature changed from 75 to 40.
The operational winter selection item changed from 6 to 1.
The operational summer selection item changed from 6 to 5.
The double counting internal work trip limit changed from to 2.574.
The double counting shopping trip limit changed from to 1.287.
The double counting other trip limit changed from to 124.839.
The major street/highway road dust emission factor changed from .0008255 to .004415.
The freeway/expressway road dust emission factor changed from .0005738 to .0054404.
The travel mode environment settings changed from both to: none

URBEMIS 2001 For Windows 6.2.2

File Name: C:\Program Files\URBEMIS 2001 For Windows\Projects2k\hopkinssum.
Project Name: Hopkins Ranch
Project Location: Mountain Counties and Rural Counties

DETAIL REPORT
(Pounds/Day - Summer)

Total Land Use Area to be Developed (Estimated): 13 acres
Retail/Office/Institutional Square Footage: 0
Single Family Units: 65 Multi-family Units: 0

CONSTRUCTION EMISSION ESTIMATES

Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	2.91	27.54	-	32.32	2.75
Const. Worker Trips	0.38	0.54	1.03	0.10	-
Stationary Equip	1.18	0.96	-	0.06	0.01
Mobile Equip. - Gas	12.24	7.36	-	0.98	0.00
Mobile Equip. - Diesel	2.88	45.68	-	2.82	3.60
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	0.26	-	-	-	-
TOTALS(lbs/day,unmitigated)	19.85	82.09	1.03	36.29	6.37

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	PM10	SO2
Natural Gas	0.06	0.81	0.35	0.00	-
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.21	0.02	1.62	0.00	0.03
Consumer Prdcts	3.18	-	-	-	-
TOTALS(lbs/day,unmitigated)	3.45	0.83	1.97	0.01	0.03

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	PM10	SO2
Single family housing	4.60	5.22	47.94	2.98	0.04
Golf Course	1.66	2.01	17.67	1.14	0.01
TOTAL EMISSIONS (lbs/day)	6.26	7.22	65.61	4.13	0.05

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2005 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2001 (10/2001)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	4.47 trips / dwelling units	65.00	290.55
Golf Course	7.15 trips / Hole	18.00	128.70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	61.40	4.70	94.50	0.80
Light Truck < 3,750 lbs	9.30	11.00	88.90	0.10
Light Truck 3,751- 5,750	16.70	1.80	97.60	0.60
Med Truck 5,751- 8,500	7.20	12.50	79.20	8.30
Lite-Heavy 8,501-10,000	1.10	18.20	72.70	9.10
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.10	9.10	27.30	63.60
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00
Motorcycle	1.40	90.90	9.10	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	0.70	0.00	100.00	0.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Golf Course				2.0	1.0	97.0

Changes made to the default values for Construction

The asphalt option switch changed from off to on.
The architectural coating option switch changed from on to off.
The construction year changed from 2000 to 2005.
The construction mitigation measure option switch changed from on to off.
The site grading max daily acreage estimate changed from to 3.
The site grading tracked loader total vehicles changed from to 1.
The site grading wheeled loader total vehicles changed from to 1.
The site grading motor grader total vehicles changed from to 1.
The stationary equipment equipment units changed from 2 to 7.
The mobile gas fork lift 175 HP total vehicles changed from to 1.
The mobile diesel fork lift 175 HP total vehicles changed from to 1.
The mobile diesel truck: off hwy total vehicles changed from to 1.
Changes made to the default values for Area

The wood stove option switch changed from on to off.
The fireplcase option switch changed from on to off.
The landscape option switch changed from off to on.
The consumer products option switch changed from off to on.
Changes made to the default values for Operations

The pass by trips option switch changed from on to off.
The mitigation option switch changed from on to off.
The operational emission year changed from 2002 to 2005.
The double counting internal work trip limit changed from to 2.574.
The double counting shopping trip limit changed from to 1.287.
The double counting other trip limit changed from to 124.839.
The travel mode environment settings changed from both to: none

Spreadsheet to Calculate Emissions from Woodstoves

Project: Hopkins Ranch

Residences:	65	Emission Factors (lbs/ton)1				Emissions Pounds/Year				
		ROC	NOx	CO	PM10	ROC	NOx	CO	PM10	
Percent Conventional:	0	53	2.8	230.8	30.6	0	0	0	0	
Percent Phase I:	0	13.5	2	123.9	19.8	0	0	0	0	
Percent Phase II:	100	13.5	2	122.6	15.4	3356.815	497.3059	30484.85	3829.255	
Pounds Wood/Residence/Year:	7650.86					3356.815	497.3059	30484.85	3829.255	
1. From Table 1.10-1 EPA AP-42, Average of Noncatalytic and Catalytic						21.65687	3.208425	196.6765	24.70487	pound/day

Appendix B
Plant and Wildlife Species

PLANT AND WILDLIFE SPECIES OBSERVED OR KNOWN TO OCCUR WITHIN THE STUDY AREA

Common Name	Scientific Name
Plants	
Common yarrow	*Achillea millefolium*
Hair grass	*Aira caryophyllea*
Wild onion	*Allium* sp.
Rancher's fireweed	*Amsinckia menziesii*
Scarlet pimpernel	*Anagallis arvensis*
Mugwort	*Artemisia douglasiana*
Wild oats	*Avena fatua*
Coyotebush	*Baccharis pilularis*
Black mustard	*Brassica nigra*
Quaking grass	*Briza minor*
Harvest brodiaea	*Brodiaea elegans* ssp. *elegans*
California brome	*Bromus carinatus*
Ripgut brome	*Bromus diandrus*
Soft chess	*Bromus hordeaceus*
Red brome	*Bromus madritensis* ssp. *rubens*
Incense cedar	*Calocedrus decurrens*
Sticky calycadenia	*Calycadenia multiglandulosa*
Sedge	*Carex densa*
Yellow star thistle	*Centaurea solstialis*
Western redbud	*Cercis occidentalis*
Pineapple weed	*Chamomila suaveolens*
Soap plant	*Chlorogalum pomeridianum* var. *pomeridianum*
Clarkia	*Clarkia gracilis* ssp. *gracilis*
Miner's lettuce	*Claytonia perfoliata*
Horseweed	*Conyza canadensis*
Dogtail grass	*Cynosurus echiatus*
Umbrella sedge	*Cyperus eragrostis*
Daucus	*Daucus pusilla*
Wild hyacinth	*Dichelostemma multiflorum*
Twining brodiaea	*Dichelostemma volubile*
Spikerush	*Eleocharis* spp.
Autumn willow-herb	*Epilobium paniculatum*

Common Name	Scientific Name
Turkey mullein	*Eremocarpus setigerus*
Yerba santa	*Eriodictyon californicum*
Filaree	*Erodium botrys*
Fennel	*Foeniculum vulgare*
Geranium	*Geranium dissectum*
Gumplant	*Grindelia* sp.
Fitch's tarweed	*Hemizonia fitchii*
Velvet grass	*Holcus lanatus*
Mediterranean barley	*Hordeum marinum* ssp. *gussoneanum*
Barley	*Hordeum marinum* ssp. *leporinum*
Wild iris	*Iris macrosiphon*
Baltic rush	*Juncus balticus*
Bog rush	*Juncus effusus*
Rush	*Juncus tenuis*
Minor duckweed	*Lemna minor*
Duckweed	*Lemna* sp.
Annual ryegrass	*Lolium multiflorum*
Trefoil	*Lotus grandiflorus* var. *grandiflorus*
Spanish clover	*Lotus purshianus*
California broom	*Lotus scoparius*
Lupine	*Lupinus* sp.
Common mallow	*Malva neglecta*
White sweetclover	*Melilotus alba*
Common monkeyflower	*Mimulus guttatus*
Deergrass	*Muhlenbergia rigens*
Dallis grass	*Paspalum distichum*
Canary grass	*Phalaris canariensis*
Kentucky bluegrass	*Poa pratensis* ssp. *pratensis*
Smartweed	*Polygonum amphibium*
Rabbitsfoot grass	*Polypogon monspeliensis*
Fremont cottonwood	*Populus fremontii* ssp. *fremontii*
Blue oak	*Quercus douglasii*
Valley oak	*Quercus lobata*
Interior live oak	*Quercus wislizenii*

Common Name	Scientific Name
Buttercup	*Ranunculus arvensis*
California buttercup	*Ranunculus californicus*
California wild rose	*Rosa californica*
Himalayan blackberry	*Rubus discolor*
Curly dock	*Rumex crispus*
Narrow-leaved willow	*Salix exigua*
Goodding's black willow	*Salix gooddingii*
Sanicle	*Sanicula crassicaulis*
Prickly sow thistle	*Sonchus asper*
Rose clover	*Trifolium hirtum*
Ithuriel's spear	*Triteleia laxa*
Broad-leafed cattail	*Typha latifolia*
Common vetch	*Vicia sativa*
California wild grape	*Vitis californica*
Mule's ears	*Wyethia ssp.*
Animals/Common Name	
Reptiles and Amphibians	
Bull Frog	*Rana catesbeiana*
Gopher snake	*Pituopus melanoleucus*
Pacific chorus frog	*Pseudacris regilla*
Western fence lizard	*Sceloporus occidentalis*
Western toad	*Bufo boreas*
Birds	
Acorn woodpecker	*Melanerpes formicivorous*
American crow	*Corvus brachyrhynchos*
Anna's hummingbird	*Calypte anna*
Ash-throated flycatcher	*Myiarchus cinerascens*
Black phoebe	*Sayornis nigricans*
Black-headed grosbeak	*Pheucticus melanocephalus*
Bufflehead	*Bucephala albeola*
California quail	*Callipepla californica*
Dark-eyed junco	*Junco phaeonotus*
Egret	*Ardea alba*
Great blue heron	*Ardea herodias*

