El Dorado County Pollock Pines Community Park

Initial Study/ Mitigated Negative Declaration

Prepared For:

El Dorado County
Department of General Services
Division of Airports, Parks and Grounds
3000 Fairlane Court, Ste 1
Placerville, Ca 95667

March 2007

El Dorado County

Pollock Pines Community Park

Initial Study/Mitigated Negative Declaration

Prepared for:

EL DORADO COUNTY
Department of General Services –
Division of Airports, Parks and Grounds
3000 Fairlane Court, Ste. 1
Placerville, CA 95667

Prepared by:

PACIFIC MUNICIPAL CONSULTANTS
10461 Old Placerville Road, Suite 110
Sacramento, CA 95827

MARCH 2007

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study/Mitigated Negative Declaration prepared pursuant to the California Environmental Quality Act (CEQA) for the proposed Pollock Pines Community Park ("Project" or "project"). 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 (County) will serve as lead agency for the proposed project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study/Mitigated Negative Declaration is to evaluate the potential environmental impacts of the proposed 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," "potentially significant unless mitigation incorporated," or "potentially significant" in response to the environmental checklist, and provides mitigation measures, where appropriate, to mitigate potentially significant impacts to a less than significant level;

4.0 Determination - Provides the environmental determination for the project;

5.0 References - List of references used.

Appendices - Biological Resources Technical Report
Cultural Resources Technical Report

2.0 PROJECT DESCRIPTION

El Dorado County proposes to develop a community park in Pollock Pines, approximately 13 miles east of Placerville in El Dorado County, California. The Pollock Pines Community Park would include public use facilities for organized events and general public recreation. The El Dorado County Department of General Services, Division of Airports, Parks and Grounds (County Parks) will construct, maintain, and operate the park.

2.1 PROJECT LOCATION

The proposed park site is located on 26.4 acres of undeveloped County-owned land (APN 101-220-10 and 101-220-11, which have been combined into a single parcel, APN: 101-220-19). The project site is located at the end of Red Hook Trail, near the existing Community Center in the unincorporated community of Pollock Pines as shown on **Figure 2-1**. The project site is within the Pollock Pines 7.5 Minute USGS quad map (Section 36, Township 11N, Range 12E, Mount Diablo Meridian).

The site is heavily forested with northeast facing slopes ranging from 5% to 20%. The elevation of the site ranges from 3,780 feet to 3,862 feet, increasing in elevation from the northwest portion of the site to the southeast corner of the site. An El Dorado Irrigation District (EID) irrigation canal borders the northern edge of the project site, while the remaining surrounding land uses are primarily estate residences. The site is zoned Estate Residential 10-acre, as are the adjacent properties to the south, north, and portions of the west. A portion of the land west of the site is designated as a Timberland Preserve Zone and a portion of the land to the east is zoned Single-Family Residential. The site is accessed through an existing road easement at the end of Red Hook Trail (see **Figure 2-2**).

2.2 PROJECT PURPOSE AND OBJECTIVES

The purpose of the Pollock Pines Community Park is to provide a public recreational facility available to County residents and visitors to Pollock Pines and the surrounding areas. The proposed park meets the criteria for a "community park" as defined in the 2004 El Dorado County General Plan- Parks and Recreation Element, Policy 9.1.1.3, which states "community parks and recreation facilities shall provide a focal point and gathering place for the larger community. Community parks are generally 10 to 44 acres in size, are for use by all sectors and age groups, and may include multi-purpose fields, ball fields, group picnic areas, playground, tot lot, multi-purpose hard-courts, tennis courts, and a community center."

2.3 PROJECT CHARACTERISTICS

PARK FACILITIES

Facilities to be developed on the park site would provide a variety of active and passive recreation opportunities including organized athletic events, community events, general recreation, and picnicking. These facilities are described in further detail below and in **Table 2-1**.

Turf Area: Soccer Field and Ball Field

The park will include natural or synthetic turf areas for organized play and public use. The turf area will include a soccer field and a ball field. The 69,000 square foot soccer field (330 feet by 210 feet) will be striped, and will have either permanent or portable goals, goal netting, and corner flagging that may be stored onsite and periodically installed for league play. The 70,700 square foot ball field will be configured to accommodate both softball and baseball play for

youths and adults. Infield and outfield turf, compact dirt base lines, pitching mounds, inset home plates, backstops and perimeter fencing, bullpen/team seating, and spectator seating are included within the ball field. Both fields would be located at the western half of the park as shown on **Figure 2-3**.

Hard-Surface Court

An asphalt/concrete hard surface court would also be developed within the park. The court would include painting/striping for basketball play, four-square, and hopscotch, a basketball rim and backboard, and related equipment. The court would be located within the older children's play area, east of the ball field.

Child Play Areas

Two handicap-accessible child play areas would be developed east of the turf area, near the southern portion of the park. One play area would be for younger children and would include three picnic tables, age-appropriate swings, slides, and other play equipment. The play area for older children would also include two picnic tables, swings, slides, and climbing equipment in addition to the hard-surface court described above. Each play area would be delineated and would provide soft ground surfacing for child safety and three benches.

Volleyball Court and Horseshoe Pits

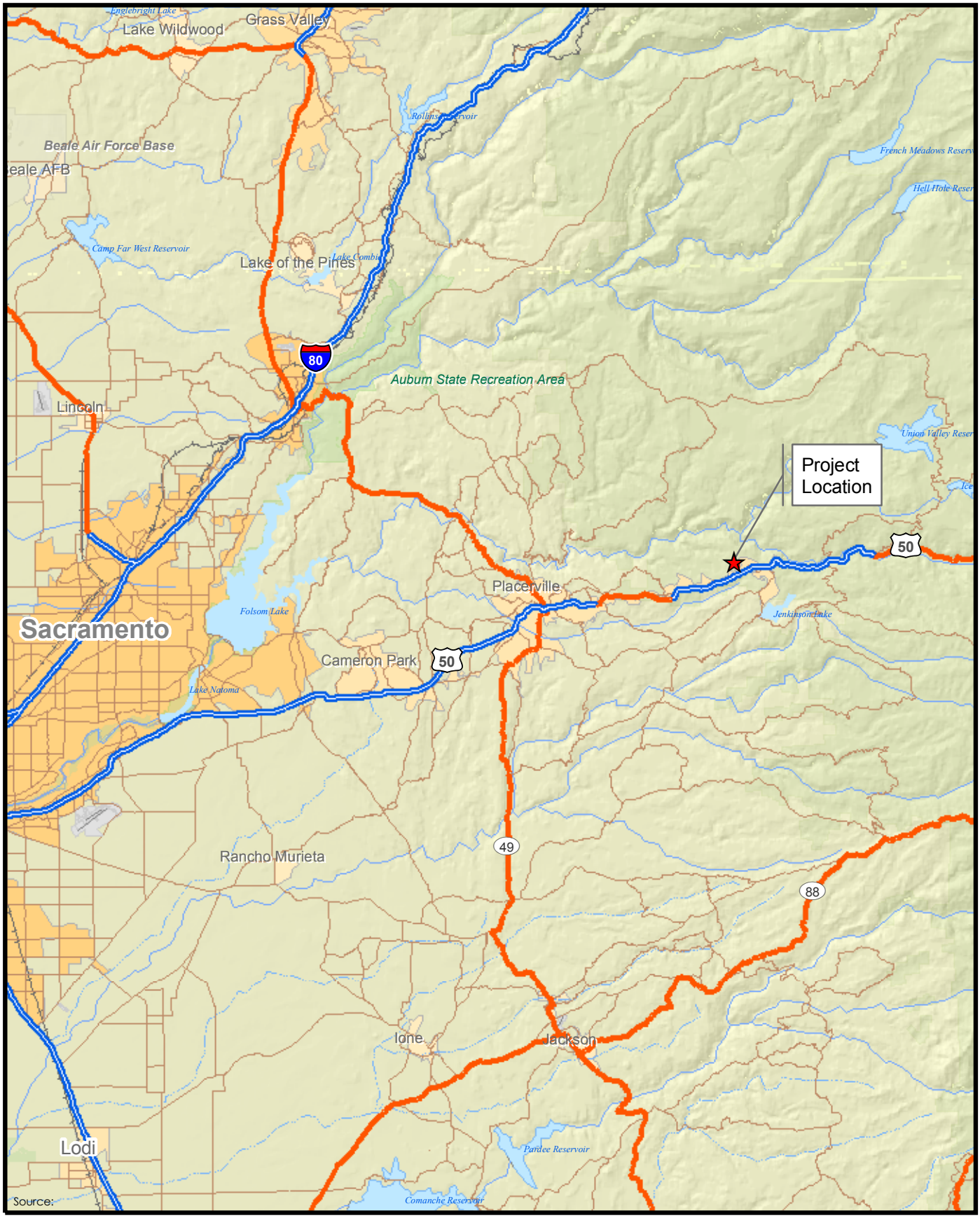
One volleyball court would be located north of the soccer field and three horseshoe pits would be located east of the ball fields (**Figure 2-3**). The volleyball court would have a sand base and the horseshoe pits would have a sand/gravel base.

Outdoor Classroom Environmental Education Facilities and Amphitheater

A small 45 x 45 foot structure (Nature Interpretive Pavilion) designed to contain environmental education displays, along with a stage, backstage, storage areas, and public seating would be located near the entrance to the park at the eastern edge of the site. The primary purpose of the facility would be to educate school groups on the regional environment and conservation. A patio area would be located at the building entrance and a walkway would connect the pavilion to the amphitheater and the park roadway. The amphitheater portion of the facility would be available, through coordination with County Parks, for scheduled outdoor events that may include non-amplified live music, theater, or other performances and activities.

Picnic Areas

A group picnic area with capacity for 75 to 100 people would be located at the southern portion of the park near the ball field. The group picnic area would include concrete pavement, a grill, a serving table, 10 handicap accessible picnic tables, potable water at the sink and preparation table, and a shade structure. A 3-foot stone retaining wall would be located on the south side of the group picnic area and a 3-foot railing would be located on the north side of the group picnic area. Two benches would also be available in the uncovered portion of the picnic area. The overall group picnic area is roughly 72 feet by 56 feet or 4,032 square feet, including the uncovered areas. The shade structure is roughly 1,848 square feet and 18 feet in height, excluding the retaining wall. Several smaller picnic areas consisting of one or more picnic tables would be situated at various locations within the park, such as the child play areas. A 24 x 24 foot shade structure will also be placed adjacent to the child play area.



T:_GIS\EI_Dorado_County\Mxds\Pollock Pines Park\Figure 2-1 Project Location Map.mxd - 4/27/2006 @ 9:23:48 AM

FIGURE 2-1
PROJECT LOCATION MAP

PMC

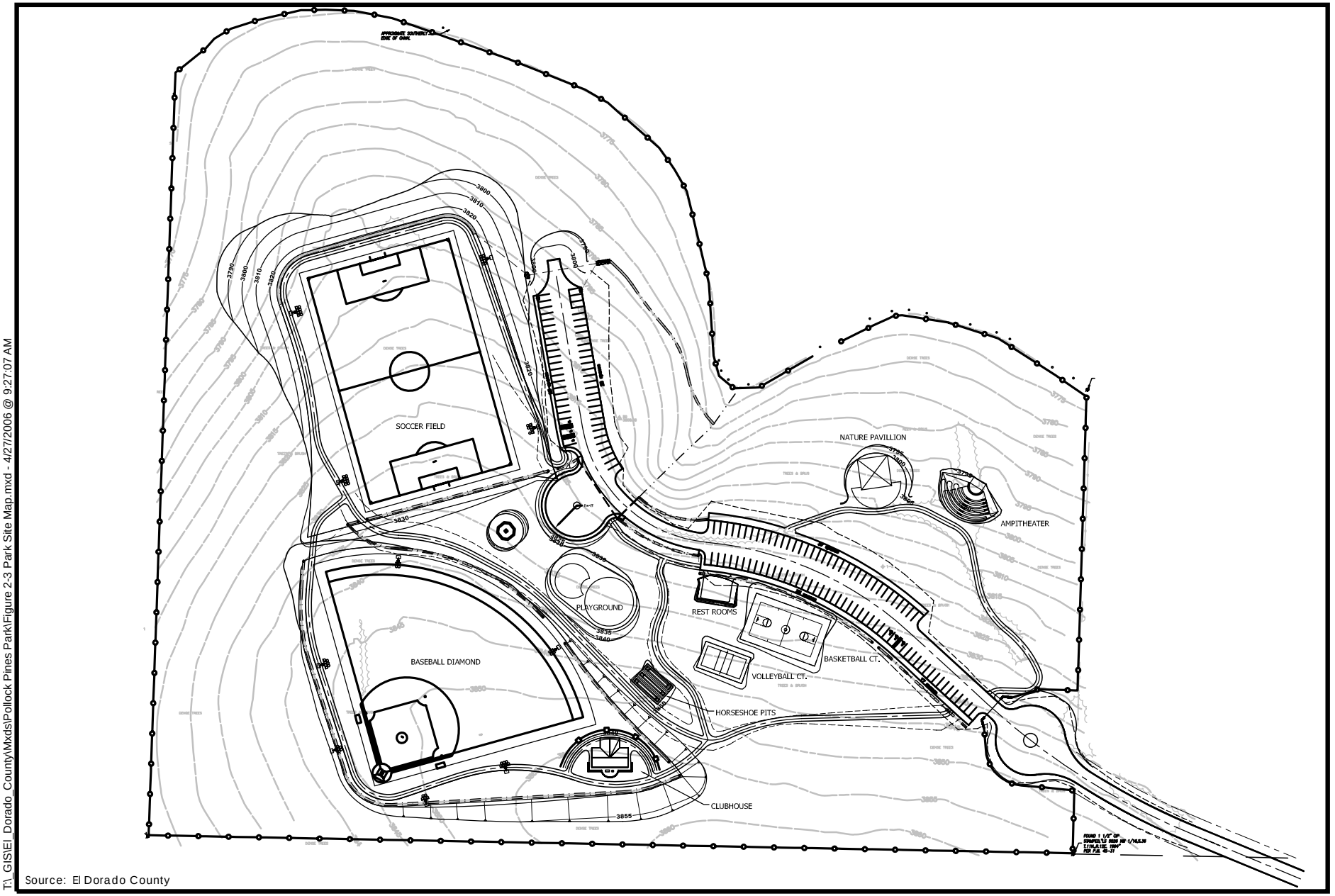
500 0 500

Feet

N

FIGURE 2-2
PROJECT VICINITY MAP

PMC



T:_GIS\EI_Dorado_County\Mxds\Pollock Pines Park\Figure 2-3 Park Site Map.mxd - 4/27/2006 @ 9:27:07 AM

Source: El Dorado County

100 0 100
Feet

N

FIGURE 2-3
PARK SITE MAP

PMC

Restrooms and Concession Building

One restroom facility would be located within the concession building near the child play areas. The structure measures 23 feet by 31 feet, including the roof overhang and concrete padding at the doorways to the restrooms and concessions, and would be approximately 16 feet in height. No retaining walls are proposed for this structure. The restroom would include men's and women's facilities containing a wheelchair accessible stall, a sink, and a urinal/stall. The concession building would also contain a storage area, mechanical room, and a concessions stand. Use of the concessions stand would be made available to community groups associated with organized athletic or other events at the park. An on-site septic system is proposed for the disposal of wastewater generated within the project.