Common Name	Scientific Name
Great horned owl	*Bubo virginianus*
Housefinch	*Carpodacus mexicanus*
Killdeer	*Charadrius vociferus*
Lark sparrow	*Chondestes grammacus*
Lesser goldfinch	*Carduelis psaltria*
Mallard	*Anas platyrhynchos*
Mountain chickadee	*Parus gambeli*
Mourning dove	*Zenaida macroura*
Northern flicker	*Colaptes auritus*
Northern harrier	*Circus cyaneus*
Nuttall's woodpecker	*Picoides nuttallii*
Plain titmouse	*Parus inornatus*
Red-tailed hawk	*Buteo jamaicensis*
Ring necked pheasant	*Phasianus colchicus*
Rock dove	*Columba livia*
Rufous-sided towhee	*Pipilo erythrophthalmus*
Savannah sparrow	*Passerculus sandwichensis*
Scrub jay	*Aphelocoma coerulescens*
Song sparrow	*Melospiza melodia*
Spotted towhee	*Pipilio erythrophthalmus*
Turkey vulture	*Cathartes aura*
Western bluebird	*Sialia currucoides*
Western kingbird	*Tyrannus verticalis*
Western meadowlark	*Sturnella neglecta*
White crowned sparrow	*Zonotrichia leucophrys*
Yellow-rumped warbler	*Dendroica coronata*
Mammals	
Black-tailed jackrabbit	*Lepus californicus*
Bobcat	*Felis rufus*
Brush rabbit	*Sylvilagus bachmani*
California ground squirrel	*Spermophilus beecheyi*
Common poorwill	*Phalaenoptilus nuttallii*
Coyote	*Canis latrans*
Deer mouse	*Peromyscus maniculatus*

Common Name	Scientific Name
Mountain Lion	*Felis concolor*
Mule deer	*Odocoileus hemionus*
Raccoon	*Procyon lotor*
Striped skunk	*Mephittis mephittis*
Western gray squirrel	*Sciurus griseus*

APPENDIX C
ARCHAEOLOGICAL INVESTIGATIONS FOR THE WHITE ROCK ROAD EAST PROJECT

Archaeological Investigations for the White Rock Road, East Project, El Dorado County

Prepared for:

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July 2002

MANAGEMENT SUMMARY

El Dorado County is proposing to improve White Rock Road from Latrobe Road to Silva Valley Parkway. This proposed project is identified as the White Rock Road, East Project. The project extends from the intersection of Latrobe Road and White Rock Road, approximately 0.25 miles south of State Highway 50, in an easterly direction for approximately 1.3 miles to Silva Valley Parkway. Proposed road improvements include: new construction of roadway from Tong Road to Silva Valley Parkway; widening of existing sections of roadway; and repaving of existing sections of roadway. The White Rock Road, East Project is subject to the legal requirements of the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.) 1970, as amended.

Archaeological investigations for the White Rock Road, East Project included: a records search at the North Central Information Center; a sacred lands search conducted by the Native American Heritage Commission; and pedestrian surface survey of the Area of Potential Effects (APE) for both the interim and ultimate improvements associated with the project. The records search identified that the APE had been previously surveyed and two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H, are located within project boundaries. The sacred lands search did not identify any Native American cultural resources within the APE. Pedestrian surface survey of the APE relocated the previously recorded sites and features, but did not identify any new sites or features.

Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. The site was previously recorded and is adequately documented. Site CA-ELD-558-H also lacks integrity and does not seem to meet the eligibility criteria for inclusion in the California Register of Historical Resources (CRHR). Site CA-ELD-721-H is White Rock Road which is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. The site seems to meet the criteria for inclusion in the CRHR due to its regional and local historical significance. The site was previously recorded and is adequately documented. Indeed, a segment of White Rock Road has been recorded in Historic American Engineering Record (HAER) format for another road widening project. Isolate P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. Isolate P-9-15-H is a rock wall which runs parallel to the north side of a segment of White Rock Road. Both isolates were previously recorded, are adequately documented, and do not seem to possess the potential to provide any additional information relevant to the prehistory or history of the region. Therefore, sites CA-ELD-558-H and CA-ELD-721-H and isolated features P-9-12-H and P-9-15-H do not require any additional archaeological investigations and/or any other mitigation either prior to or during project implementation.

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1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

El Dorado County is proposing to improve White Rock Road from Latrobe Road to Silva Valley Parkway. This proposed project is identified as the White Rock Road, East Project. The project extends from the intersection of Latrobe Road and White Rock Road, approximately 0.25 miles south of State Highway 50, in an easterly direction for approximately 1.3 miles to Silva Valley Parkway (Figures 1-2). Proposed road improvements include: new construction of approximately 1,400 feet of two lane roadway measuring 42 feet wide from Tong Road to Silva Valley Parkway; initially widening approximately 4,200 feet of existing sections of roadway from 18 feet to 42 feet and eventually to a six lane roadway approximately 130 feet wide; and repaving of approximately 1,300 feet of an existing section of roadway from the Joeger Cutoff Road to Tong Road (Figures 3a-3c). The White Rock Road, East Project is subject to the legal requirements of the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.) 1970, as amended.

1.2 PROJECT LOCATION

The White Rock Road, East Project is located in the southwestern portion of El Dorado County along White Rock Road from Latrobe Road, approximately 0.25 miles south of State Highway 50, to Silva Valley Parkway (Figures 1-2). The APE for both the interim and ultimate improvements associated with the project extends from the intersection of Latrobe Road and White Rock Road in an easterly direction for approximately 1.3 miles to the intersection with Silva Valley Parkway (Figures 3a-3c).

1.3 SCOPE OF WORK

Archaeological investigations for the White Rock Road, East Project included: a records search at the North Central Information Center at California State University, Sacramento; a sacred lands search conducted by the Native American Heritage Commission; pedestrian surface survey of the APE for both the interim and ultimate improvements associated with the project; and completion of an archaeological report documenting the results of archaeological investigations and presenting management recommendations for cultural resources within the APE for both the temporary and ultimate improvements associated with the project.

1.3.1 Archaeological Resource Identification

The records search identified that the APE had been previously surveyed (cf., Peak & Associates 1987, 1988, 2000; Jones & Stokes 1989; Foster and Foster 1992; Supernowicz 1992, 1994) and two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H, are located within project boundaries. The sacred lands search did not identify any Native American cultural resources within the APE. Pedestrian surface survey of the APE relocated the previously recorded sites and features, but did not identify any new sites or features. Surface visibility within the APE, however, was limited due to tall grasses. Regardless of current surface visibility, it seems appropriate to assume that a reasonable effort has been made to identify historical resources within the APE for the White Rock Road, East Project and also that any cultural resources (i.e., prehistoric

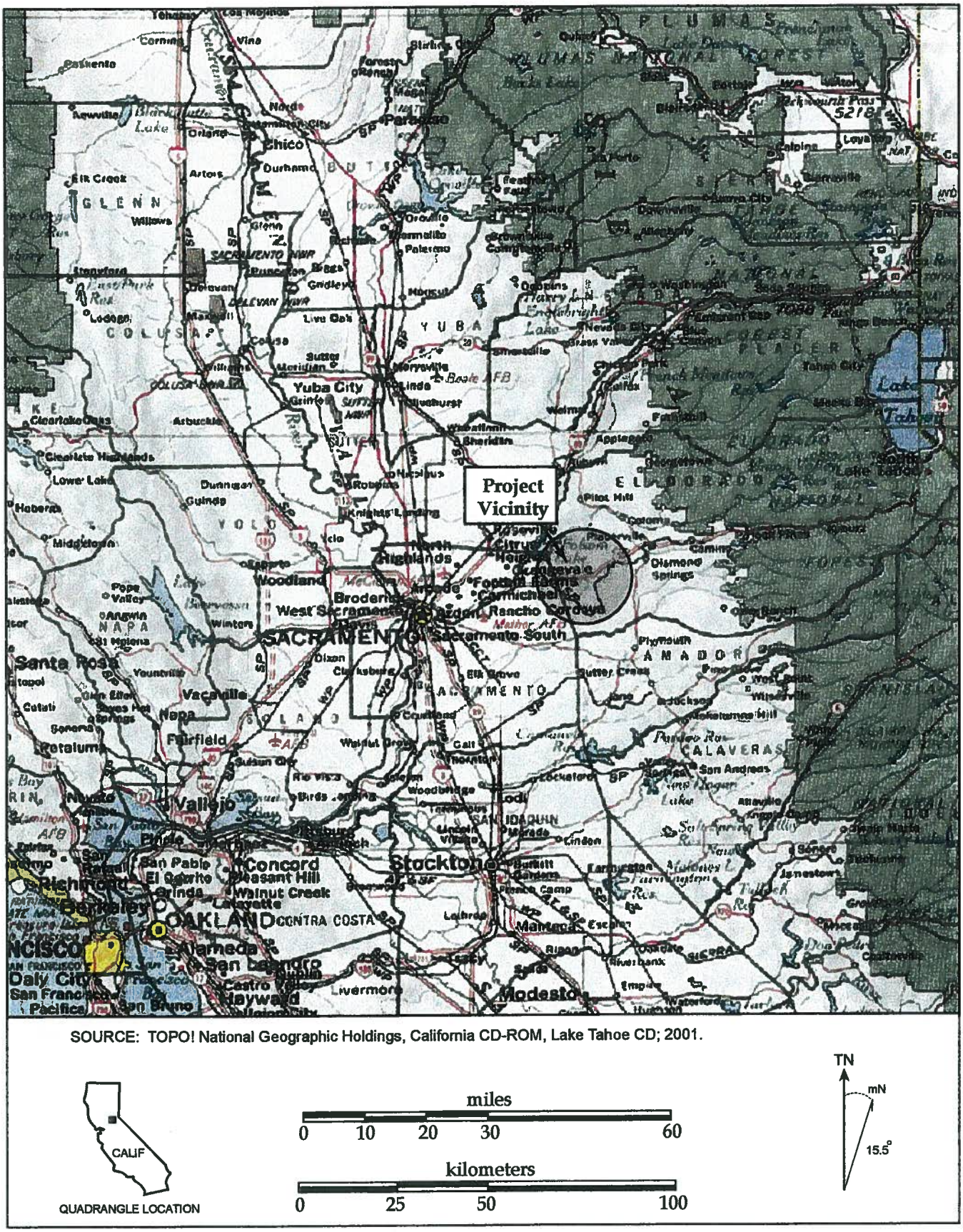


Figure 1. Project Vicinity Map.

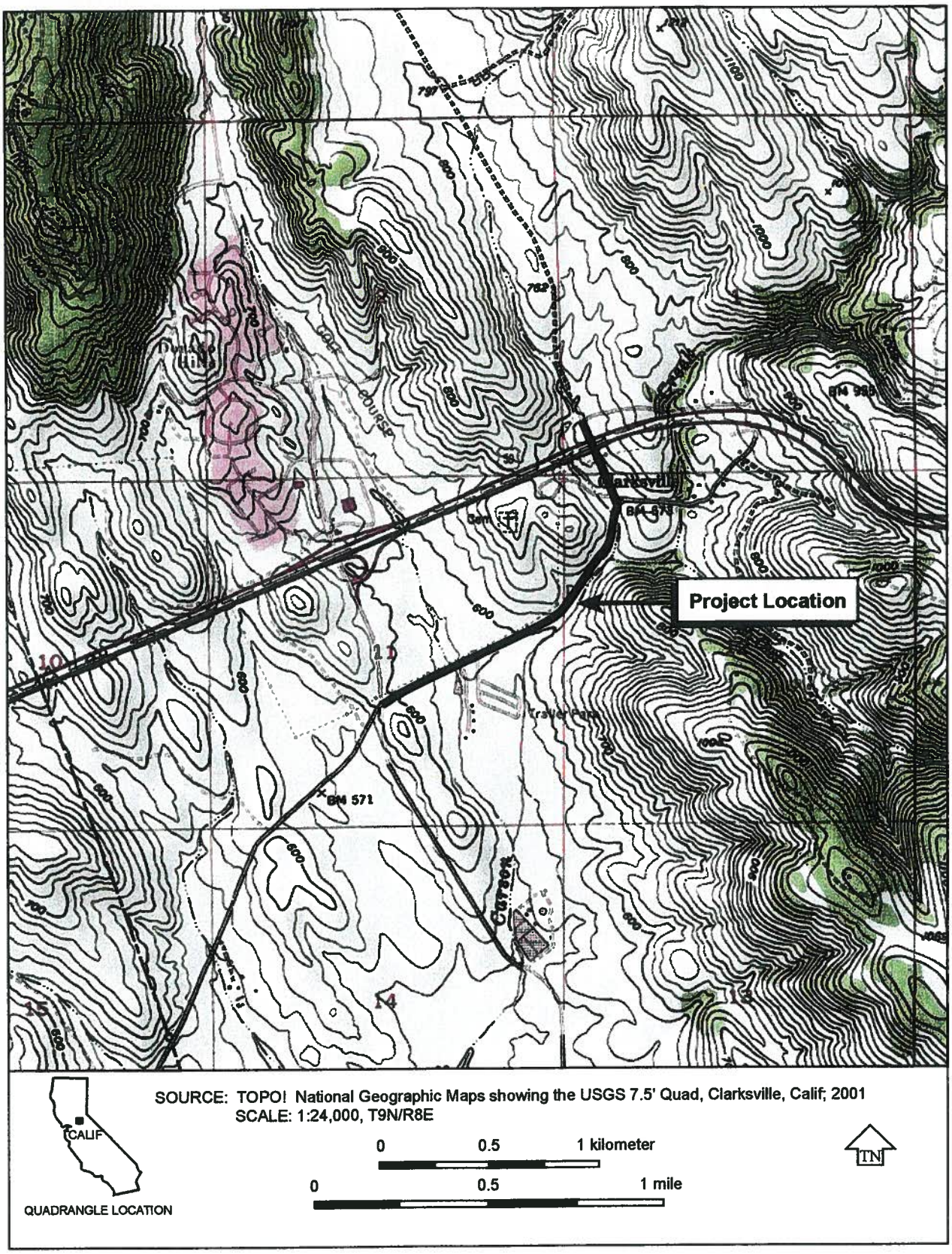
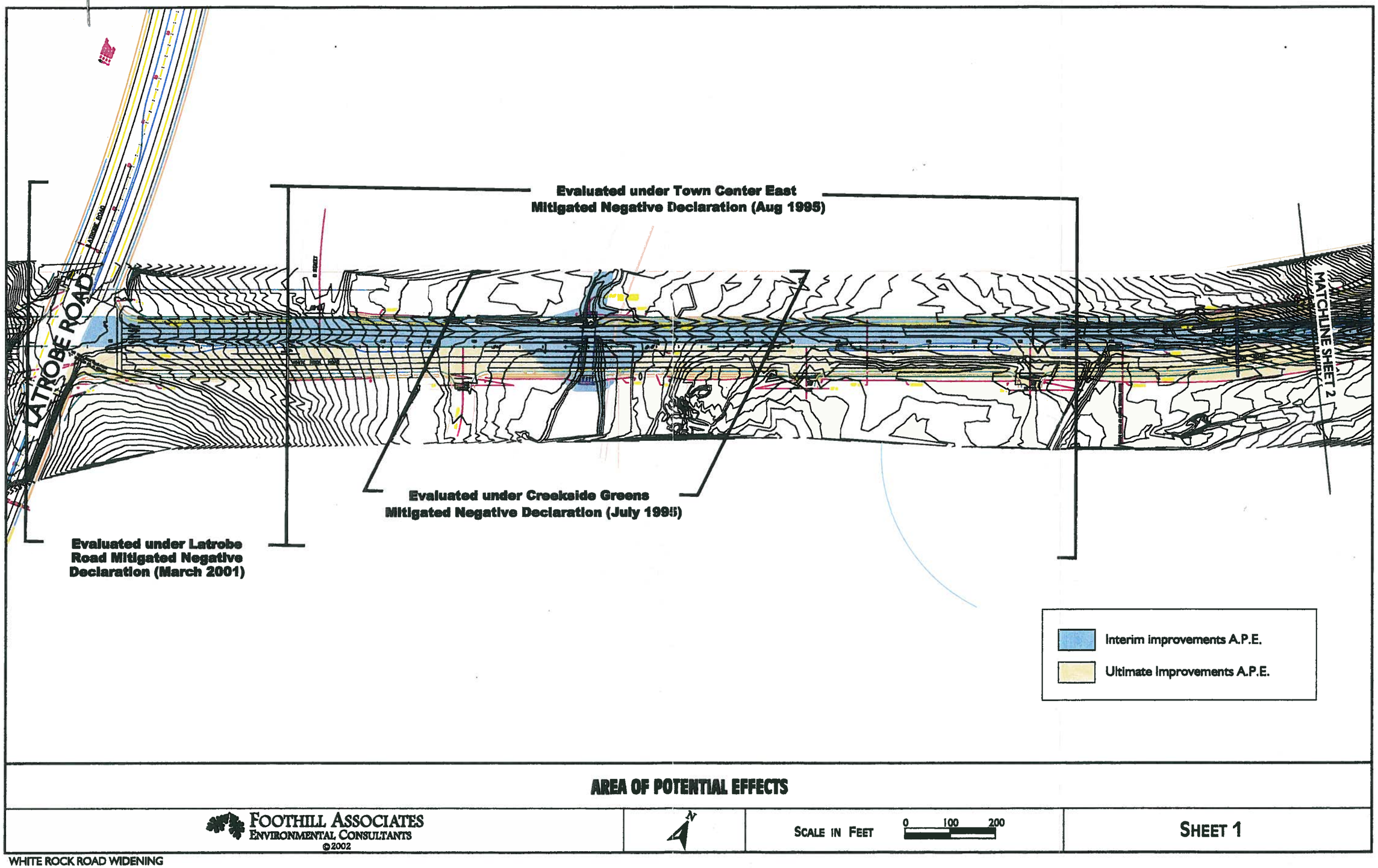
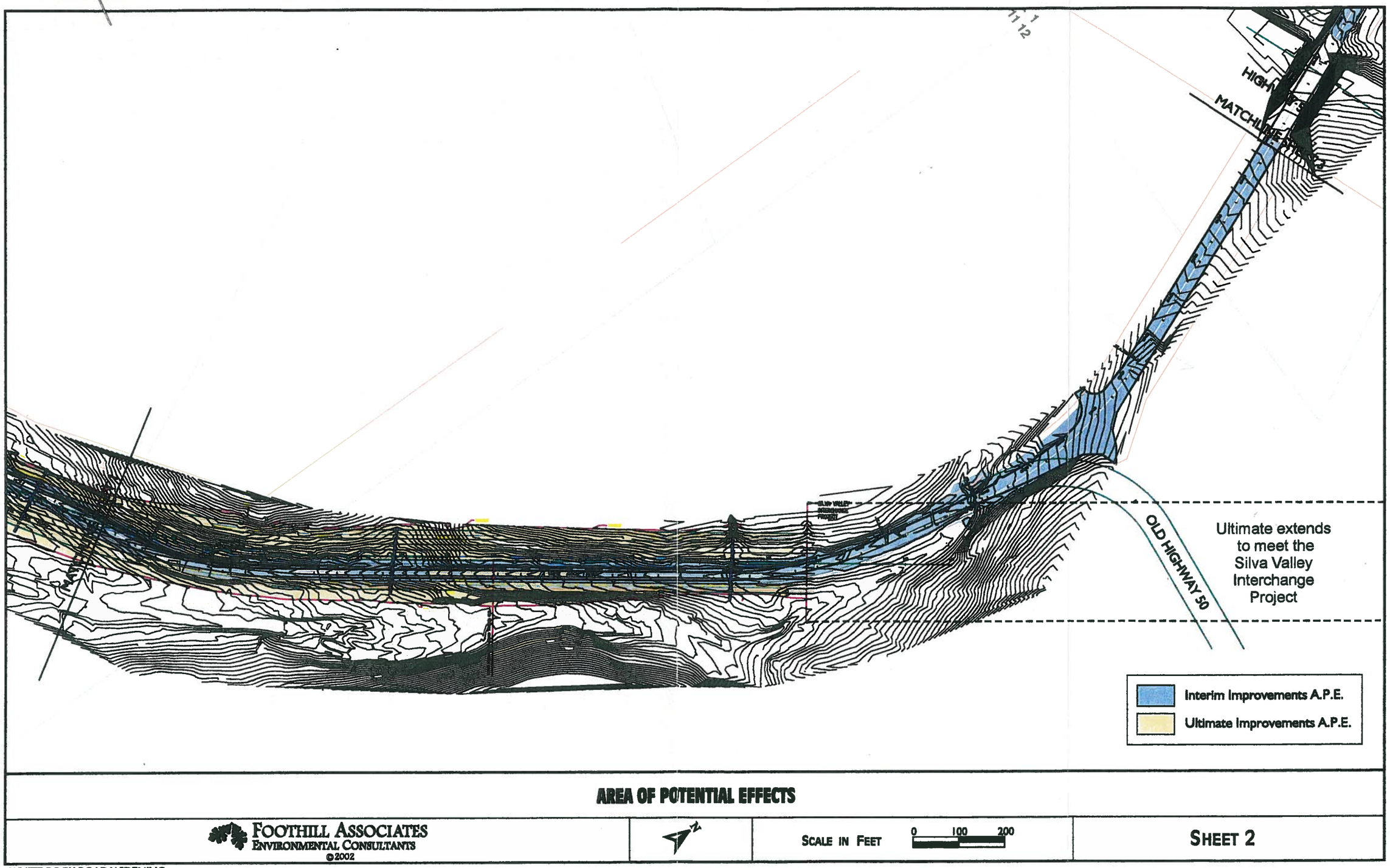