TABLE 2-1
SUMMARY OF PARK FACILITIES

Facility	Dimensions (feet)	Area (square feet)	Features
Soccer Field	330 x 210	69,300	Striping with portable or permanent goals and night lighting
Ball Field	--	70,700	Youth and adult baseball/softball and night lighting
*Hard Surface Court	--	7,980	Basketball, four-square, and hop-scotch areas
Child Play Areas	--	8,960	Child and toddler play lots with play equipment, soft ground surfacing and benches
Volleyball Court	30 x 60	1,800	One court located north of the soccer field
Horseshoe Pits	34 x 50	1,700	Three horseshoe pits east of the ball fields
*Outdoor Classroom Amphitheater	--	4,000	Available for un-amplified events and productions
*Nature Interpretive Pavilion	45 x 45	2,000	Environmental education and exhibit facility
*Group Picnic Area & Shade Structure	72 x 56 24 x 24	4,032 1,964 5,996	Ten ADA accessible tables, a grill, sink, and a shade structure
*Concessions/Restrooms	23 x 31	700	Concession stand and men's and women's restrooms
*Trails	7,811	33,013	Concrete, asphalt and decomposed granite trails within the park
*Parking Areas	136 Spaces	26,402	Three separate parking areas totaling 150 spaces would be developed along the park roadways
*Road	--	44,414	Access roadway through the park
Total Developed Park Area		647,500 (14.86 acres)	
*Total Hard Surface Coverage		121,805	Asterisk indicates hard surface facilities

Source: El Dorado County, 2004

Trail System

Asphalt, concrete, natural, and/or rubberized surfaced trails will be developed throughout the park to provide pedestrian routes to parking areas, restrooms, recreation areas, and other park facilities. The park would include approximately 7,811 linear feet (33,013 square feet) of pathway around the perimeter of the ball field and from the parking area to the perimeter path.

Entry Gate and Access Road

An entry gate would be located at the park entrance with pilaster on either side of the entry road. The pilasters would be roughly 12.5 feet in height. Perimeter fencing would connect to the gates to separate the park area from adjacent properties.

A 44,414 square foot roadway measuring approximately 24 feet in width would provide access to the park. From the connection at Red Hook Trail, the park access roadway would follow the existing dirt road alignment on the park site. Three turnaround areas would be provided at the park site: one at the entry, another between the two sports fields serving as a pedestrian drop off, and one at the end of the roadway. Crosswalks would be located on the park roadway as needed.

Parking Areas

Two paved parking areas are proposed for the park, occupying approximately 26,402 square feet of park area. The parking areas would be located on the eastern portion of the park site and would be paved and striped with landscaped islands interspersed throughout the parking lots. Approximately ten handicap-access parking spaces and 136 standard parking spaces would be located in the parking areas. Bike racks would also be installed at various locations throughout the park.

Lighting

Safety lighting would be installed in the parking areas and throughout the park as necessary to provide adequate night lighting for evening uses and security. Lighting would be developed for the soccer and ball fields to accommodate evening events. All lighting will be directional and shielded to reduce off-site light and glare to the extent practicable.

Maintenance Area

A small maintenance building, including a work-bench and an equipment storage area, would be constructed and located away from public use areas as feasible. The maintenance building and outdoor equipment storage areas would be fenced. Public access to this area would be prohibited.

Ancillary Facilities

The park would also include directional signage in the parking areas and along pathways. Electrical supply outlets would be located at the appropriate use facilities to provide electricity for maintenance equipment and event use. In addition, drinking water fountains and waste receptacles would be installed in proximity to public use areas throughout the park.

Landscaping/Facility Design

Park landscaping would combine trees, shrubbery plantings, groundcover, and curved pathways and curbs in a manner that provides an aesthetic and consistent appearance to the developed areas of the park. All planted areas, including turf areas, would be irrigated with in-ground systems installed during construction. All park signage, lighting, fencing, and building design will also be consistent in appearance. Approximately 3,100 feet of boundary field fencing will be installed around the park as needed for safety and security purposes. In addition, 750 feet of tubular fencing and two gates would be used to create the front entry to the park.

Infrastructure Improvements

Development of the park site is proposed to include the construction and installation of underground water and electrical lines connecting to the site from Red Hook Trail and running throughout the project site. An on-site septic system is proposed for the treatment of wastewater generated on the project site. The project also includes the installation of stormwater drainage and retention improvements. The County has opted to reserve the right to possibly forgo connection to the EID's water system along Red Hook Trail. If this option proves to be cost prohibitive, the County may elect to provide water to the proposed project via an onsite well. While it is assumed that the project would connect to the EID municipal water system, the potential impacts associated with construction and operation of an on-site well are addressed in this environmental document.

OPERATION

County Parks will operate and maintain the Pollock Pines Community Park. Operations activities include coordination with sports leagues and community groups for scheduling events and facilities use. Through coordination with County Parks, each sponsoring organization will be responsible for equipment set-up for organized sport events and group activities. County Parks maintenance staff will ensure that there is adequate access to equipment stored onsite such as soccer goals, detachable bases, and other equipment.

Facility Operations

The park will be open year round to the public from 6:00 a.m. to one half-hour after sunset, with exceptions for extending lighted evening play through advance arrangement with County Parks. Anticipated peak-use times for the park are 9:00 a.m. to 7:00 p.m. on weekends and summer holidays, and from 3:00 p.m. to 7:00 p.m. on weekdays. Typical peak use associated with organized sporting events will occur between March and October, with late fall and winter use levels expected to be relatively minimal.

Concession Operations

Public service or sport league groups will provide concession operations. Access to the concession building and use of permanent equipment will be coordinated through County Parks.

Maintenance

County Parks staff will maintain the park grounds and equipment, clean and stock restrooms, empty waste receptacles, and provide general upkeep of park facilities. General hours of

grounds-keeping activities requiring mechanized equipment such as, lawn mowers, lawn edge trimmers, and leaf blowers, will occur on weekdays between 7:00 a.m. and 5:00 p.m.

CONSTRUCTION TECHNIQUES AND SCHEDULE

Typical construction equipment would likely include pick-up trucks, bulldozers, a backhoe or front loader, semi-tractor and trailer, dump trucks, and other equipment. All equipment would be kept tuned to manufacturer specifications to reduce air emissions and noise. Equipment idling would also be kept to a minimum to reduce disturbance to adjacent land uses. Since the site is not currently developed, extensive tree removal, grading, fill, and site development is necessary to construct the park facilities.

Vegetation Removal

The site is densely forested with primarily pine, and limited numbers of oak trees in various stages of growth, with an average of approximately 50 trees per acre. Development of the project site would result in the removal of an estimated 500 to 700 trees. Tree removal is needed to provide an open turf area for the soccer and ball fields and for the development of parking areas and other permanent park structures.

Ground Disturbance

The total amount of land disturbance is estimated to be approximately 647,500 square feet (14.86 acres) for construction of the park. A majority of the disturbed areas would be comprised of landscape or turf, as well as grassy swales and drainage swales; the remainder would be covered with pavement and other impervious surfaces.

Due to the 82-foot elevation change and extensive sloping on the site, portions of the site must be graded using cut and fill techniques to provide a nearly flat surface. Park facilities such as the soccer field and ball fields would need to be located on level ground to provide an adequate playing surface. Although smaller than the fields, the other park buildings, trails, and play areas would also require a stable and level area. Retaining walls would be developed for many of the structures, including the picnic area and amphitheater. It is estimated that the grading efforts in the development of this park will yield a balanced amount of excavation and embankment material, approximately 70,000 cubic yards.

Hard Coverage

Once completed, impervious coverage would total approximately 121,805 square feet as shown in **Table 2-1**. Appropriate drainage will be designed and developed on the park site in accordance with the El Dorado County Drainage Manual. The drainage will include cross culverts and inlets along the road and parking areas. In addition, the recreational areas will have surface drainage. The system would mimic the current natural drainage patterns on the site, with discharges flowing into existing ravines and drainage swales that currently serve onsite drainage.

Erosion Control

Best management practices (BMPs) shall be employed in accordance with the most current El Dorado County Stormwater Management Plan. BMPs shall be used throughout the construction and operation of the park site to prevent erosion and sediment discharge into down-slope and low-lying drainages. Permanent drainage swales shall comprise of grassy swales to further

enhance water quality. Drainage on the site would be primarily to the northeast due to the natural topography and slope of the site, and runoff from the site would be conveyed over the top of the EID canal located north of the project site and discharge into the parcel north of the PID canal.

Traffic

Construction traffic would circulate to and from the park site along Red Hook Trail, Pony Express Trail, and Highway 50. Once construction equipment is placed on the site, most construction traffic would consist of material hauling and commuting construction workers.

Schedule

It is not currently known when construction of the project may commence.

3.0 INITIAL STUDY CHECKLIST

INTRODUCTION

This chapter provides an evaluation of the potential environmental impacts of the proposed project, including the CEQA Mandatory Findings of Significance. There are 16 specific environmental issues evaluated in this chapter. Cumulative impacts are evaluated in Chapter 4.0. The environmental issues evaluated in this chapter include:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Services Systems

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

- ***Reviewed Under Previous Documents***: Where the impact has been identified as potentially significant, this is checked if the impact has been adequately addressed in previous environmental documents, and further analysis is not required. The discussion will include reference to the previous documents.

- ***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.

- ***Potentially Significant Impact***: The proposed project would result in an environmental impact or effect that is potentially significant, and no mitigation can be identified that would reduce the impact to a less than significant level.

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

ENVIRONMENTAL SETTING

The project site is heavily vegetated with coniferous tree species including Douglas fir (*Pseudotsuga menziesii*), white fir (*Aibes concolor*), Jeffrey pine (*Pinus jeffrey*), and black oak (*Quercus kelloggii*). Surrounding land uses consist of estate residences and some commercial uses such as the nearby bowling alley. A dirt road surrounds the northern and eastern portions of the site. The perimeter of the site is visible from the residences at Red Hook Trail, but the dense vegetation and slopes on the site shield views of the majority of the project site from the surrounding areas.

DISCUSSION OF IMPACTS

a) *Would the project have a substantial adverse effect on a scenic vista?*

Less than Significant. Scenic vistas include natural features such as topography, water courses, rock outcrops, natural vegetation and man-made alterations to the landscape. As described above, the project site and surrounding vicinity is heavily vegetated with coniferous trees. While the project site is heavily wooded, it does not contain unique visual features that would distinguish this site from the surrounding forested area. There are no water courses on the project site, and there are no distinct or distinguishing rock features. The nearest water course is the EID Canal, located along the northern boundary of the project site. The project would not alter the existing visual character of the canal, and the canal is not visible from the areas of the project site proposed for improvements.

Construction of the proposed project would require the removal of an estimated 500-700 trees from the project site. While the project site is largely covered with coniferous trees, there are also sporadic old-growth black oaks located throughout the site. The park site and associated facilities have been designed and located so that the oak trees will be retained to the greatest extent feasible.

The removal of several hundred trees from the project site will result in an alteration of the existing visual character of the site. However, the majority of the trees proposed for removal are located within the interior of the project site. Trees and vegetation around the perimeter of the project site will largely be retained to provide a visual buffer between the project site

and the surrounding land uses. The height and density of the trees to be retained around the perimeter of the proposed park will effectively shield views of the project site from the surrounding land uses. As a result, the project is anticipated to have a **less than significant** impact on a scenic vista.

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

Less than Significant. The nearest scenic highway is US 50, south of the project site. The project site is not visible from US 50; therefore, the project would not affect aesthetic resources within the proximity of a State scenic highway.

There are no identified historic buildings within or in the vicinity of the project site. The proposed project involves the construction and operation of community park, and would not impact any nearby historic buildings or historic resources.

There are no identified distinctive rock outcroppings within the project site.

The project has been designed to minimize impacts to the surrounding landscape, slopes, and trees. The majority of the existing oak trees on the site will be retained, however, the project would result in the removal of approximately three oaks. The trees and vegetation surrounding the perimeter of the project site will be retained to provide screening from the surrounding land uses. This impact is ***less than significant***.

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

Less than Significant. The reader is referred to discussion a) above. While construction of the proposed community park will require the removal of several hundred coniferous trees, the park site has been designed to retain the large oak trees on site and to maintain a vegetative buffer between the project site and the surrounding land uses. Due to the natural topography of the site and the height of the trees throughout the project area, unobstructed views onto the project site from the surrounding areas are limited. The project proposes to remove trees within the area to be developed with ballfields, hard courts, pavement (roadways and parking areas) and other associated maintenance buildings and restrooms. The retention of the existing trees throughout the remainder of the site, and the retention of the trees surrounding the perimeter of the site will effectively shield views of the site from the surrounding residences. Additionally, the proposed improvements will have a low profile, which will reduce their visibility from the surrounding areas. Most of the improved area of the site will be covered in grass. Grass fields are generally considered to be aesthetically pleasing, and are not considered "eye sores" and would not place highly visible structures in view of the adjacent residences. The maintenance building and restrooms would be one-story structures, and due to the natural topography of the site, would not be visible from the surrounding residences. While the visual character of the project site will change substantially upon implementation of the project, the proposed park improvements would off-set the visual impacts associated with altering the project site from its current condition. Therefore, this impact is considered ***less than significant*** and no mitigation is required.

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

Less than Significant. The proposed project would introduce new sources of glare to the project site and surrounding areas through the introduction of new reflective surfaces such as windows from proposed on-site facilities and from windshields of vehicles utilizing the onsite parking facilities. As discussed above, the trees and vegetation surrounding the project site will be retained to the greatest degree feasible. Land uses surrounding the project site will have indirect and broken/obstructed lines of site to the project site that will effectively reduce and filter glare from reflective building materials and automobiles to less than significant levels.

The proposed park also includes outdoor lighting features designed to illuminate the playing fields for nighttime activities. The outdoor lighting has been designed in compliance with El Dorado County Outdoor Lighting Ordinance 17.14.170, which requires submittal of an outdoor lighting plan to the County Planning Director as part of the site plan review. The ordinance also requires that all lighting be shielded and directed downward to reduce light spillage. There are ten 70-foot lighting poles proposed as part of the project. Each lighting pole will have up to 7 luminaires (light fixtures). The proposed location of the light poles is shown on **Figure 3.1-1**. As shown in **Figure 3.1-2**, the light fixtures atop the poles are equipped with hoods to shield and direct the light downward and reduce light spillage onto adjacent land uses. As shown on **Figure 3.1-3**, the light poles will illuminate the playing fields to a maximum of 42 horizontal footcandles.[1] As shown on **Figure 3.1-4**, at a distance of approximately 150 feet from the light poles, the constant illumination would reach a maximum of 0.13 horizontal footcandles. As a comparison for reference, 0.2 horizontal footcandles is considered to be the minimum amount of acceptable lighting for a parking lot (IDA 1999). The existing residence northwest of the project site is approximately 400 feet from the northwestern-most light pole. At a distance of 400 feet the horizontal light spillage will be imperceptible, and would not result in nighttime illumination greater than the existing conditions.

As discussed above, the existing trees and vegetation surrounding the project site will largely be retained. The trees will provide additional light-screening and will reduce light spillage onto adjacent properties.

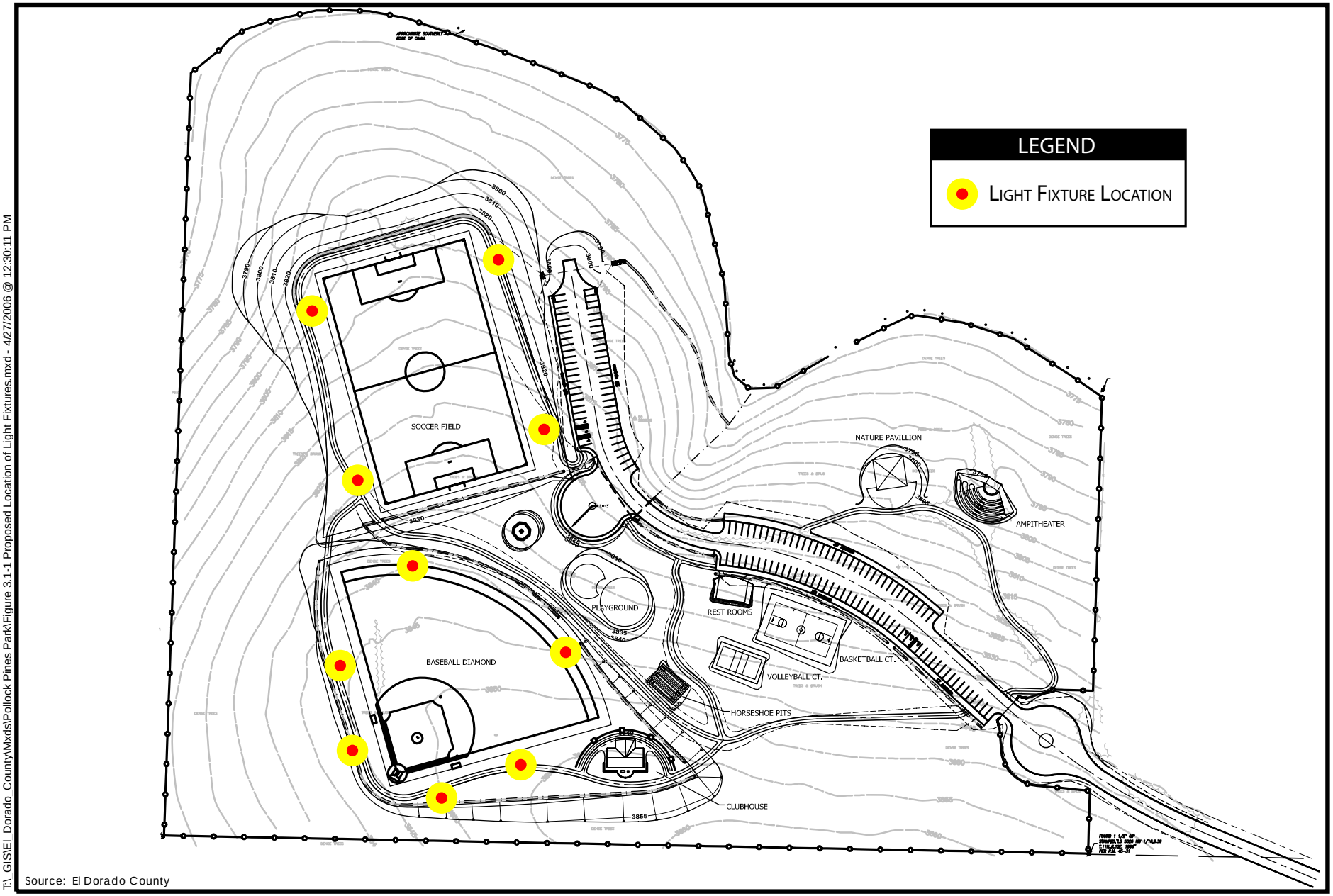
Additional outdoor safety and security lighting will also be placed within designated parking areas and adjacent to ancillary structures such as the restrooms and concession stands. All outdoor security and safety lighting shall comply with the requirements of El Dorado County Ordinance 17.14.170.

Compliance with Ordinance 17.14.170, which requires the use of directional shields and hoods, and the retention of thick stands of mature coniferous trees around the perimeter of the project site will reduce impacts from nighttime lighting to a **less than significant level**. No mitigation is required.

CONCLUSION REGARDING AESTHETICS

The proposed project would result in less than significant impacts to aesthetics, light and glare.

[1] "Horizontal footcandle" is a measure of illumination striking a horizontal surface as measured by a light meter.



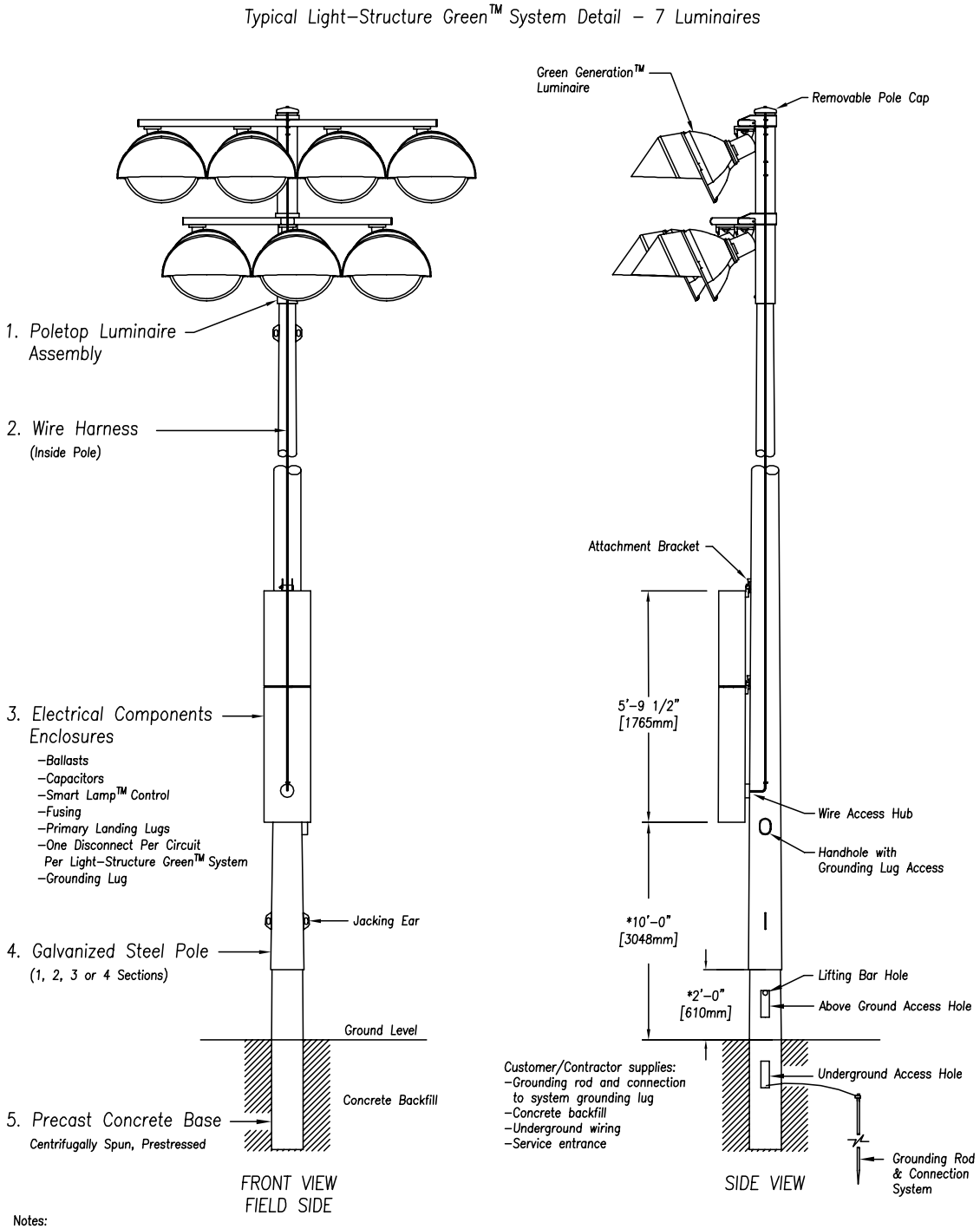
T:_GIS\El_Dorado_County\Mxds\Pollock Pines Park\Figure 3.1-1 Proposed Location of Light Fixtures.mxd - 4/27/2006 @ 12:30:11 PM

Source: El Dorado County

100 0 100 Feet N

FIGURE 3.1-1
PROPOSED LOCATION OF LIGHT FIXTURES

PMC



Notes:
1. This drawing is not to scale.
2. * This dimension for reference only. Variances may occur depending on steel pole tolerances, concrete tolerances, galvanizing thickness, hole depth accuracy.
3. Musco provides a base installation bar, an installation level modified for taper, and installation wedges.
4. Provisions for auxiliary equipment such as speaker or security lighting can be incorporated.
5. Copyright 1991, 2005 Musco Lighting. Patents issued and pending.