Figure 2. Project Location Map.



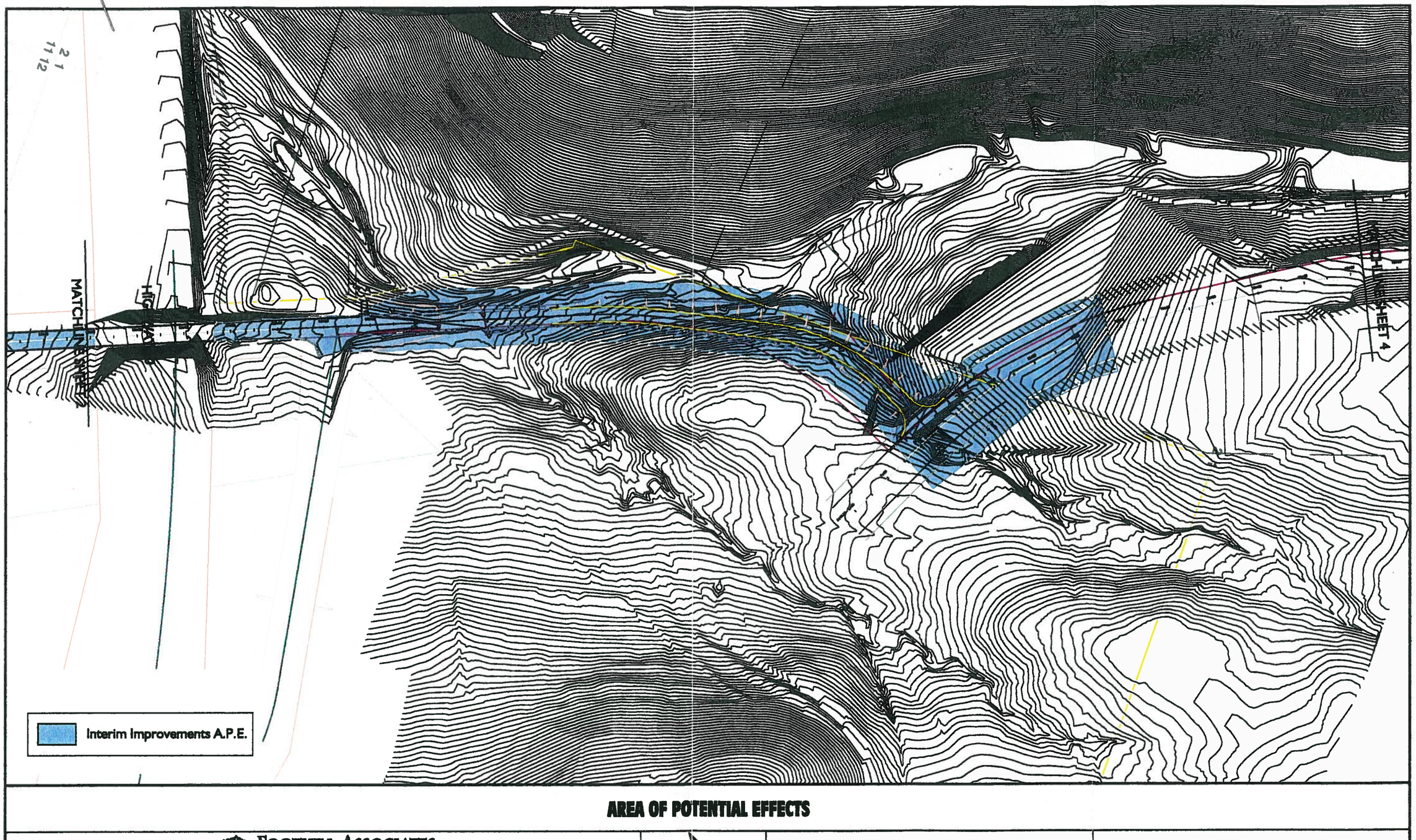
WHITE ROCK ROAD WIDENING

Figure 3a. Area of Potential Effects Map



WHITE ROCK ROAD WIDENING

Figure 3b. Area of Potential Effects Map



WHITE ROCK ROAD WIDENING

Figure 3c. Area of Potential Effects Map

sites, historic sites, features, or artifacts) within project boundaries have been identified.

1.3.2 Site Recording

Current archaeological investigations did not identify any new cultural resources within the APE for the project. The site records of previously recorded sites and isolated features within project boundaries were updated, as appropriate, for the current project (Appendix A, Site Records).

1.4 NATIVE AMERICAN and OTHER CONSULTATION

A sacred lands search and a list of Native American contacts was requested from the Native American Heritage Commission. The sacred lands search did not identify any Native American cultural resources either within or near the currently proposed project area. Pacific Legacy contacted all groups and/or individuals on the list provided by the Native American Heritage Commission and other interested parties regarding the White Rock Road, East Project (Appendix B, Native American and Other Consultation).

1.5 PROJECT PERSONNEL AND SCHEDULE

All *Pacific Legacy, Inc.* personnel that participated in this project meet Secretary of the Interior's Standards and Guidelines for Professional Qualifications. Pedestrian surface survey of the APE for the White Rock Road, East Project was conducted by Michelle St.Clair, B.A. and Tina Pitsenberger, B.A. of *Pacific Legacy, Inc.* in May 2002. John A. Nadolski, M.A. was responsible for overall project management and implementation, including fieldwork and report writing. Mr. Nadolski has 10 years of California archaeological experience and over 20 years of supervisory experience.

2.0 ENVIRONMENTAL CONTEXT

The White Rock Road, East Project is located near Carson Creek at the eastern edge of the Central Valley between the American and Cosumnes Rivers. This area provided a rich resource base which was exploited by prehistoric and historic Native American populations. Euroamericans also used the project area for mining and ranching.

2.1 GEOLOGY

The geology of the Sierra Nevada is primarily characterized by igneous and metamorphic rocks of diverse composition and age (Norris and Webb 1990:63). These rocks are called the "basement" or subjacent series. In the north-central Sierra Nevada sedimentary and volcanic rocks overlie the subjacent series and are known as the superjacent series (Norris and Webb 1990:63). The description of the geologic composition of the north-central Sierra Nevada may be enhanced by subdividing it into four areas which include the foothills, the midslope, the crest, and the immediately adjacent western edge of the Great Basin. The principle rocks of the western foothill zone of the north-central Sierra Nevada are Mesozoic metavolcanics, metasediments, and metamorphics (e.g., slates and graywackes) which surround intrusive igneous rocks representing the underlying batholith (Hill 1975; Norris and Webb 1990).

2.2 FLORA

Mayer and Laudenslayer (1988) developed the California Wildlife-Habitat Relations System (WHR). In this scheme wildlife habitats are classified in a standardized manner with respect to vegetation, habitat stages (i.e., successional stages), biological setting, physical setting, and distribution. The WHR system was primarily designed to recognize and categorize major vegetation complexes in a manner which would facilitate prediction of wildlife-habitat relationships. Its ecological approach also facilitates much wider applications, including investigations of mans interaction with the environment. The WHR associations in the project area include: valley oak woodland; blue oak–digger pine; annual grassland; riverine; and urban. The point is that there are numerous habitats near the project area which may be exploited by man.

Significant plant resources in the area identified as food sources for Native American populations include a variety of greens, roots/bulbs/corms, grass seeds, fruits/berries, and tree crops (i.e., acorns and other nuts). All of these plant resources have a high degree of seasonal availability and abundance. The diversity, abundance, and availability of plant resources varies, however, not only by season but also elevation. Regardless, late summer to mid-fall is the period of maximum diversity, abundance, and availability of plant resources. Conversely, during winter and early spring plant resources are at a minimum.

2.3 FAUNA

The project area contains a wide variety of animal species. Native Americans in the project area exploited many of these animal species for both food and other uses. These species include:

salmonids (i.e., salmon and trout); other freshwater fishes (e.g., minnows, suckers, and sunfish); quail; grouse; pigeons; doves; rabbits; squirrels; and artiodactyl herbivores (i.e., deer) (Jackson et al. 1994: Unit I, Volume B, Chapter 6.6).

Salmon and trout were very important resources on the west slope of the Sierra Nevada. Five species of anadromous salmon (i.e., chinook, coho, sockeye, pink, chum) originally inhabited the Sacramento-San Joaquin River system (Wang 1986). The most numerous were chinook or king salmon (*Oncorhynchos tshawytscha*) which made two annual spawning runs (Wang 1986). Rainbow trout (*Salmo gairdneri*) were also present in the Sacramento-San Joaquin River system as both year-round residents and anadromous steelhead rainbow trout.

Game birds in the area include California quail (*Callipepla californica*), band-tailed pigeon (*Columba fasciata*), and mourning dove (*Zenaidura macroura*) (Zeiner et al. 1990b). All of these game birds are year-round residents of the region, but some species migrate from higher to lower elevations with the onset of winter (Zeiner et al. 1990b).

Game mammals in the project area are generally active and available year-round, with some species forming annual population aggregates or commonly living in "colonies" (Zeiner et al. 1990a). Smaller mammal varieties in the study area include: pikas (*Ochotona princeps*); jackrabbits (*Lepus* spp.) and cottontail rabbits (*Sylvilagus* spp.); western gray squirrels (*Sciuris griseus*); Douglas' (*Tamiasciurus douglasii*) and northern flying squirrel (*Glaucomys sabrinus*); California ground squirrels (*Spermophilus beecheyi*); and other burrowing sciurids (i.e., yellow-bellied marmots (*Marmota flaviventris*), Beldings ground squirrel (*Spermophilus beldingi*), and the golden-mantled ground squirrel (*Spermophilus lateralis*) (Zeiner et al. 1990a).

Large mammals in the project area primarily include mule deer (*Odocoileus hemionus*). It has been argued that deer were the most important terrestrial mammal resource for prehistoric peoples in both the north-central Sierra Nevada and adjacent areas (Jackson et al. 1994: Unit II, Volume A, Chapter 1.6). The deer in the Sierra Nevada follow an annual pattern of migrations from higher to lower elevations. Year-round deer range is found in the Sierra Nevada foothills with winter range occupying a relatively narrow western midslope area (Longhurst et al. 1952:24). Longhurst et al. (1952:12, 105), however, suggest that current migratory patterns may be quite different from past patterns. They suggest that past forest structure at higher elevations may have been too dense to support deer, consequently deer may have remained at relatively low altitudes throughout the year.

3.0 CULTURAL CONTEXT

The archaeology of the White Rock Road, East Project area is relatively scant, but is primarily related to the prehistoric cultures and chronology of the Central Valley. The area, however, may also have been exploited by prehistoric cultures generally associated with higher elevations of the Sierra Nevada, such as the Martis Complex. Consequently, the archaeology of the Central Valley will be highlighted in the discussion of regional prehistory, but reference will also be made to possible relationships between prehistoric cultures of the Central Valley and the Sierra Nevada.

3.1 REGIONAL PREHISTORY

The Central Valley of California has long held the attention of California archaeologists. Indeed, archaeological work during the 1920s and 1930s led to the development of the first cultural chronology for the region. This chronology was primarily based on the results of excavations conducted in the lower Sacramento River Valley. The chronology identified three archaeological cultures which were named Early, Transitional, and Late (Lillard et al 1939). An antecedent to the Early Culture was postulated, but neither characteristics nor probable origins of this earlier culture were discussed in detail (Lillard et al 1939).

Heizer (1949) redefined these three archaeological cultures. He subsumed the three cultural groups into three time periods, designated the Early, Middle, and Late Horizons. Heizer (1949), based on his excavations at CA-SAC-107, identified the Windmiller cultural pattern as representative of the Early Horizon. Heizer intimated that new research and a reanalysis of existing data would also be initiated for cultures associated with the Middle and Late Horizons, but did not complete this work.

The Windmiller Pattern was further refined by Ragir (1972), a student of Heizer. Ragir (1972) reanalyzed, updated, and elaborated the description, temporal span, and geographic distribution of the Windmiller Pattern. The Windmiller Pattern is highlighted by: large, heavy, stemmed and leaf-shaped projectile points commonly made on a variety of materials; perforate charmstones; *Haliotis* and *Olivella* shell beads and ornaments; trident fish spears; baked clay balls (presumably for cooking in baskets); flat slab millingstones; small numbers of mortars; and ventrally extended burials oriented toward the west (Heizer 1949; Ragir 1972). The subsistence pattern of Windmiller groups probably emphasized hunting and fishing, with seed collecting (possibly including acorns) supplementing the diet (Heizer 1949; Ragir 1972; Moratto 1984). Ragir (1972) dates the Windmiller Pattern from 4,500-2,500 B.P., with a maximum age of 7,000 B.P.

Windmiller groups appear to be firmly established in the Lower Sacramento River Valley by 4,000 B.P., and are routinely interacting with their neighbors. For example, Windmiller groups acquired: obsidian from at least two Coast Range and three trans-Sierran sources; *haliotis* and *olivella* shells and ornaments from the coast; and quartz crystals from the Sierra foothills (Heizer 1949; Ragir 1972). It is hypothesized that the bulk of these materials were acquired through trade. Some of these materials, however, may have been acquired as part of seasonal movements between the Central Valley and the Sierra Nevada foothills. Johnson's (1967; 1970) work along the edge of the Sierra Nevada foothills at Camanche Reservoir and CA-AMA-56, the Applegate site, and Rondeau's (1980) work at CA-ELD-426, the Bartleson Mound near Latrobe, further a link between

Windmiller cultures of the Central Valley and cultures of Sierra Nevada foothills.

Ragir (1972) not only investigated the Windmiller Pattern, but also investigated cultures associated with the Middle and Late Horizon. She identified the Cosumnes Culture as representative of the Middle Horizon, based on excavations at CA-SAC-66 (Ragir 1972). The Middle Horizon is characterized by: tightly flexed burial with variable orientation; red ochre stains in burials; distinctive *Olivella* and *Haliotis* beads and ornaments; distinctive charmstones; cobble mortars and evidence of wooden mortars; numerous bone tools and ornaments; large, heavy foliate and lanceolate concave base projectile points made of materials other than obsidian; and objects of baked clay. Middle Horizon cultures are generally quite different from Windmiller, but do continue to exhibit some of the characteristics of Windmiller such as similar projectile point forms. The similarities in projectile point form may be indicative of cultural continuity and/or functional and adaptational success of particular forms.

The Late Horizon is characterized by the Hotchkiss Culture (Ragir1972), and spans the time period from 1,500 B.P. to contact. The Hotchkiss Culture is primarily represents both local innovation and the blending of new cultural traits introduced into the Central Valley. It is distinguished by intensive fishing, extensive use of acorns, elaborate ceremonialism, social stratification, and cremation of the dead.

The work of Lillard, Fenenga, Heizer, and Ragir is significant in the development of archaeology in the Central Valley of California. The research of Ragir is also important due to its impact on the Central California Taxonomic System (CCTS) originally presented by Beardsley (1954). The CCTS attempted to organize a cultural sequence for the area of central California from the interior to the coast. Ragir's work corrected and refined aspects of the CCTS and also facilitated future research regarding its temporal sequence and cultural units. The CCTS and its refinement is a dominant and ongoing theme in the archaeology of Central California.

3.2 ETHNOGRAPHY

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber (1925, 1936) subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the project area which is in Nisenan territory. Nisenan inhabit the drainages of the Yuba, Bear, and American rivers, and also the lower reaches of the Feather River, extending from the east banks of the Sacramento River on the west to the mid to high elevations of the western flank of the Sierra Nevada (Wilson and Towne 1978). Nisenan are members of the Maiduan Family of the Penutian stock and are generally divided into three groups based on dialect differences: the Northern Hill Nisenan in the Yuba River drainage; the Valley Nisenan along the Sacramento River; and the Southern Hill Nisenan along the American River (Kroeber 1925; Beals 1933; Wilson and Towne 1978).

The basic social and economic group of Nisenan is the family or household unit, with the nuclear and/or extended family forming a corporate unit. Among the Nisenan these groups combined to form tribelets, which were their largest sociopolitical unit (Wilson and Towne 1978). Each tribelet had a chief or headman who exercised political control over all villages within it. Tribelet populations of Valley Nisenan were as large as 500 persons (Wilson and Towne 1978), while

foothill tribelets ranged between 100 and 300 persons (Littlejohn 1928). Each Nisenan tribelet owned a bounded tract of land and exercised control over its natural resources (Littlejohn 1928). Beals (1933) estimates that Nisenan tribelet territory averaged approximately 100 square miles. Within these areas Nisenan practiced seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting lifezones that are in relatively close proximity to each other. Valley Nisenan, however, generally did not range beyond the valley and lower foothills.

Among Nisenan obsidian was a highly valued material for the manufacture of a variety of tools, and was usually imported. Several types of tools and weapons were also made of bone and wood, including stirring sticks, mush paddles, pipes, and hide preparation equipment. Cordage was made from plant material, and used to construct fishing nets and braided and twined tumplines. Soaproot brushes also were commonly used during grinding activities to collect meal and/or flour.