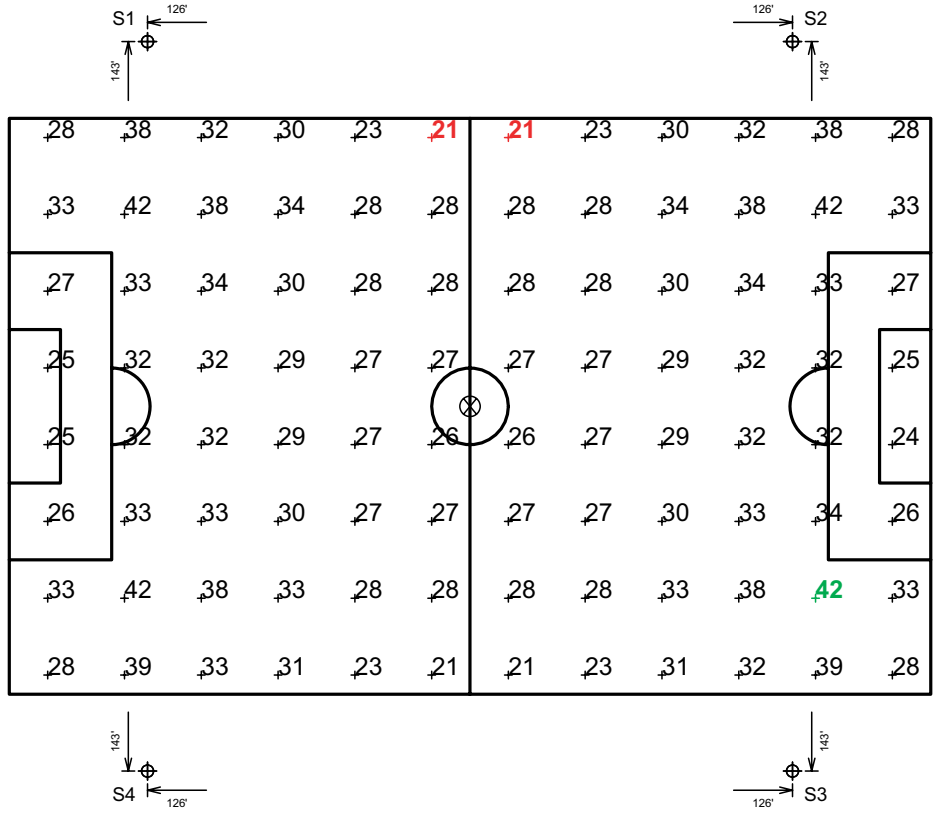
T:\El Dorado County\Pollock Pines Park MND\Figures\AI Files

Source: MUSCO Lighting

FIGURE 3.1-2
RENDERING OF 7-LIGHT POLE

PMC

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S4	70'	-	70'	1500W MZ	7	7	0
4	← TOTALS →					28	28	0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

GUARANTEED PERFORMANCE

ILLUMINATION SUMMARY

Soccer

· Size: 360' x 225'
· Grid Spacing = 30.0' x 30.0'
· Values given at 3.0' above grade

· Luminaire Type: Green Generation
· Rated Lamp Life: 5000 hours
· Avg Lumens/Lamp: 134,000

CONSTANT ILLUMINATION
HORIZONTAL FOOTCANDLES

	Statistical Area
No. of Target Points:	96
Average:	30.2
Maximum:	42
Minimum:	21
Avg/Min:	1.43
Max/Min:	1.98
UG (Adjacent Pts):	1.39
CV:	0.159

Average Lamp Tilt Factor:	1.000
Number of Luminaires:	28
Avg KWh Consumption over 5000 hours:	43.68

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Averages shall be +/-10% in accordance with IESNA RP-6-01. Individual measurements may vary from computer predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet of design locations.

Source: MUSCO Lighting

T:\El Dorado County\Pollock Pines Park MND\Figures\AI Files

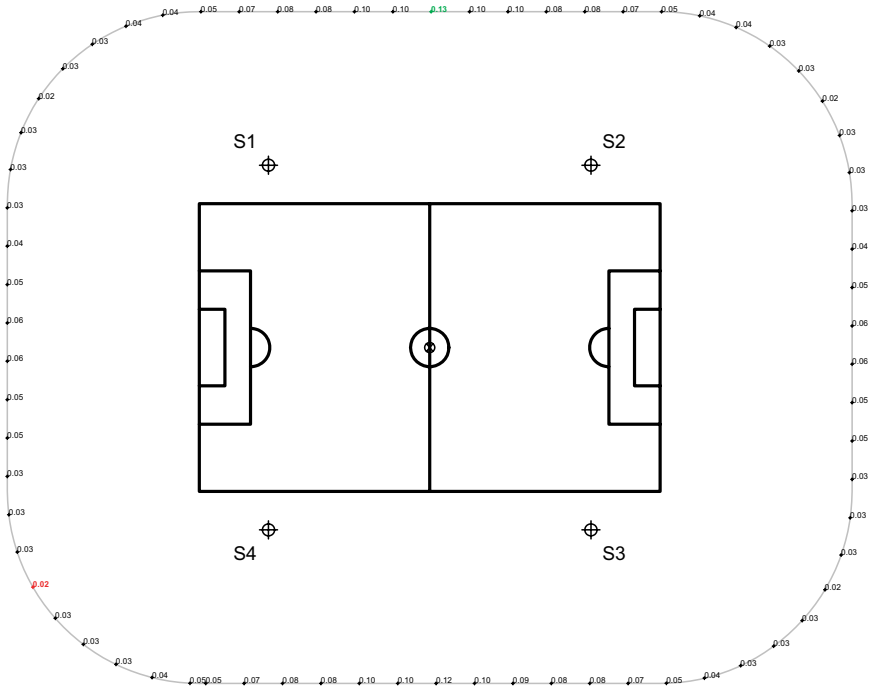
0 30 60
SCALE IN FEET

N

FIGURE 3.1-3
SOCCER FIELD CONSTANT HORIZONTAL ILLUMINATION

PMC

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S4	70'	-	70'	1500W MZ	7	7	0
4	← TOTALS →					28	28	0



GUARANTEED PERFORMANCE

ILLUMINATION SUMMARY

Soccer Spill

· Grid Spacing = 30.0'
· Values given at 3.0' above grade

· Luminaire Type: Green Generation
· Rated Lamp Life: 5000 hours
· Avg Lumens/Lamp: 134,000

CONSTANT ILLUMINATION
HORIZONTAL FOOTCANDLES

	Statistical Area
No. of Target Points:	71
Average:	0.054
Maximum:	0.13
Minimum:	0.02

Average Lamp Tilt Factor:	1.000
Number of Luminaires:	28
Avg KWh Consumption over 5000 hours:	43.68

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Averages shall be +/-10% in accordance with IESNA RP-6-01. Individual measurements may vary from computer predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet of design locations.

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

T:\El Dorado County\Pollock Pines Park MND\Figures\AI Files

Source: MUSCO Lighting

0 60 120
SCALE IN FEET

N

FIGURE 3.1-4
SOCCER FIELD LIGHT SPILLAGE

PMC

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.2 AGRICULTURE RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The project site is located in an unincorporated area of El Dorado County, near the community of Pollock Pines. The project area consists of undeveloped lands that have not been historically used for agricultural operations. The only agricultural resource on the project site consists of timber from the hundreds of trees currently on-site. Approximately 500-700 trees are proposed for removal. These trees will be harvested and sold as timber by the County as part of the removal process in order to maximize the use of on-site natural resources.

DISCUSSION OF IMPACTS

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. No agricultural resources or agricultural operations exist within or adjacent to the project area. Implementation of the proposed project would not convert any Prime Farmland, Unique Farmland or Farmland of Statewide Importance. There is no impact.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. No land zoned for agricultural uses exists within or adjacent to the project area. The proposed project would not disrupt agricultural activities, and does not conflict with existing zoning for agricultural use or a Williamson Act contract.

c) *Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

No Impact. Refer to discussion a) and b) above. The project would not result in conversion of farmland to a non-agricultural use.

CONCLUSION REGARDING AGRICULTURAL RESOURCES

The project would result in no impacts to agricultural resources.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3	**AIR QUALITY** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

CLIMATE AND METEOROLOGY

The project site is located in the western portion of the Mountain Counties Air Basin (Basin) of California, an approximately 11,000-square-mile area encompassing Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa counties, in addition to the western slope of El Dorado County and the central portion of Placer County. The majority of the Basin is located in the northern Sierra Nevada with the western boundary of the basin extending into the Sacramento Valley. The project site lies within the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD).

The general climate of the Basin varies considerably with elevation and proximity to mountains. The terrain features of the Basin make it possible for various climates to exist within the general area. The pattern of mountains and hills is primarily responsible for the wide variations of rainfall, temperatures, and localized winds that occur throughout the region. Temperature variations have an important influence on basin wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry. The Sierra Nevada receives large amounts of precipitation from storms moving over the continent from the Pacific Ocean. Precipitation in the Basin is highly variable, depending on elevation and location. Areas in the eastern portion of the Basin, with relatively high elevations, receive the most precipitation. Precipitation levels decline toward the western areas of the Basin. Climates vary from alpine in the high elevations of the eastern areas to more arid at the western edge of the Basin.

REGULATORY FRAMEWORK

Various local, regional, state, and federal government agencies share the responsibility for air quality management in El Dorado County. At the local level, the EDCAQMD adopts and enforces regulations to control emissions from stationary sources. At the state level, the California Air Resources Board (CARB) sets emission standards for motor vehicles and oversees the actions of all air districts in the state in their efforts to control stationary sources emissions. Together, CARB and the air districts have the responsibility for attaining and maintaining the national and state ambient air quality standards. The air districts and CARB work jointly with the United States Environmental Protection Agency (US EPA) to develop and implement the State Implementation Plan, or SIP, which is designed to achieve and maintain federal ambient air quality standards. The US EPA has authority under federal law to step in if state authorities do not meet their obligations in this regard. Local Councils of Governments, county transportation agencies, cities and counties, and various nongovernmental organizations are also involved in efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs (EDCAQMD 2002).

Air Quality Standards

Ambient air quality is described in terms of compliance with state and national standards. Ambient air quality standards are the level of air pollutant concentration considered safe to protect the public health and welfare. These standards are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. National Ambient Air Quality Standards (NAAQS) were originally established by the US EPA in 1971 for six air pollution constituents. The NAAQS have been periodically revised since 1971. States have the option to add other pollutants, to require more stringent compliance, or to include different exposure periods. California Ambient Air Quality Standards (CAAQS) and NAAQS are listed in **Table 3.3-1.**

Criteria Pollutants

Criteria pollutants are those pollutants for which state or federal ambient air quality standards have been adopted. These pollutants and their health effects are described below. Applicable ambient air quality standards are summarized in **Table 3.3-1**.

Ozone

Ozone (O_3) is a colorless gas with a pungent odor that causes eye irritation and impairment of respiratory function. Ozone is a secondary pollutant, meaning that it is formed in the atmosphere as a result of the interaction of ultraviolet light, reactive organic gases, and nitrogen oxides (NO_x). ROG is composed of non-methane hydrocarbons. NO_x is made of different chemical combinations of nitrogen and oxygen, mainly nitrogen oxide (NO) and nitrogen dioxide (NO_2). Motor vehicles are the primary source of ROG and NO_x.

TABLE 3.3-1
AMBIENT AIR QUALITY STANDARDS

California 1		National 2	
Air Pollutant	**Concentration**	**Primary (>)**	**Secondary (>)**
Ozone	0.09 ppm, 1-hr avg	0.12 ppm, 1-hr avg 0.08 ppm, 8-hr avg3	0.12 ppm, 1-hr avg 0.08 ppm, 8-hr avg3
Carbon Monoxide	9.0 ppm, 8-hr avg 20 ppm, 1-hr avg	9 ppm, 8-hr avg 35 ppm, 1-hr avg	9 ppm, 8-hr avg 35 ppm, 1-hr avg
Nitrogen Dioxide	0.25 ppm, 1-hr avg	100 µg/m3 annual	100 µg/m3 annual
Sulfur Dioxide	0.04 ppm, 24-hr avg 0.25 ppm, 1-hr avg	0.03 ppm, annual avg 0.14 ppm, 24-hr avg	0.5 ppm, 3-hr avg
Respirable Particulate Matter (PM_{10})	20 µg/m3 annual arithmetic mean 50 µg/m3, 24-hr avg	50 µg/m3 annual arithmetic mean 150 µg/m3, 24-hr avg	50 µg/m3 annual arithmetic mean 150 µg/m3, 24-hr avg
Suspended Particulate Matter ($PM_{2.5}$)	12 µg/m3 annual arithmetic mean	15 µg/m3 annual arithmetic mean 65 µg/m3, 24-hr avg	15 µg/m3 annual arithmetic mean 65 µg/m3, 24-hr avg
Lead	1.5 µg/m3, 30-day avg	1.5 µg/m3 calendar quarter	1.5 µg/m3 calendar quarter
Sulfates	25 µg/m3, 24-hr avg	--	--
Hydrogen Sulfide	0.03 ppm, 1-hr avg	--	--
Vinyl Chloride	0.01 ppm, 24-hr avg	--	--
Visibility Reducing Particles	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%.	--	--

[1] *California standards for ozone, carbon monoxide, sulfur dioxide (1-hour), suspended particulate matter-PM_{10} visibility reducing particles, are values that are not to be exceeded. The sulfur dioxide (24-hour), sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded.*

[2] *National standards, other than ozone and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.*

[3] *Based on newly established 8-hour EPA standard. The 0.12 ppm 1-hour standard will not be revoked in a given area until that area has achieved 3 consecutive years of air quality data meeting the 1-hour standard.*

[4] *Based on newly established 8-hour EPA standard.*

ppm = parts per million by volume

µg/m^3 = micrograms per cubic meter

Source: California Air Resources Board 2005

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles is a major cause of CO. CO is also produced during the winter from wood-burning stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the CO state and federal standard are generally limited to major intersections during peak hour traffic conditions, known as hot spots, where concentrations may result.

Nitrogen Dioxide

Nitrogen dioxide (NO_2), often used interchangeably with NO_x, is a reddish-brown gas that can cause an increase in the incidence of chronic bronchitis and lung irritation. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations) in the vicinity.

Particulate Matter

Particulate matter is made up of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. About 90 percent by weight of particulate matter is larger than 10 microns, but approximately 90 percent of particulate matter by number is less than 5 microns in diameter. The aerosols formed in the atmosphere, primarily sulfate and nitrate, are usually smaller than 1 micron. Particulate matter consists of particles in the atmosphere resulting from many kinds of dust and fume-producing industrial and agricultural operations, from combustion, and from atmospheric photochemical reactions. Natural activities also put particulate matter into the atmosphere; wind-raised dust is one such source of particulate matter.

Health impacts from breathing particulate matter, which include lung irritation and damage, have resulted in revision of federal and state particulate standards to reflect particulate matter that is small enough to be inhaled. PM_{10} consists of atmospheric particulates measuring 10 microns or less in diameter. In July 1997, EPA adopted a new federal ambient air quality standard for finer particulate matter, particulate matter of 2.5 microns or less in diameter ($PM_{2.5}$), to be used in conjunction with the federal PM_{10} standard.

Sulfur Dioxide and Lead

Sulfur dioxide (SO_2), used interchangeably with SO_x, is a colorless gas with a pungent, irritating odor. The major source of SO_2 emissions is fuel-burning equipment in which fuel oil and/or coal are consumed. SO_2 can cause a number of health problems including aggravation of chronic obstructive lung disease.

Lead is present in the atmosphere in particulate form. Sources include lead smelters and industrial operations. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage; it can also cause lesions of the neuromuscular and circulatory system.

Toxic Air Contaminants

Toxic air contaminants (TACs), are pollutants that may result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the body's natural defense

system, and diseases that lead to death. Since it is not practical to eliminate all TACs from our lives, these compounds are regulated through risk management programs. These programs are designed to ensure that the risk of adverse health effects from exposures to TACs is not significant. Toxic air contaminants and regulatory requirements applicable to the proposed project are summarized below:

Naturally Occurring Asbestos (NOA)

NOA can be found throughout El Dorado County within the common serpentine soils of the area. Disturbance of serpentine rock has the potential to release NOA into the air. Serpentine does not pose a health risk unless it is disturbed in such a manner that causes asbestos-containing particulate matter to be released from the rock into the air. If inhaled, the asbestos can cause lung damage and is considered a hazardous substance.

In order to keep the risk of asbestos exposure at a minimum, the State and the County have a number of regulations in place designed to significantly decrease the chances that asbestos in soil and rock can become airborne. El Dorado County's Air Quality Management Division enforces the following regulations designed to minimize naturally occurring asbestos dust:

- Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations
- Asbestos Airborne Toxic Control Measure for Surfacing Applications
- El Dorado County's Naturally Occurring Asbestos and Dust Protection Ordinances, including:
  - Rule 223 Fugitive Dust – General Requirements
  - Rule 223-1 Fugitive Dust – Construction Requirements
  - Rule 223-2 Fugitive Dust - Asbestos Hazard Mitigation (if certain conditions are found to be present, this rule may apply)

These regulations do not prohibit construction activities, but in areas where naturally occurring asbestos can be found, construction projects must have dust-control measures in place as well as mitigation procedures for soil and rock areas disturbed by construction. In addition, the asbestos ordinance also requires a disclosure as part of real estate transactions for properties where naturally occurring asbestos soils are known to have been disturbed (US EPA 2005).

Diesel-Exhaust Particulate Matter

The ARB identified particulate emissions from diesel-fueled engines (diesel-exhaust PM or DPM) as a TAC in August 1998. Diesel-exhaust PM is currently the ARB's primary TAC of concern for mobile sources, in part because, of all controlled TACs, diesel PM emissions are estimated to be responsible for approximately 70% of the total ambient TAC risk (ARB 2000). In 2000, the ARB developed and approved the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* and the *Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines*. The ARB is now implementing an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles and is currently developing regulations designed to reduce diesel PM emissions from diesel-fueled engines and vehicles. The goal of each regulation is to make diesel engines as clean as possible by establishing state-

of-the-art technology requirements or emission standards to reduce diesel PM emissions. These regulations require substantial reductions in diesel PM emissions beginning with the 2004 model year. Off-road vehicles will come under more stringent regulation beginning with the 2005 model year. Each of these sets of regulations will serve to significantly reduce diesel PM emissions and long-term human health risks attributable to diesel-fueled vehicles and equipment.

Lead

Operation of the proposed shooting range would be subject to federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.1025, Lead Exposure). OSHA regulations establish maximum allowable exposure limits for personnel. In addition, the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) requires range owners to have an active lead safety program to prevent employees from becoming lead poisoned.

Attainment Status Designations

In accordance with federal and state law, the ARB is required to designate areas of the state as attainment, nonattainment, or unclassified for ambient air quality standards. An "Attainment" designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A "Nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "Unclassified" designation signifies that data do not support either an attainment or nonattainment status. Nonattainment areas are divided into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. The attainment status designations for the El Dorado County portion of the Basin are summarized in **Table 3.3-2**.

TABLE 3.3-2
ATTAINMENT STATUS DESIGNATIONS MOUNTAIN COUNTIES AIR BASINCEL DORADO COUNTY PORTION

State Designation	Pollutant	Federal Designation
Nonattainment	Ozone – 1 Hour	Severe nonattainment
Unclassified	Carbon monoxide	Unclassified/attainment
Nonattainment	Particulate matter (PM_{10})	Unclassified
Attainment	Nitrogen dioxide	Attainment
Attainment	Sulfur dioxide	Attainment
Attainment	Sulfates	No federal standard
Attainment	Lead (Particulate)	No designation
Attainment	Hydrogen sulfide	No federal standard
Unclassified	Visibility reducing particulates	Unclassified

Source: El Dorado County AQMD 2002

ENVIRONMENTAL IMPACTS

STANDARDS OF SIGNIFICANCE

The El Dorado County Air Quality Management District (EDCAQMD) recognizes both qualitative and quantitative thresholds of significance for air quality.

Qualitative thresholds include:

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

Quantitative thresholds established by the El Dorado County AQMD are:

- ROG and NOx emissions during construction may assumed to be not significant if:

    1. The project encompasses 12 acres or less of ground that is being worked at one time and at least one of the mitigation measures relating to such pollutants described in Section 4.4.1 of the *EDCAQMD CEQA Guide* is incorporated into the project; or

    2. The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the District.

- 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 (TAC) 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.

METHODOLOGY

Air quality impacts were analyzed in accordance with El Dorado County Air Quality Management District's (EDCAQMD) recommended methodologies, as outlined in the EDCAQMD's *CEQA Guide* (2001). Accordingly, short-term construction-generated exhaust emissions associated with the operation of onsite construction equipment were evaluated based on Section 4.2.2 of the EDCAQMD CEQA Guide- *Screening of Construction Equipment Exhaust Emissions Based on Incorporation of Mitigation Measures*. Fugitive dust emissions from project construction are based on incorporation of EDCAQMD-recommended control measures. Emissions of fugitive dust would be considered less than significant if the measures have been incorporated to prevent visible emissions beyond the boundaries of the project. Operational air quality impacts were calculated using URBEMIS 2002 Model 8.7.0.

DISCUSSION OF IMPACTS

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less than Significant with Mitigation Incorporated. The proposed project could result in a minor, temporary increase in ozone, PM_{10}, carbon monoxide, reactive organic compounds, or nitrogen oxides associated with short-term construction and long-term operation of the proposed land use. Significant increases in short-term or long-term project-generated emissions may conflict with or obstruct implementation of air quality plans for the maintenance or attainment of ambient air quality standards. Short-term and long-term air quality impacts associated with the proposed project are discussed separately, as follows:

SHORT-TERM CONSTRUCTION

The EDCAQMD CEQA Guide to Air Quality Assessment Section 4.2.2 states:

"ROG and NOx emissions during construction may be assumed to be not significant if:

a) The project encompasses 12 acres or less of ground that is being worked on at one time and at least one of the mitigation measures relating to such pollutants described in Section 4.4.1 of this chapter (or an equivalent measure) is incorporated into the project;"

As discussed in Section 2.0, only 14.86 acres of the 26.4-acre site would be disturbed for park development. During the course of construction activities no more than 12 acres of land will be disturbed at any one given time during the peak of construction activities (Vegna 2005). Therefore, with the incorporation of one of the mitigation measures identified in Section 4.4.1 of the EDCAQMD *CEQA Guide to Air Quality Assessment,* short-term construction-related impacts to air quality would be reduced to less than significant.

Mitigation Measures

MM 3.3.1 The County shall require the project contractor to adhere to one of the following mitigation measures:

- Require the prime 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 15 percent NOx reduction compared to the most recent CARB fleet average. Successful implementation of this measure requires the prime contractor to 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. Usually the inventory includes the horsepower rating, engine production year, and hours of use of fuel throughput for each piece of equipment. In addition, the inventory list is updated and submitted monthly throughout the duration of when the construction activity occurs.

- Obligate the prime contractor to use an alternative fuel, other than diesel, verified by the California Air Resources Board or otherwise

documented through emissions testing to have the greatest NOx and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent.

- Obligate the prime contractor to use aqueous emulsified fuel verified by the California Air Resources Board or otherwise documented through emissions testing to have the greatest NOx and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent.

Timing/Implementation: *Prior to and throughout construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

All grading activities are required to comply with EDCAQMD's Best Management Practices (BMP's), sufficient to prevent visible emissions beyond the property lines of the project site, pursuant to EDCAQMD Rule 223 and Rule 223-1. Rule 223-1 requires all construction projects within the County to prepare and comply with a Dust Mitigation Plan. The Dust Mitigation Plan must include provisions to ensure that no visible dust emissions pass beyond the project boundary. The El Dorado County AQMD shall be consulted, prior to finalization of the Dust Mitigation Plan, to ensure that all feasible measures deemed necessary to reduce project-related impacts to a less-than-significant level have been incorporated.

It is also important to note that the project site is located in the foothills of the Sierra Nevada where naturally occurring asbestos is present in surface deposits of ultramafic rock (serpentinite). Airborne entrainment of asbestos may occur from the disturbance of ultramafic rock due to construction operations such as grading or excavating, as well as vehicle traffic on unpaved roads. Asbestos is listed as a Toxic Air Contaminant by California ARB and as a Hazardous Air Pollutant by the U.S. Environmental Protection Agency. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled asbestos fibers may remain in the lungs and are linked to such diseases as asbestosis, lung cancer, and mesothelioma.

According to *Asbestos Review Area* map prepared by the California Department of Conservation, Division of Mines and Geology, the proposed project site is not located near a fault line where the presence of naturally occurring asbestos is likely to occur. In the event that NOA is discovered on the project site during construction activities, the project would be required to comply with ADCAQMD Rule 223-2, which requires the preparation of an Asbestos Hazard Mitigation Plan. Compliance with Rule 223-2 would ensure that impacts associated with the discovery of NOA on-site would not result in significant impacts.

Implementation of Mitigation Measure 3.3.1 and the preparation of and adherence to a dust control plan consistent with EDCAQMD Rule 223 would reduce short-term construction-related air quality impacts to **less than significant**.

LONG-TERM OPERATION

The proposed project would not involve the long-term use of any major stationary sources of emissions. In addition, use of the proposed facility is not anticipated to result in a substantial increase in vehicle trips or vehicle miles traveled. Long-term operational emissions attributable

to the proposed project were quantified by running an URBEMIS computer model, as allowed for in the EDCAQMD Guidelines. The result of the URBEMIS model are presented in **Table 3.3-3**.

TABLE 3.3-3
OPERATIONAL (VEHICLE) EMISSIONS ESTIMATES

	ROG	NOx	CO	SO_2	PM_{10}
Total lbs/day (Unmitigated)	0.42	0.67	4.77	0.00	0.45

Source: URBEMIS 2002 version 8.7.0

As indicated in **Table 3.3-3**, operation of the proposed project would result in emissions significantly below the EDCAQMD's significance threshold of 82 lbs/day for ROG or NO_X. The emissions generated during project operation are primarily attributed to vehicles emissions generated by park users. As a result, long-term operational emissions attributable to the proposed project would not be anticipated to conflict with or obstruct local, State or Federal air quality plans. This impact is less than significant.

IMPACT SUMMARY

Implementation of the proposed project would not result in a long-term increase in emissions that would conflict with or obstruct local, State or Federal air quality plans. Construction related impacts to air quality would be reduced to less than significant levels through adherence to the EDCAQMD rules and regulations and **MM 3.3.1** identified above.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant.

SHORT-TERM CONSTRUCTION

Construction air quality impacts are generally attributable to dust generated by equipment and vehicles. Fugitive dust is emitted both during construction activity and as a result of wind erosion over exposed earth surfaces. Clearing and earth moving activities comprise a major source of construction dust emissions, but traffic and general disturbances of soil surfaces during construction also generate significant dust emissions. As noted in Impact 3.3(a), the proposed project must comply with EDCAQMD-recommended measures for control of fugitive dust. As a result, short-term emissions of airborne fugitive dust would be considered less than significant.