Fishing formed a large component of Valley Nisenan subsistence activity. Consequently, they used an extensive assemblage of fishing-related implements and facilities including spears, cordage lines with bone fishhooks, harpoons with detachable points, dams for stream diversion, nets of cordage and basketry, weirs, and an array of fishtraps (Wilson and Towne 1978). In addition, tule, lashed log, and bark rafts were used to acquire resources and facilitate travel. Other specialized food processing and cooking techniques primarily included grinding and leaching of ground acorn and buckeye meal. Acorns, buckeyes, pine nuts, seeds, berries, and meat were routinely processed using bedrock mortars and pestles. A soaproot brush was used to sweep "meal" into mortar cups and collect flour. Fist-sized, heated stones were used to cook and/or warm "liquid-based" foods such as acorn gruel. Whole acorns were stored in granaries. In addition to these plant resources, other plants may have been "managed", primarily by controlled burning, for both food (e.g., edible grasses and seed producing plants) and the manufacture of baskets and other useful equipment (Blackburn and Anderson 1993).

3.3 HISTORY

Spanish exploration of the Central Valley did not begin until the late 1700s, and the eastern edges of the Central Valley and the Sierra Nevada were not explored until the early 1800s. In 1808 Gabriel Moraga explored along the Mokelumne, Cosumnes, and American Rivers, passing near modern day Folsom (Beck and Haase 1974). Subsequent exploration of the project area is credited to mountain men such as Jedediah Smith who crossed the Sierra Nevada into California in 1826 (Beck and Haase 1974). Smith traveled along the American, Sacramento, and Cosumnes Rivers, and also probably passed through current Pleasant Valley (Brooks 1977). Smith is soon followed by other explorers such as Ewing Young, Joseph Walker, John Fremont, and Christopher "Kit" Carson. Indeed, in 1844 Fremont crossed the Sierra Nevada near Lake Tahoe and descended the west slope in proximity to the American River, which he eventually followed to Sutter's Fort. Many of the trails, however, used by these early explorers and subsequent immigrants were not newly discovered routes, but rather Native American trails that were already in use.

Early explorations of the Sierra Nevada and its flanks was soon followed by groups of Euroamerican immigrants moving west. The first of these immigrant groups was the Bartleson-Bidwell party in 1841 (Beck and Haase 1974). This group crossed the Sierra Nevada and followed the Stanislaus River into the Central Valley. The Bartleson-Bidwell party was followed in 1843 by

the Joseph Chiles and Joseph Walker parties (Beck and Haase 1974). Chiles crossed the Sierra Nevada following the Malheur and Pit Rivers into the Central Valley, and then traveled south along the Sacramento River. Walker, on the contrary, traveled south along the eastern front of the Sierra Nevada to Walker Lake where he crossed into Owens Valley, and eventually the Central Valley using what is now known as Walker's Pass. The Stevens-Murphy party of 1844 are probably the first immigrants to cross the Sierra Nevada and enter California via the Truckee and Bear Rivers. The route followed by this group became known as the California Trail, and it becomes a popular route into California during the Gold Rush. The successful crossing of the mountains by the Stevens-Murphy party, however, is followed by the 1846 disaster of the Donner Party.

The Mexican-American War which began in 1846 also affected the exploration of the project area, primarily in terms of the identification of new immigrant trails across the Sierra Nevada. The exploits of the Mormon Battalion and the establishment of the Mormon Emigrant Trail (MET) highlight these activities. After serving in the Mexican-American War, members of the Mormon Battalion worked at both Sutter's Fort and Coloma. The Mormons, however, in 1848 decided to return to Salt Lake City following a route through current Pleasant Valley, Sly Park and Jenkinson Lake, Leek Springs, Carson Pass, and Hope Valley (Owens 1989). This route eventually became known as the Carson Wagon Road, and provided an alternative trail across the Sierra Nevada to the California Trail along the Truckee River. This route, however, was not popular until the onset of the Gold Rush.

The discovery of gold at Sutter's Mill in Coloma in 1848 was the catalyst that caused a dramatic alteration of both Native American and Euroamerican cultural patterns in California. Once news of the discovery of gold spread, a flood of Euroamericans began to enter the region, particularly gravitating to the area of the "Mother Lode". Initially, the Euroamerican population grew slowly, but soon exploded as the presence of large deposits of gold was confirmed. The population of California quickly swelled from an estimated 4,000 Euroamericans in 1848 to 500,000 in 1850 (Bancroft 1888). This large influx of immigrants had a negative effect on Native American cultures, and marks the beginning of a relatively rapid decline of both Native American populations and culture.

Immigrants to California seeking their fortune in the gold fields arrived from around the world. Some "argonauts" arrived by ship in San Francisco, while others came over the Sierra Nevada using previously established trails. Two of these trails are the California Trail and the MET. The MET soon became a popular route to Placerville and the gold fields of the Sierra Nevada. The early arrivals to the gold fields began prospecting in the more accessible placer deposits. Recovery of gold from these deposits required only simple tools and techniques (e.g., panning). In the 1850s, as these relatively easily accessed gold deposits became scarce and more miners entered the area, gold extraction techniques became more complicated and intensive (Thrush 1968; Tibbetts 1997). For example, sluiceboxes, flumes, dams, and eventually hydraulic operations soon became standard facilities for placer mining. As gold deposits continued to dwindle, drift mining, requiring tunneling to reach gold deposits, became a widespread extraction technique. Finally, hard-rock mining, the use of explosives, and the use of stamp mills and arrastres to extract gold from quartz were employed. Many of these mining techniques, particularly hydraulic mining, required the use of large quantities of water. Consequently, extensive water diversion systems including dams and miles of ditches were constructed to supply the water necessary to "wash out" huge amounts of gravel (Supernowicz 1983; Tibbetts 1997).

The discovery of gold along the forks and tributaries of the American River demanded roads that linked together Sacramento, Placerville, and other areas of El Dorado County. Two roads that functioned as major travel routes in El Dorado County are Green Valley Road and the Carson Wagon Road/Placerville Road/MET. Green Valley Road linked several mining camps in vicinity of the current project including Mormon Island, Folsom, Salmon Falls, and Clarkson's Village or Clarksville. Indeed, Clarkson's Village was located along the Placerville Road, approximately ½ mile east of Mormon Tavern, and served as a "way station" for "argonauts" entering and leaving the "Motherlode", and also became a mining town. A post office was established in Clarkson's Village in 1855 and the name of the town was officially changed to Clarksville by postal authorities (Peak & Associates 1988: 11). Some of the early inhabitants of Clarksville include the Tong family, George Fitch, Joseph Joerger, and W.D. and Amelia Rantz. The Tong family settled in Clarksville in 1855 and constructed a toll road, built a hostelry called Railroad House, established mining operations, and raised cattle in the area (Peak & Associates 1988: 11). The Tongs became a prominent family in Clarksville, and members of the family served as postmasters and justice of the peace in the town. Indeed, the Tong family still maintains a cemetery in Clarksville.

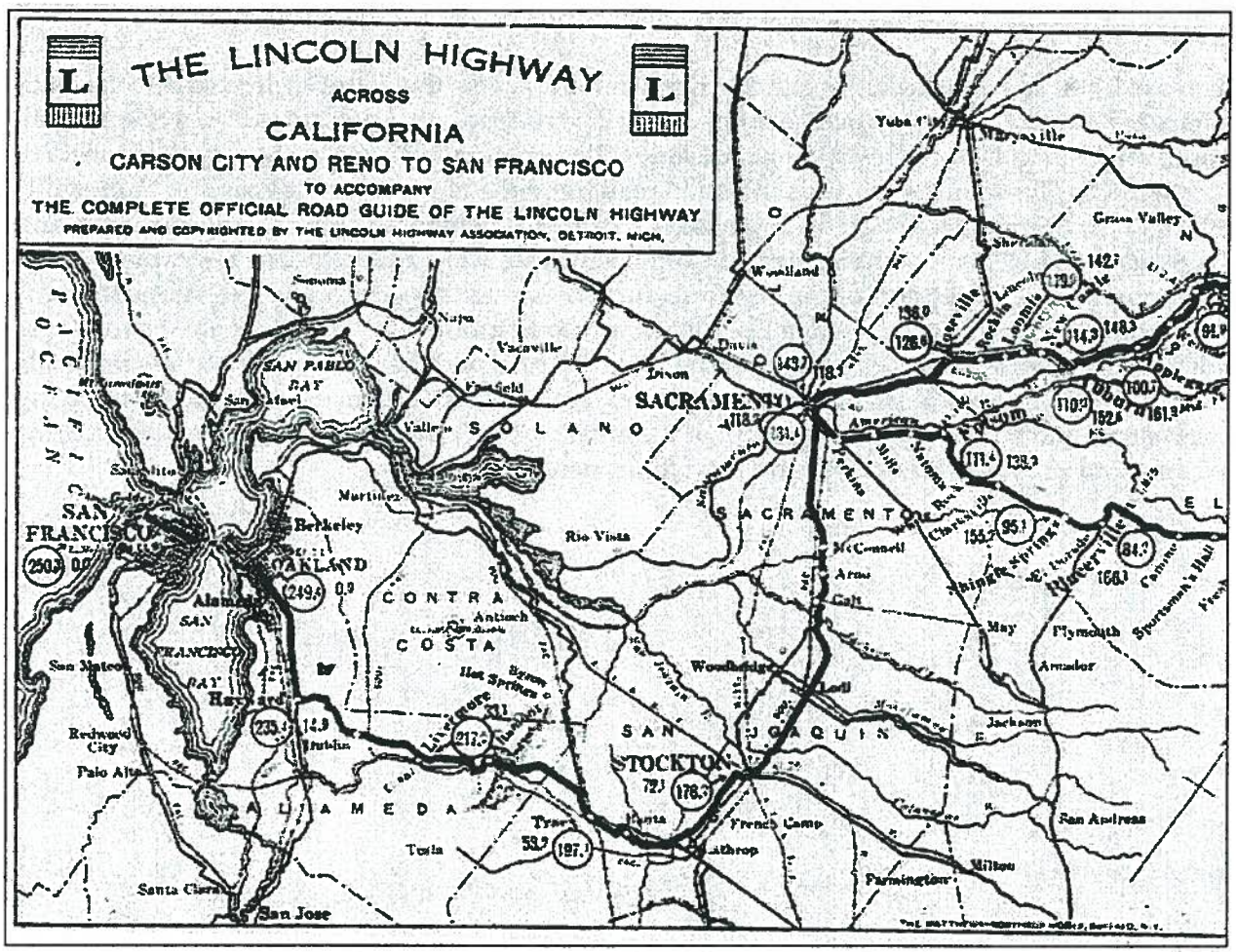
As the gold mining expanded in the area surrounding Placerville, a reliable transportation and supply route was needed between Placerville and Sacramento. The Placerville Road, of which present-day White Rock Road was a part, provided the reliable route between the two towns. Placerville Road passed through Clarkson's Village or Clarksville, and helped facilitate the growth of the town during the 1850s. Subsequent construction, however, of a railroad line between Sacramento and Placerville bypassed Clarksville, and both the use of the Placerville Road and the growth of Clarksville began to decline in the late 1860s. Indeed, the loss of freight traffic in the late 1860s and the decline of mining activity stifled the economic development of the area. Regardless of these negative impacts on the local economy, Clarksville remained the local commercial and social center for new businesses such as dairy and sheep ranching and new residents associated with those enterprises.