LONG-TERM OPERATION

A project's contribution of localized concentrations of pollutants can occur associated with the long-term operation of onsite stationary equipment, as well as the contribution of vehicle traffic at major roadway intersections projected to operate at unacceptable levels of service (i.e., LOS E or worse). Major roadway intersections operating at unacceptable levels of service have been shown to result in increased concentrations of CO at nearby receptors that can exceed applicable air quality standards.

The proposed project would not involve the placement or long-term operation of any major stationary sources of emissions. In addition, nearby affected roadway intersections are not

projected to operate at unacceptable levels of service, high volumes of traffic, nor is implementation of the proposed project anticipated to result in a substantial contribution to vehicle traffic along area roadways. As such, the proposed project's contribution to localized concentrations of criteria air pollutants, including CO and PM_{10}, would be considered less than significant.

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

Less than Significant. The EDCAQMD's primary criterion for determining whether a project has significant cumulative impacts is whether the project is consistent with an approved plan or mitigation program. This criterion is applicable to both the construction and operational phases of a project.

As noted in Impact 3.3(a), implementation of the proposed project would not result in significant increases in operational emissions and operational emissions of ROG and NOx are not anticipated to exceed EDCAQMD's significance thresholds of 82 lbs/day. Additionally, significant increases in emissions of airborne particulate matter associated with short-term construction activities may occur, but will be reduced to less than significant levels through adherence to EDCAQMD regulations, BMPs and MM 3.3.1 identified above. These impacts are, therefore, less than significant.

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant. See analysis under (a) and (b). "Sensitive receptors" to air quality issues are considered residences, schools, parks, hospitals, or other land uses where children or the elderly congregate, or where outdoor activity is the primary land use. Existing sensitive receptors located in the vicinity of the proposed project area consist primarily of rural residential dwellings and Pinewood Elementary School, which is located approximately 0.5 miles northeast of the project site.

As noted in Impacts 3.3(a) and (b) above, the long-term operation of the proposed project would not result in substantial increases in pollutant concentrations at nearby receptors or on the project site. Construction and operation of the proposed community park would create a sensitive receptor in the project area. However, there are no existing sources of air quality emissions in the vicinity of the project area that would expose users of the community park to substantial pollution concentrations. This impact is less than significant and no mitigation is required.

e) *Would the project create objectionable odors affecting a substantial number of people?*

Less than Significant. Construction activities would involve the use of a variety of gasoline or diesel powered engines that emit exhaust fumes. Asphalt paving as well as the application of architectural coatings are also sources of construction-related odors. However, construction-related emissions would occur intermittently throughout the workday, and the exhaust odors would dissipate rapidly within the immediate vicinity of the equipment. Operation of the proposed project would involve the use of fertilizers to maintain the grass fields and play-areas within the park. Fertilizer odors would be minimal, and due to the rural nature of the project area, surrounding land uses would not be affected by odors. This impact is less than significant and no mitigation is required.

CONCLUSIONS REGARDING AIR QUALITY

Compliance with the regulatory requirements established by the EDCAQMD and the implementation of **MM 3.3.1** would reduce air quality impacts to a less than significant level.

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

ENVIRONMENTAL SETTING

The analysis presented in this section of the Initial Study is based on the Biological Resources Report prepared by Parsons (2004) for the project site (See **Appendix A**).

The property is forested and is bordered on the north side by an EID irrigation canal and to the south by estate residential property. Slopes on the property range from 5% to 20% with a northerly aspect. Elevation ranges from 3,780 feet to 3,860 feet above sea level. The property is heavily vegetated with coniferous tree species including Douglas fir (*Pseudotsuga menziesii*), white fir (*Aibes concolor*), Jeffrey pine (*Pinus jeffrey*), and black oak (*Quercus kelloggii*). The vegetation composition of the site can be classified as Sierran Mixed Conifer Forest. This

vegetation community classification corresponds with the Sierran Mixed Conifer habitat type. Forest stands onsite are uneven in age structure as past logging has resulted in a densely forested stand with a uniformly aged canopy of limited layers and scrub openings. In disturbed areas where there is limited canopy cover, the under-story is composed of a variety of scrub species, including incense cedar saplings and blackberry. Old dirt roads and trails transect the subject area.

Riparian habitat within the irrigation canal that runs along the northern boundary of the project site has wetland vegetation associated with it banks. However the vegetation that composes the habitat is routinely trimmed for maintenance and provides limited habitat suitability. The banks of the irrigation canal are steep and uniform in structure. This linear canal lacks sinuosity and does not exhibit pool/riffle habitat. The reader is referred to **Appendix A** for a more complete description of the on-site habitat characteristics. Special-status species with the potential to occur within or around the project site are identified below under Impact Discussion a).

REGULATORY FRAMEWORK

This section lists specific environmental review and consultation requirements as well as identifies permits and approvals that must be obtained from local, state, and federal agencies before construction of the proposed project.

Federal

Endangered Species Act

Provisions of the Federal Endangered Species Act (FESA), as amended (16 USC 1531), protect federally listed threatened and endangered species and their habitats from unlawful take. "Take" under FESA includes activities such as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The United States Fish and Wildlife Service (USFWS) regulations define harm to include some types of "significant habitat modification or degradation." The United States (U.S.) Supreme Court ruled on June 29, 1995, that "harm" may include habitat modification "...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." For projects with a federal nexus, Section 7 of the FESA requires that federal agencies, in consultation with the USFWS or the National Oceanic and Atmospheric Administration (NOAA) Fisheries, use their authorities to further the purpose of FESA and to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat. Section 10(a)(1)(B) allows non-federal entities to obtain permits for incidental taking of threatened or endangered species through consultation with USFWS or NOAA Fisheries.

Clean Water Act, Section 404

The objective of the Clean Water Act (CWA 1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Discharge of fill material into "waters of the U.S.," including wetlands, is regulated by the U.S. Army Corps of Engineers (ACOE) under Section 404 of the federal Clean Water Act (33 USC 1251-1376). ACOE regulations implementing Section 404 define "waters of the U.S." to include intrastate waters, including lakes, rivers, streams, wetlands, and natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as

"areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3; 40 CFR 230.3). The placement of structures in "navigable waters of the U.S." is also regulated by the ACOE under Section 10 of the federal Rivers and Harbors Act (33 USC 401 et seq.). Projects are permitted under either individual or general (e.g., nationwide) permits. Specific applicability of permit type is determined by the ACOE on a case-by-case basis.

In 1987 the ACOE published a manual that standardized the manner in which wetlands were to be delineated nationwide. To determine whether areas that appear to be wetlands are subject to ACOE jurisdiction (i.e., are "jurisdictional" wetlands), a wetlands delineation must be performed. Under normal circumstances, positive indicators from three parameters, (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils must be present to classify a feature as a jurisdictional wetland. In addition to verifying wetlands for potential jurisdiction, the ACOE is responsible for the issuance of permits for projects that propose filling of wetlands. Any permanent loss of a jurisdictional wetland as a result of project construction activities is considered a significant impact.

Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The vast majority of birds found in the study area are protected under the MBTA. Thus, project construction has the potential to directly take nests, eggs, young or individuals of these protected species. Further, construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to the abandonment of nests, a violation of the MBTA.

Bald Eagle Protection Act

The bald eagle and golden eagle are federally protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c). It is illegal to take, possess, sell, purchase, barter, offer to sell or purchase or barter, transport, export or import at any time or in any manner a bald or golden eagle, alive or dead; or any part, nest or egg of these eagles unless authorized by the Secretary of the Interior. Violations are subject to fines and/or imprisonment for up to one year. Active nest sites are also protected from disturbance during the breeding season.

State

California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Department of Fish and Game (DFG) has the responsibility for maintaining a list of endangered and threatened species (California Fish and Game Code 2070). DFG maintains a list of "candidate species" which are species that DFG formally notices as being under review for addition to the list of endangered or threatened species. DFG also maintains lists of "species of special concern" which serve as species "watch lists." Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project

will have a potentially significant impact on such species. In addition, DFG encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under *California Fish and Game Code Section 206.591*. Authorization from the DFG would be in the form of an Incidental Take Permit.

California Regional Water Quality Control Board

Clean Water Act, Section 401 Water Quality Certification

Section 401 of the Clean Water Act of 1977

Section 401 of the Clean Water Act 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 U. S. obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The appropriate Regional Water Quality Control Board (in California) regulates section 401 requirements.

California Department of Fish and Game

Streambed Alteration Agreement (Sections 1600-1607 of the California Fish and Game Code)

State and local public agencies are subject to Section 1602 of the California Fish and Game Code, which governs construction activities that 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 DFG. Under Section 1602, a discretionary Stream Alteration Agreement permit from the DFG (Region 2 for the proposed Project) must be issued by the DFG to the project developer prior to the initiation of construction activities within lands under DFG jurisdiction. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

Native Plant Protection Act

The Native Plant Protection Act (*California Fish and Game Code Section. 1900-1913*) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by the DFG). An exception to this prohibition in the Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify DFG and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed (*Fish and Game Code, § 1913* exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way"). Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

Birds of Prey

Under *Section 3503.5 of the California Fish and Game Code* it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) 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.

"Fully Protected" Species

California statutes also accord "fully protected" status to a number of specifically identified birds, mammals, reptiles, and amphibians. These species cannot be "taken," even with an incidental take permit.

Section 3505 of the California Fish and Game Code makes it unlawful to "take" "any aigrette or egret, osprey, bird of paradise, goura, numidi, or any part of such a bird." Section 3511 protects from "take" the following "fully protected birds": (a) American peregrine falcon (*Falco peregrinus anatum*); (b) brown pelican (*Pelecanus occidentalis*); (c) California black rail (*Laterallus jamaicensis coturniculus*); (d) California clapper rail (*Rallus longirostris obsoletus*); (e) California condor (*Gymnogyps californianus*); (f) California least tern (*Sterna albifrons browni*); (g) golden eagle; (h) greater sandhill crane (*Grus canadensis tabida*); (i) light-footed clapper rail (*Rallus longirostris levipes*); (j) southern bald eagle (*Haliaeetus leucocephalus leucocephalus*); (k) trumpeter swan (*Cygnus buccinator*); (l) white-tailed kite (*Elanus leucurus*); and (m) Yuma clapper rail (*Rallus longirostris yumanensis*).

California Fish and Game Code Section 4700 identifies the following "fully protected mammals" that cannot be "taken": (a) Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*); (b) bighorn sheep (*Ovis canadensis*), except Nelson bighorn sheep (subspecies *Ovis canadensis nelsoni*); (d) Guadalupe fur seal (*Arctocephalus townsendi*); (e) ring-tailed cat (genus *Bassariscus*); (f) Pacific right whale (*Eubalaena sieboldi*); (g) salt-marsh harvest mouse (*Reithrodontomys raviventris*); (h) southern sea otter (*Enhydra lutris nereis*); and (i) wolverine (*Gulo gulo*).

Fish and Game Code Section 5050 protects from "take" the following "fully protected reptiles and amphibians": (a) blunt-nosed leopard lizard (*Crotaphytus wislizenii silus*); (b) San Francisco garter snake (*Thamnophis sirtalis tetrataenia*); (c) Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*); (d) limestone salamander (*Hydromantes brunus*); and (e) black toad (*Bufo boreas exsul*).

Fish and Game Code Section 5515 also identifies certain "fully protected fish" that cannot lawfully be "taken" even with an incidental take permit. The following species are protected in this fashion: (a) Colorado River squawfish (*Ptychocheilus lucius*); (b) thicktail chub (*Gila crassicauda*); (c) Mohave chub (*Gila mohavensis*); (d) Lost River sucker (*Catostomus luxatus*); (e) Modoc sucker (*Catostomus microps*); (f) shortnose sucker (*Chasmistes brevirostris*); (g) humpback sucker (*Xyrauchen texanus*); (h) Owens River pupfish (*Cyprinoden radiosus*); (i) unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*); and (j) rough sculpin (*Cottus asperrimus*).

Local

2004 El Dorado County General Plan

In addition to federal and state regulations, the 2004 El Dorado County General Plan defines certain goals and objectives for protecting natural resources:

Objective 7.4.1: Rare, Threatened, and Endangered Species. The County shall protect State and Federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws.

Objective 7.4.4: Forest and Oak Woodland Resources. Protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values.

Objective 7.4.5: Native Vegetation and Landmark Trees. Protect and maintain trees including oaks and landmark and heritage trees.

The El Dorado County General Plan also presents specific policies related to the objectives shown above for conservation of biological resources.

DISCUSSION OF IMPACTS

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

Less than Significant with Mitigation. The following sources provided information pertaining to the occurrence or potential occurrence of special-status species within the study area:

- *California Natural Diversity Database (CNDDB/Rarefind May 2004).* A copy of the CNDDB report for the Pollock Pines 7½ minute USGS topographic quadrangle is included in Attachment 1 of Appendix A.

- *California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Electronic Version 1.5.1 1994-2004).* A copy of the CNPS report for the Pollock Pines 7½ minute USGS topographic quadrangle is included in Attachment 2 of Appendix A.

- *U.S. Fish and Wildlife Service (USFWS)* list of federally listed and proposed threatened and endangered species that may occur in the project vicinity (letter dated March 17, 2004 [covering the Pollock Pines 7½ minute USGS topographic quadrangle]). A copy of the letter is included in Attachment 3 of Appendix A.

- *Important Biological Resource Maps*, El Dorado County Planning Department.

- *El Dorado County General Plan Draft EIR.*

As indicated in Table 1 of **Appendix A**, a total of nine special status species may occur within the project area and vicinity and may be impacted as a result of implementation of the project.

These nine species include one amphibian, five avian species, one mammal and two plant species. A brief species account is provided below along with a discussion of potential impacts.

AMPHIBIANS

The following special-status plant species have the potential to occur on the project site:

California Red-legged Frog

The California red-legged frog (*Rana aurora draytonii*) is a large brown to reddish brown frog that historically occurred in coastal habitats from the vicinity of Point Reyes National Seashore (Marin County), and inland from the vicinity of Redding (Shasta County), southward to northwestern Baja California, Mexico (Jennings and Hayes 1994, USFWS 2000a). The species has been extirpated from seventy percent of its historic range (USFWS 2000a). Though still common in the San Francisco Bay area and along the central coast, the remainder of the California red-legged frog's (CRLF) distribution has been reduced to isolated localities in the Sierra Nevada, northern Coast Range, and northern Transverse Range (USFWS 2000a).

The California red-legged frog inhabits a variety of aquatic, upland, and riparian environments, including ephemeral and permanent ponds, seasonal wetlands, perennial creeks, intermittent streams, manmade aquatic features, riparian corridors, blackberry (*Rubus* sp.) thickets, non-native annual grasslands, and oak savannahs (USFWS 2000b). California red-legged frog is listed as threatened by the USFWS and is designated as a species of special concern by the California Department of Fish and Game.

Potential for Impacts

The EID canal at the northern edge of the project site provides marginal low-quality habitat for the CRLF and the potential for CRLF occurrence on the project site is considered low. The proposed project does not include construction or operational activities that would impact the EID canal, however, mitigation presented in this document requires the construction of a bridge crossing and stormwater conveyance system that would channel runoff from the project site over the EID canal to the north. As further described under MM 3.8.1b, the construction of this stormwater over-chute would be restricted to the areas beyond the outer banks of the EID canal, and would not include improvements to the interior of the banks or the streambed. Due to the relatively low-quality of the EID canal as CRLF habitat, and the requirement that all improvements are completed outside of the canal banks, the proposed project would have **a less than significant** impact on the California red-legged frog, and no mitigation is required.

PLANTS

The following special-status plant species have the potential to occur on the project site:

Pleasant Valley Mariposa Lily

The Pleasant Valley mariposa lily (*Calochortus clavatus var. avius*) is an endemic perennial herb that is only found within the El Dorado National Forest. This lily is found in relatively rocky infertile soils, open stands of mixed conifer forest, lava caps, and mixed oak/manzanita/pine communities. This plant is primarily located between 3,000 and 5,000 feet in elevation and on south facing slopes (ENFIA 1993). Past fire history also may be an important habitat component, as many of the known plants occur within areas that have recently burned. The plants bulb is

four to six inches below the surface, which may allow it to survive relatively low intensity burns. In addition, its preference to rocky soils may be attributed to avoidance of competition with other plants or avoidance of foraging gophers. The majority of Pleasant Valley mariposa lilies that come up each spring do not produce flowers, only a single leaf for a short duration during the spring. The bulb then survives on its own until the next spring. It is thought plants only flower after their third or fourth year (ENIFA 1993). Only one occurrence has been recorded within two miles of the project area (pers. comm. Jennifer Ebert, USFS). Pleasant Valley Mariposa Lily is listed as a species of special concern by the USFWS and is designated as species that are rare, threatened, or endangered in California and elsewhere by the California Native Plant Society.

Potential for Impacts

As noted in the environmental setting above, the subject property is densely forested with a northerly aspect. In addition, there are no rock outcrops within the project area, and as such the quality of habitat that is present onsite is not ideal for the Pleasant Valley mariposa lily. However, since this lily is endemic to the El Dorado National Forest, and little is known about its abundance and life history, the habitat conditions onsite could be sufficient to support a population. Construction and operation of the proposed project could result in impacts to the Pleasant Valley mariposa lily. This is considered a **potentially significant** impact.

Stebbins's Phacelia

Stebbins's phacelia is an annual herb that grows in cismontane woodland, lower montane coniferous forest, and meadows and seeps often associated with rocks and rubble on metamorphic rock benches (CNDDB 2004). Stebbins's phacelia flowers from June to July. It is known only from El Dorado, Placer, and Nevada counties and occurs at elevations ranging from 2,000 to 6,590 feet. The closest known occurrence of Stebbins's phacelia is more than eight miles to the northeast (pers. comm. Jennifer Ebert, USFS). Stebbins's phacelia is listed as a species of special concern by the USFWS and is designated as species that are rare, threatened, or endangered in California and elsewhere by the California Native Plant Society.

Potential for Impacts

Because Stebbins's phacelia is not purely associated with rock outcrops and rubble, moderately suitable habitat is present onsite. Construction and operation of the proposed project could result in impacts to Stebbins's phacelia. This is considered a **potentially significant** impact.

Mitigation Measures

MM 3.4.1 Focused surveys to determine the presence of the two special-status plant species with potential to occur at the project site (identified above) shall be conducted in accordance with California Department of Fish & Game's Natural Diversity Database guidelines for conducting field surveys. Specifically, the guidelines are outlined in: Guidelines for Assessing Effects of Proposed Developments on Rare Plants and Plant Communities, James R. Nelson, California Native Plant Society's INVENTORY of Rare and Endangered Vascular Plants of California, February 1994, Special Publication No. 1, Fifth Edition. These guidelines require rare plant surveys to be: Conducted at the proper time of year when rare or endangered species are both "evident" and identifiable. Field surveys shall be scheduled to coincide with known

flowering periods (June-July), and/or during periods of phonological development that are necessary to identify the plant species of concern.

Timing/Implementation: *Prior to construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

MM 3.4.2 If any of the species are found on-site from the implementation of MM 3.4.1, and cannot be avoided, a transplanting program will be undertaken (if feasible) to move the plant to suitable alternative habitat location. If transplanting is determined to be infeasible, replacement credits may be purchased by the County at an approved mitigation bank.

Timing/Implementation: *Prior to construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

MM 3.4.3 Special-status plant species that are identified adjacent to the project site, but not proposed to be disturbed by the project, shall be protected by barrier fencing to ensure that construction activities and material stockpiles do not impact any special-status plant species. These avoidance areas shall be identified on site improvement plans.

Timing/Implementation: *Prior to construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

With implementation of the above mitigation measures, impacts to special-status plants are considered **less than significant**.

RAPTORS AND MIGRATORY BIRDS

Habitat at the project site provides suitable foraging opportunities for many avian species, including some raptors and migratory birds. Raptors and raptor nests are considered to be a special resource by federal and state agencies and are protected under the MBTA and California Code of Regulations. All migratory birds are also protected under the MBTA.

The following raptor and migratory bird species have the potential to occur on the project site:

Northern Goshawk

Northern goshawks (*Accipiter gentilis*) inhabit a broad range of forested communities, including mixed conifer, true fir, montane riparian, Jeffrey pine, ponderosa pine, and lodgepole pine forest. Within California, this species occurs in the Sierra Nevada, Klamath, Cascade, Inyo-White, Siskiyou, Warner Mountains, and the North Coast Ranges (Zeiner et al. 1990, USFS 2000). Goshawks may also possibly inhabit suitable habitats in the Transverse Ranges and other

mountainous areas in southern California (Zeiner et al. 1990, USFS 2000). The northern goshawk is listed as a species of concern by the U.S. Fish and Wildlife Service, a sensitive species by the USDA Forest Service and a species of concern by the California Department of Fish and Game.

Potential for Impacts

Habitat conditions within the Pollock Pines Community Park project area provide suitable foraging and potentially suitable nesting habitat for northern goshawk. High levels of canopy closure, moderate slopes and northern aspect are all habitat components that are present within the project area. A known northern goshawk Protected Activity Center (PAC) (238 acres) is located 1.16 miles to the west of the project area along with multiple recorded sightings. Due to known goshawk activity in the proximity of the project (PAC and sightings) and habitat conditions, northern goshawks have the potential to utilize the project area. Construction and operation of the proposed project could result in impacts to northern goshawks. This is considered a **potentially significant** impact.

California Spotted Owl

The range of the California spotted owl (*Strix occidentalis occidentalis*) is considered to include the southern Cascades, the entire Sierra Nevada province of California, all mountainous regions of the southern California province, and the central Coast Ranges at least as far north as Monterey County (Verner et al. 1992). In the Sierra Nevada, the major forest types comprising known and potential habitat include mixed conifer, red fir, ponderosa pine/hardwood, eastside pine, and foothill riparian/hardwood forests (Verner et al. 1992). Mixed conifer forest is the most abundant forest type and contains most of the known owl sites. Habitats used for nesting typically have greater than 70 percent total canopy cover, except at very high elevations where canopy cover as low as 30 to 40 percent may occur (as in some red fir stands of the Sierra Nevada). Nest stands typically include a mixture of tree sizes with a number of very large, old trees and usually at least two canopy layers. Large snags and an accumulation of downed woody debris are usually present. Foraging habitat is similar in structure and composition, but also comprises more open stands with canopy covers down to 40 percent. The California spotted owl is listed as a species of concern by the U.S. Fish and Wildlife Service, a sensitive species by the USDA Forest Service and a species of concern by the California Department of Fish and Game.

Potential for Impacts

A California spotted owl Protected Activity Center is located approximately 1.5 miles to the west of the project area. No recorded sightings of California spotted owls are known to occur within or adjacent to the project area (pers. comm. Jennifer Ebert, USFS, November 2004).

Based on the habitat requirements and relative close proximity of three PACs, the project area can be considered suitable habitat for the California spotted owl. A total of 946.7 acres of California spotted owl PAC habitat lies within 2.5 miles of the project vicinity. Construction and operation of the proposed project could result in impacts to California spotted owl. This is considered a **potentially significant** impact.

Flammulated Owl

Flammulated owls inhabit montane coniferous forests, often associated with ponderosa pine forests up to higher red fir forests from the North Coast of California through the Klamath Range, Sierra Nevada and into the mountains in southern California. Flammulated owls nest in

secondary cavities created by woodpeckers in snags or trees. The flammulated owl is listed as a species of concern by the U.S. Fish and Wildlife Service.

Potential for Impacts

The habitat within the project area contains moderately suitable nesting and foraging habitat for flammulated owls. Construction and operation of the proposed project could result in impacts to flammulated owl. This is considered a **potentially significant** impact.

Rufous Hummingbird

Rufous hummingbirds are a common migratory bird in California. Rufous hummingbirds are found in a variety of habitats that provide nectar producing flowers, including montane hardwood-conifer, riparian, and valley hardwood habitats. In addition to nectar, this hummingbird also forages for insects on foliage and hawks insects from the air. Trees and shrubs in many habitats provide cover, including lowland riparian, open woodlands, scrub, and chaparral, as well as mountain meadows extending to and above treeline (Grinnell and Miller 1944). This species breeds in coniferous forests to the north of California, with nests placed in berry tangles, shrubs, and conifers. The nest is an open cup, usually on a sloping branch near ground (Harrison 1978). The rufous hummingbird is listed as a species of concern by the U.S. Fish and Wildlife Service.

Potential for Impacts

The habitat within the project area may provide suitable foraging habitat for migratory rufous hummingbirds. Presence of breeders is highly unlikely due to their known existing breeding range just extending to northern California. Implementation of the proposed project would not likely have an adverse impact to this species due to the limited nectar producing plants within the project area. This impact is **less than significant**.

White-Headed Woodpecker

White-headed woodpeckers are a common resident of montane coniferous forests within the Sierra Nevada and other mountain ranges in western North America. Unlike other woodpeckers in the genus Picoides, the majority of the white-headed woodpeckers diet consists of pine seeds, which are gleaned from conifers along with insects from bark crevices. White-headed woodpeckers prefer semi-open stands of conifers with 40-70% cover. Nests are excavated in large snags or stumps, with a minimum 24-inch diameter at nest height (Raphael and White 1984). The white-headed woodpecker is listed as a species of concern by the U.S. Fish and Wildlife Service.

Potential for Impacts

Foraging and nesting habitat exists within the project area. No white-headed woodpeckers were observed during the site visit. Potential impacts to the species could result if breeding white-headed woodpeckers are nesting in habitat that will be removed in conjunction with the project. This is considered a **potentially significant impact**.

Disturbance or incidental take (loss) of these species as a result of implementation of the proposed project is considered a potentially significant impact.

Mitigation Measures

MM 3.4.4 If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the County shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or DFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or DFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through February 28th).

Timing/Implementation: *Prior to any site disturbance.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

Implementation of the above mitigation measure would reduce impacts to raptors and migratory birds to a **less than significant** level.

HABITAT MODIFICATION

Construction and implementation of the proposed project would result in the loss of approximately 15 acres of mixed coniferous woodland habitat within the project site. The project site is located in an unincorporated area of El Dorado County. Due to the rural nature of the project area and the extensive areas of mixed coniferous woodlands surrounding the project site, the loss of approximately 15 acres of woodland from the site would not significantly reduce the available habitat of any of the special-status species identified above. This impact is, therefore, considered less than significant.