Gold mining originally attracted people to the Sierra Nevada, but it also opened the region to new business enterprises and occupations. For example, miners generated a need for a wide variety of supplies and services. Indeed, some of the most successful people in the region were not miners, but rather businessmen who supplied the miners. Many of these businessmen and businesses were established by discouraged miners who were not very successful in the gold fields. Consequently, new businesses and occupations including dairy and sheep ranching were established in the region. Indeed, these businesses provided a familiar occupational outlet for discouraged miners, and growing populations in the area provided a ready market for their products. In fact, by the 1860s ranching dramatically affected and modified the landscape of the Sierra Nevada, and by the 1870s grazing of both sheep and cattle was one of the largest industries in El Dorado County. Ranching enterprises continued in the area on a relatively large scale until the 1930s. From the 1930s to the present, however, the industry has gradually declined, and today is virtually nonexistent in the area.

Ranchers and other residents of the Clarksville area continued to use the Placerville Road primarily to travel between Clarksville, White Rock, and Sacramento. At the end of the 19th and beginning of the 20th century, a growing demand for roads that linked communities and provided access to railroad lines led to the passage of the State Highways Act in 1909. The Act authorized the creation of a highway network within California and to join with roads in adjoining states. The Placerville Road was incorporated into the developing highway system since it linked Sacramento with

Placerville, a county seat (Lortie 2000). Subsequently in 1913, the Placerville Road, including present day White Rock Road, was incorporated into the intercontinental Lincoln Highway system (Lincoln Highway Association 1935) (Figure 4). The road in vicinity of Clarksville was improved (i.e., realigned, graded, and graveled) between 1917 and 1918 and was paved with concrete in 1919 or 1920 (Lincoln Highway Association 1935). Regardless of these types of improvements, most states did not have the funds to either maintain existing highways or construct new routes. The Federal Highway Act of 1916 attempted to rectify this situation by providing matching funds to states for road construction. This Act was soon followed by the Federal Aid Highway Act of 1925 which created our current system of numbered interstate highways. Consequently, named highways, such as the Lincoln Highway, were given numbers, and the section of it through Clarksville became U.S. Highway 50.

Increased use and expansion of the highway system across the country demanded that both engineering and safety improvements be made to the roads that comprised it. For example, improvements to U.S. Highway 50 near Clarksville began in 1937 and were completed in 1940 (Lortie 2000). These improvements included realigning the highway and bypassing Clarksville, which had a dramatic effect on the town and signaled the beginning of its isolation, decline, and eventual abandonment. Subsequently, in 1950 new lanes were added to U.S. Highway 50 near Clarksville. This expansion of the highway further isolated the town and the segment of the Placerville Road, present day White Rock Road, passing through it. Consequently, the road was not well traveled and was primarily used by local ranchers and the other relatively few residents of the area. White Rock Road remained a relatively isolated and seldom used road until the recent commercial and residential development of the area. Today, White Rock Road provides access to existing and proposed businesses and private residences in the area.



SOURCE: The Complete Official Road Guide of the Lincoln Highway, Lincoln Highway Association, Detroit, Mich., 1924.

Figure 4. The Lincoln Highway Across California.

4.0 RESULTS OF ARCHAEOLOGICAL INVESTIGATIONS

Archaeological investigations for the White Rock Road, East Project have been completed. These investigations included a record search at the North Central Information Center at California State University, Sacramento, a sacred lands search conducted by the Native American Heritage Commission, and a pedestrian surface survey of the APE for both the temporary and ultimate improvements associated with the project. The record search identified that: the APE had been previously surveyed (cf., Peak & Associates 1987, 1988, 2000; Jones & Stokes 1989; Foster and Foster 1992; Supernowicz 1992, 1994); and two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H, are located within project boundaries. The sacred lands search did not identify any Native American cultural resources within the APE. Pedestrian surface survey of the APE relocated the previously recorded sites and features, but did not identify any new sites or features. Surface visibility within the APE, however, was limited due to tall grasses. Regardless of current surface visibility, it seems appropriate to assume that a reasonable effort has been made to identify historical resources within the APE for the White Rock Road, East Project and also that any cultural resources (i.e., prehistoric sites, historic sites, features, or artifacts) within project boundaries have been identified.

4.1 SITE and ISOLATE CHARACTERIZATION

There are two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H, within project boundaries (Figure 5) (Appendix A, Site Records). Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. Site CA-ELD-721-H is White Rock Road which is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. Isolate P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. Isolate P-9-15-H is a rock wall which runs parallel to the north side of a segment of White Rock Road. All of the sites and isolates were previously recorded and are adequately documented.

Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. Albert is the son of George Clinton Fitch who settled the area in 1865, and was buried in the Clarksville Cemetery in 1904 (Peak & Associates 1988). Albert farmed lands in vicinity of Clarksville and either built or acquired the house recorded as site CA-ELD-558-H. Albert Fitch was an avid gardener and attempted to plant a tree from every country in the world at his house (Peak & Associates 1988). Therefore, he built water storage facilities at the site and other features, such as a rock garden, to tend and display his various plants. Unfortunately, the house was completely destroyed by fire in the early 1950s (Peak & Associates 1988). After the fire, Albert Fitch moved to Clarksville, where he lived until his death in 1954.

The site is adequately documented and the history of the Fitch family, including Albert, has been adequately researched (cf., Peak & Associates 1988; Jones & Stokes 1989). The site was destroyed in the early 1950s and also has been subjected to vandalism and natural deterioration. Indeed, many of the features recorded at the site in 1988 could neither be relocated nor identified during the site visit for the current project. In addition, further research regarding the Albert Fitch house would not likely yield information important to regional or local history. Therefore, the

remnants of the Albert Fitch house do not seem to meet any of the CEQA guidelines or criteria at §15064.5 and §21083.2 for either a significant historical resource or a unique archaeological resource (cf., Jones & Stokes 1989: 223).

Site CA-ELD-721-H, present day White Rock Road, is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. The road has been improved (e.g., graded and paved) over time, but the alignment of the road has remained relatively unchanged. The site is important in regional and local history and seems to meet the criteria for inclusion in the CRHR. The history of White Rock Road, however, has been adequately researched and the road is adequately documented according to Historic American Engineering Record standards (cf., Napoli 2002).

Isolated feature P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. The road is adequately documented and additional research regarding the feature would not likely yield information important to regional or local history. Therefore, P-9-12-H does not seem to meet any of the CEQA guidelines or criteria at §15064.5 and §21083.2 for either a significant historical resource or a unique archaeological resource.

Isolated feature P-9-15-H is a rock wall which runs parallel to the north side of a segment of White Rock Road. The rock wall is adequately documented and additional research regarding the feature would not likely yield information important to regional or local history. Indeed, the rock wall was previously determined ineligible for inclusion in the CRHR (cf., Peak & Associates 2000).

4.2 SITE MANAGEMENT RECOMMENDATIONS

Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. The house was destroyed by fire in the early 1950s and currently lacks integrity due to vandalism and natural deterioration. The site is adequately documented and the history of the Fitch family, including Albert, has been adequately researched (cf., Peak & Associates 1988). Indeed, additional research regarding the Albert Fitch house would not likely yield information important to regional or local history. Therefore, the remnants of the Albert Fitch house do not seem to meet any of the CEQA guidelines or criteria at §15064.5 and §21083.2 for either a significant historical resource or a unique archaeological resource, and does not require any additional archaeological investigation and/or mitigation prior to or during project implementation (cf., Jones & Stokes 1989: 223).

Site CA-ELD-721-H, present day White Rock Road, is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. The site is important in regional and local history and seems to meet the criteria for inclusion in the CRHR. The history of White Rock Road, however, has been adequately researched and the road is adequately documented according to Historic American Engineering Record standards (cf., Napoli 2002). Therefore, the site does not require any additional archaeological investigation and/or mitigation prior to or during project implementation.

Isolated feature P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. The road is adequately documented and additional research regarding the feature would not likely

yield information important to regional or local history. Therefore, P-9-12-H does not seem to meet any of the CEQA guidelines or criteria at §15064.5 and §21083.2 for either a significant historical resource or a unique archaeological resource, and does not require any additional archaeological investigation and/or mitigation prior to or during project implementation.

Isolated feature P-9-15-H is a rock wall which runs parallel to the north side of a segment of White Rock Road. The rock wall is adequately documented and additional research regarding the feature would not likely yield information important to regional or local history. Indeed, the rock wall was previously determined ineligible for inclusion in the CRHR, and does not require any additional archaeological investigation and/or mitigation prior to or during project implementation (cf., Peak&Associates 2000).

In summary, there are two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H, within project boundaries. CA-ELD-558-H does not seem to meet the criteria for inclusion in the CRHR, while CA-ELD-721-H seems to meet the criteria for inclusion in the CRHR. Both sites, however, are adequately documented and do not require any additional archaeological investigations and/or mitigation prior to or during project implementation. Isolated features P-9-12-H and P-9-15-H do not seem to meet the criteria for inclusion in the CRHR and do not require any additional archaeological investigations and/or mitigation prior to or during project implementation.

5.0 MANAGEMENT CONSIDERATIONS

El Dorado County is proposing to improve White Rock Road from Latrobe Road to Silva Valley Parkway. This proposed project is identified as the White Rock Road, East Project. The project extends from the intersection of Latrobe Road and White Rock Road, approximately 0.25 miles south of State Highway 50, in an easterly direction for approximately 1.3 miles to Silva Valley Parkway (Figures 1-2). Proposed road improvements include: new construction of roadway from Tong Road to Silva Valley Parkway; widening of existing sections of roadway; and repaving of existing sections of roadway. The White Rock Road, East Project is subject to the legal requirements of the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.) 1970, as amended.

Previous and current archaeological investigations within the boundaries of the White Rock Road, East Project are adequate. These investigations identified two sites, CA-ELD-558-H and CA-ELD-721-H, and two isolated features, P-9-12-H and P-9-15-H (Figure 5). Site CA-ELD-558-H is the remnants of the Albert Fitch house which dates to the 1930s. Site CA-ELD-721-H is White Rock Road which is a segment of Placerville Road/Lincoln Highway/U.S. Highway 50 which dates from the end of the 19th century to the 1940s. Isolate P-9-12-H is an unimproved dirt road which seems to have provided access to the Clarksville Cemetery, and currently provides access to wireless communications facilities. Isolate P-9-15-H is a rock wall which runs parallel to the north side of a segment of White Rock Road. Sites CA-ELD-558-H and CA-ELD-721-H and isolated features P-9-12-H and P-9-15-H were previously recorded and are adequately documented. Site CA-ELD-558-H and isolated features P-9-12-H and P-9-15-H do not seem to meet the eligibility criteria for inclusion in the CRHR. Indeed, P-9-15-H was previously determined ineligible for inclusion in the CRHR. Site CA-ELD-721-H, however, seems to meet the criteria for inclusion in the CRHR, but the site has been adequately documented. Indeed, the site has been recorded in HAER format to mitigate effects to the road resulting from the proposed widening of another section of White Rock Road. Therefore, neither CA-ELD-558-H, CA-ELD-721-H, P-9-12-H, nor P-9-15-H seems to possess the potential to provide any additional significant data relevant to regional research, and do not require any mitigation prior to or during implementation of the currently proposed White Rock Road, East Project.

6.0 REFERENCES CITED

Bancroft, Hubert Howe
1888 *History of California.* The History Company, San Francisco, California.

Beardsley, R.K.
1954 Temporal and Areal Relationships in Central California. *University of CaliforniaArchaeological Survey Reports* 24, 25. Berkeley, California.

Beals, R.L.
1933 Ethnology of the Nisenan. *University of California Publications in American Archaeology and Ethnology* 31(6): 355-414. Berkeley, California.

Beck, Warren and Ynez D. Haase
1974 *Historical Atlas of California.* University of Oklahoma Press, Norman, Oklahoma.

Blackburn, T.C. and K. Anderson
1993 *Before the Wilderness.* Ballena Press, Menlo Park, California.

Brooks, George (editor)
1977 *The Southwest Expedition of Jedediah S. Smith: His Personal Account of th eJourney to California 1826-1827.* Arthur C. Clarke Company, Glendale, California.

Foster, Daniel G. and John W. Foster
1992 An Archaeological Reconnaissance of the Bass Lake Development Area Sewer Trunk Alternatives El Dorado California. Report on file at the North Central Information Center, California State University, Sacramento.

Heizer, R.F.
1949 The Early Horizon. In *The Archaeology of Central California, I.* University of California Anthropological Records 12(1). Berkeley, California.

Hill, M.
1975 *Geology of the Sierra Nevada.* University of California Press, Berkeley.

Jackson, R.J.,T.L. Jackson, C. Miksicek, K. Roper, and D. Simons
1994 *Framework for Archaeological Research and Management, National Forest of the North Central Sierra Nevada.* Prepared for the Eldorado National Forest, Placerville, California.

Johnson, Jerald J.
1967 *The Archaeology of the Camanche Reservoir Locality, California.* Sacramento Archaeological Society Papers No. 6. Sacramento, California.

1970 Archaeological Investigations at the Applegate Site (4-Ama-56). *Center for Anthropological Research at Davis Publications* 2: 65-144.

Jones & Stokes Associates, Inc.
1989 Draft Environmental Impact Report for the Silva Valley Parkway Interchange with U.S. Highway 50. Report prepared for El Dorado County Department of Transportation.

Kroeber, A.L.
1925 *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Washington, D.C. Reprinted in 1976 by Dover Publications, Inc., New York, New York.

1936 Culture Element Distributions: III, Area and Climax. *University of California Publications in American Archaeology and Ethnology* 37(3): 101-116, Berkeley, California.

Lillard, J.B., R.F. Heizer, and F. Fenenga
1939 *An Introduction to the Archaeology of Central California.* Sacramento Junior College, Department of Anthropology Bulletin 2. Sacramento, California.

Littlejohn, H.
1928 Nisenan Geography: Field Notes and Manuscript. *Ethnological Documents (CU-23.1),* University of California Archives, Museum of Anthropology Archives, Berkeley.

Longhurst, W.M., A.S. Leopold, and R.F. Dasmann
1952 A Survey of California Deer Herds, Their Ranges and Management Problems. *California Fish and Game Bulletin* 6: 1-136. Sacramento, California.

Lortie, Frank
2000 Historic Resource Evaluation Report for Road Widening on State Route 50, El Dorado Hills to Shingle Springs. Report prepared by the California Department of Transportration, Cultural Studies Office. Sacramento, CA.

Mayer, K.E. and W.F. Laudenslayer, Jr. (editors)
1988 *A Guide to Wildlife Habitats of California.* California Department of Forestry and Fire Protection, Sacramento, California.

Moratto, M.J.
1984 *California Archaeology.* Academic Press, New York, New York.

Napoli, Donald S.
2002 Historic American Engineering Record, Placerville Road Segment (White Rock Road Segment). Report prepared for Pacific Municipal Consultants.

Norris, R.M. and R.W. Webb
1990 *Geology of California,* 2nd edition. John Wiley and Sons, Inc., New York, New York.

Owens, Kenneth N.
1989 *Archaeological and Historical Investigation of the Mormon-Carson Emigrant Trail Eldorado and Toiyabe National Forests, Volume II: History.* U.S. Forest Service Eldorado National Forest, Placerville, California.

Peak & Associates
1987 Cultural Resources Assessment of the Matz Property, Clarksville, El Dorado County, California. Report on file at the North Central Information Center, California State University, Sacramento.

1988 Archaeological Survey Report for the Proposed Interchange Alternatives Along U.S. Highway 50 at Future Silva Valley Parkway, El Dorado County, California. Report prepared for Jones & Stokes Associates, Inc.

2000 Letter Report for the Sprint PCS Site No. FS18XC011-A, El Dorado Hills Canyon. Report on file at the North Central Information Center, California State University, Sacramento.

Ragir, S.R.
1972 *The Early Horizon in Central California Prehistory.* Contributions of the University of California Archaeological Research Facility 15, Berkeley, California.

Rondeau, Michael F.
1980 *Archaeological Excavations at the Bartleson Mound, El Dorado County, California.* Report prepared for Bartleson Realtors, Plymouth, CA.

Supernowicz, D.
1983 Historical Overview of the Eldorado National Forest. Unpublished Master's Thesis on file at California State University, Sacramento.

1992 Archaeological Survey Report of Creekside Greens: A Proposed Development South of White Rock Road El Dorado County, California. Report on file at the North Central Information Center, California State University, Sacramento.

1994 Archaeological Survey Report of a 12" Off-Site Water Line Within the El Dorado Hill Business Park, TPM 85-20 South of White Rock Road El Dorado County, California. Report on file at the North Central Information Center, California State University, Sacramento.

Tibbetts, Deborah I.
1997 Gold Mining in Northern California 1848-1890: Development of a Taxonomic Framework and Harrison Diggings Revisited. Unpublished Master's Thesis on file at California State University, Chico.

Thrush, Paul W.
1968 A Dictionary of Mining, Minerals, and Related Terms. U.S. Department of the Interior.

Wang, J.C.S.
1986 *Fishes of the Sacramento-San Joaquin Estuary and Adjacent Waters, California: A Guide to the Early Life Histories.* Interagency Ecological Study Program for the Sacramento-San Joaquin Estuary Technical Report 9.

Wilson, N.L. and A.H. Towne
1978 Nisenan. In *California*, edited by R.F. Heizer, pp. 387-397. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Meyer, and M. White
1990a *Mammals.* California's Wildlife, Vol. 3. California State Wildlife Habitat Relationship System, State of California, The Resources Agency, Department of Fish and Game, Sacramento, California.

1990b *Birds.* California's Wildlife, Vol. 2. California State Wildlife Habitat Relationship System, State of California, The Resources Agency, Department of Fish and Game, Sacramento, California.