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

Less than Significant. The EID irrigation canal along the northern edge of the project site includes limited areas of riparian habitat. Implementation of the proposed project may result in limited impacts and alterations to the habitat adjacent to the canal as a result of implementation of MM 3.8.1b. However, as required by MM 3.8.1b, the ultimate alignment of the bridge and stormwater over-chute would be located in an area determined to be void of riparian habitat, as determined by a qualified biologist. Full implementation of the requirements of MM 3.8.1b, would ensure that the implementation of this measure would not result in impacts to riparian habitat. There are no other riparian areas or other sensitive natural communities located within the project site. The site consists of mixed coniferous woodlands, which are not considered sensitive natural communities by the California

Department of Fish and Game or the U.S. Fish and Wildlife Service. This impact is less than significant.

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

Less than Significant. An EID canal is located directly north and down-slope from the project site. This canal is a jurisdictional "waters of the U.S.," as defined by Section 404 of the Clean Water Act. There are no wetlands or other jurisdictional waters present on the project site. As described above, MM 3.8.1b includes requirements for the construction of a stormwater over-chute to convey runoff from the project site over the EID canal to the north. As further described under MM 3.8.1b, the improvements would not allow for any stormwater discharge into the EID canal, and all improvements must be constructed outside of the streambeds of the canal. As such, the project would not have an impact on any federally protected wetlands, as defined by Section 404 of the Clean Water Act. This impact is less than significant and no mitigation is required.

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

No Impact. El Dorado County is host to the Carson River, Grizzly Flat, Motherlode, and Pacific deer herds. However, as shown in Figure 5.12-7 of the El Dorado County General Plan Draft EIR, there are no established migratory routes or critical summer or winter habitat for deer or other wildlife species within the project area (EDAW 2003). Implementation of the proposed project would not interfere with the movement of any fish or wildlife species or impede the use of native nursery sites or corridors. There is no impact.

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

Less than Significant with Mitigation. As discussed above, the project site includes habitat that could potentially support special-status species and is located adjacent to waterways that are considered jurisdictional "waters of the U.S." Implementation of the proposed project would result in disturbance and loss of portions of these areas, which (without mitigation) would conflict with the El Dorado County General Plan objectives and policies regarding biological resources (see discussion under local policy). Therefore, conflict with local policy through implementation of the proposed project is considered a potentially significant impact. However, with implementation of mitigation measures MM 3.4.1 through 3.4.4, the El Dorado County general plan policies are enforced, thereby reducing impacts to a less than significant level.

There are 11 large black oaks located on the project site ranging in size from 28-inches diameter at breast height (dbh) to 52-inches dbh. Policy 7.4.5.2 of the County General Plan states, "It shall be the policy of the County to preserve native oaks wherever feasible." As shown on **Figure 3.4-1**, there is one black oak within the footprint of the soccer field, one black oak within the building footprint of the proposed maintenance building and one immediately adjacent to an on-site path that would require removal to construct the proposed improvements. The other eight black oaks located within the project site would be retained. The removal of native black oaks is considered **potentially significant**.

Construction of the proposed project would result in the removal of approximately 15 acres of mixed coniferous woodlands. There are no County policies regulating or restricting the removal of mixed coniferous woodlands. Impacts to mixed coniferous woodlands are **less than significant**.

Mitigation Measures

MM 3.4.5 The County shall implement one of the following options to reduce impacts to native black oak trees:

1. The proposed layout of the park site shall be amended so that all 11 black oaks identified on the project site are retained. This would require relocation of the maintenance building and the soccer field.

2. If avoidance of all on-site black oaks is deemed infeasible, the County shall mitigate the removal of black oaks consistent with the requirements specified in Policy 7.4.5.2 (A) of the County General Plan. The replacement requirement shall be calculated based upon an inch for inch replacement of removed oaks. The total of replacement trees shall have a combined diameter of the tree(s) removed. Replacement trees may be planted onsite or in other areas to the satisfaction of the County Planning Department.

Timing/Implementation: *Prior to on-site tree removal.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds and the El Dorado County Planning Department.*

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?*

No Impact. There are no adopted Habitat Conservation Plans (HCP) for El Dorado County or conservation plans related to the project location; therefore, the project would not conflict with such plans. There is no impact.

CONCLUSION REGARDING BIOLOGICAL RESOURCES

Compliance with the County General Plan policies identified in this chapter and the implementation of mitigation measures MM 3.4.1 through MM 3.4.5 would reduce project-related impacts to biological resources to less than significant levels.

FIGURE 3.4-1
OAK TREE LOCATIONS

PMC

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

ENVIRONMENTAL SETTING

PREHISTORY

The earliest evidence of prehistoric occupation within the Sierra Nevada are several sites on the eastern flanks of the Sacramento Valley, indicating use of the area about 10,000 years ago. It was not until about 4,000 years ago that the Sierra Nevada became more intensively used, as evidenced by burials, associated funerary goods, and small and large village sites near drainages. Archaeological remains indicate reliance on the acorn as a dietary staple, and the more frequent use of mortars and pestles, large projectile points, and shell beads and ornaments. About A.D. 500, prehistoric subsistence included an intensive fishing industry, along with the hunting of game and the continued use of acorns. These patterns existed until the time of Euroamerican contact.

ETHNOGRAPHY

The project lies within the territory of the Nisenan. The Nisenan territory includes the drainages of the Yuba, Bear, and American rivers (Levy 1978:387). The western boundary extends to the west bank of the Sacramento River. The basic political unit of the Nisenan was the tribelet. Each tribelet consisted of several permanent villages and a number of seasonal campsites utilized during various hunting, fishing, and gathering activities. Villages were generally situated on elevated landforms along streams and rivers (Moratto 1984:172). Early missionization, disease, and American settlement contributed greatly to the near decimation of the Nisenan populations (Levy 1978:400; Moratto 1984:172). Few records exist documenting their culture. Information has been retrieved primarily by archaeological methods (Moratto 1984:172).

HISTORY

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 spread, a flood of Euroamericans began to enter the region, and gravitated to the area of the "Mother Lode". 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.

EL DORADO CANAL

The mineral wealth of the Mother Lode has played a central role in the historic settlement and development of the El Dorado County region. During the first few years of the Gold Rush, gold deposits were mainly extracted by individuals using a pick, shovel, and gold pan. In the 1850's ground sluicing and hydraulicking were the most prevalent gold recovery systems. Thus, it became apparent that a constant supply of controlled water would facilitate the processing of large quantities of placer gravels, and by 1850 the first mining ditch in the county was completed. An extensive ditch system was created, and by the 1870's many of the high mountain lakes had been dammed to supply large volumes of water all year round (Supernowicz 1983). The lowa canal is one of the earliest canals to serve the area. However, the lowa canal proved inadequate and the El Dorado Canal was built between 1854 and 1876. The El Dorado Canal provided a more consistent and reliable source of water for the region (Supernowicz 1994). The canal originally took water from the South Fork of the American River near Silver Fork and distributed it roughly 15 miles to the west in a the Forebay in Pollock Pines. The water was then conveyed along a course on the north side of modern US-50 to Smith Flat eventually crossing the highway through a tunnel and siphon towards several reservoirs just east of Coon Hollow. Today, the canal, owned and operated by the El Dorado Irrigation District, is approximately 22 miles long from the intake near Kyburz to Forebay reservoir and the El Dorado Powerhouse near Pollock Pines.

METHODOLOGY

Parsons cultural resources staff conducted archaeological and historical investigations for the Pollock Pines Community Park in March 2004, the full report is attached as **Appendix B**. The investigations were conducted to comply with CEQA. The archaeological and historical investigations included: a records search conducted by staff at the North Central Information Center at California State University, Sacramento; a sacred lands search completed by the Native American Heritage Commission; Native American consultation conducted; and a pedestrian surface survey of the project APE. Archaeological and historical investigations were adequate to identify typical prehistoric and historic resources that would likely be present in the project area. These investigations did not identify any significant cultural resources (e.g., prehistoric sites and/or historic sites) within the boundaries for the proposed project and no comments, to date, have been received from the Native American community regarding the project.

A segment of the abovementioned El Dorado Canal, forms, in part, the northern boundary of the proposed project. Project activities, however, will not affect the canal by obstruction or destruction.

DISCUSSION OF IMPACTS

a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?*

No Impact. Archaeological and historical investigations for the project did not identify any historical resources. Therefore, the project would not impact any known historical resources.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

Less than Significant. Archaeological and historical investigations for the project did not identify any prehistoric sites, historic sites, or unique archaeological resources within project boundaries. This impact is considered less than significant.

c) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

Less than Significant. A search of the database at the University of California Museum of Paleontology did not identify any formally documented paleontological sites in the project area. This impact is considered less than significant.

d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less than Significant. Archaeological and historical investigations for the project did not identify any human remains or evidence to suggest that human remains may be present within the project area. There is a possibility, however, of the unanticipated and accidental discovery of human remains during ground-disturbing project-related activities. This is considered a **less than significant** impact because the project will implement Section 7050.5 of California's Health and Safety Code, and, if necessary, the procedures outlined in the CEQA guidelines §15064.5(d) and (e). These policies include stopping of work in the vicinity of any human remains and a determination of their significance by a qualified archaeologist and/or the County Coroner.

CONCLUSION REGARDING CULTURAL RESOURCES

The project would not result in significant impacts to cultural resources.

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

ENVIRONMENTAL SETTING

REGIONAL GEOLOGY

El Dorado County is located in the Sierra Nevada geomorphic province of California, which is east of the Great Valley province and west of the Range and Basin provinces. The Sierra Nevada province is characterized by steep-sided hills and narrow, rocky stream channels. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciation and additional volcanic activity are factors that led to the east-west orientation of stream channels.

The southwestern foothills of El Dorado County are composed of rocks of the Mariposa Formation that include amphibolite, serpentine, and pyroxenite. The northwestern areas of the county consist of the Calaveras Formation, which includes metamorphic rock such as chert,

slate, quartzite, and mica schist. In addition, limited serpentine formations are located in this area. The higher peaks in the county consist primarily of igneous and metamorphic rocks with granite intrusions, a main soil parent material at the higher elevations.

SEISMICITY

Seismicity is defined as the geographic and historical distribution of earthquakes, or more simply, earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Based on historical seismic activity and fault and seismic hazards mapping, El Dorado County is considered to have relatively low potential for seismic activity, and is located beyond the highly active fault zones of the coastal areas of California. The County's fault systems and associated seismic hazards are described below.

FAULT SYSTEMS

Earthquake activity is intrinsically related to the distribution of fault systems (i.e., faults or fault zones) in a particular area. The distribution of known faults in El Dorado County is concentrated in the western portion of the county, with several isolated faults in the central county area and the Lake Tahoe Basin. Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust. No active faults have been identified in El Dorado County. One fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well located late-Quaternary fault (DOC 2000); therefore, it represents the only potentially active fault in the county. It is part of the Foothill Fault Suture Zone system, which was considered inactive until a Richter scale magnitude 5.7 earthquake occurred near Oroville on August 1, 1975 (DOC 1990). All other faults located in El Dorado County are classified as pre-Quaternary (inactive).

SOILS

According to the Soil Survey of the El Dorado Area, California prepared by the USDA Natural Resource Conservation Service in April 1974, soils on the project site consist of Cohasset loam of 15 to 30 percent slopes (CmD) and Cohasset loam of 9 to 15 percent slopes (CmC). The Cohasset series consists of well-drained soils that are underlain by weathered andesitic conglomerate at a depth of more than 40 inches. Both CmC and CmD contain less than 5 percent cobblestones by volume, have medium surface runoff and permeability, and moderate erosion hazard. Since these soils are well drained, they do not meet the requirements for a hydric soil, and the depth to the water table is more than 6 feet.

REGULATORY FRAMEWORK

El Dorado County Ordinance 15.32, Resolution No. 259-99, provides design standards for the design of sewage disposal systems. Included in these design standards are provisions for site evaluation, permitting, inspection and enforcement, as well as design procedures and required materials and construction standards. All sewage systems within the County, including the one proposed for this project, are required to comply with these design standards.

METHODOLOGY

The analysis in this section is based on a geotechnical engineering study for the proposed project site completed by Youngdahl Consulting Group, Inc. in May 2004. The study consisted of site reconnaissance, subsurface exploration, laboratory testing, and engineering analysis. The study concluded that the primary geotechnical issues involved soft surface soils to varying depths across the site. However, use of proper site preparation and construction techniques (e.g., dust control, clearing, stripping, over-excavation, sub-grade compaction) will render the site suitable for the proposed improvements.

DISCUSSION OF IMPACTS

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

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

No Impact. There are no known faults crossing through the project site or in the vicinity of the project site. The site is not located within an Alquist-Priolo earthquake hazard zone.

ii) *Strong seismic ground shaking?*

Less than Significant. The project area is considered to be an area of low risk for seismic ground shaking. However, in California there is the risk that a seismic event could occur at anytime. All structures and recreational facilities within the project site will be designed in compliance with Title 24 requirements of the Uniform Building Code (UBC) for seismic safety. Compliance with the engineering requirements of the UBC would ensure that the risk of structural failure during a seismic event is minimized to the greatest degree feasible. As a result, the risk of adverse effects from ground shaking is minimal and is considered to be less than significant.

iii) *Seismic-related ground failure, including liquefaction?*

Less than Significant. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill. No areas of this type have been identified in El Dorado County; therefore, less than significant impacts from liquefaction are anticipated.

iv) *Landslides?*

Less than Significant. Due to the natural topography of the project site, portions of the site must be graded using cut and fill techniques to provide a flat surface for athletic fields, park buildings, trails, and play areas. Although slopes will be altered, site preparation activities such as over-excavation of soft sub soils, fill placement, and soil compaction techniques will help ensure the solidity of site soils. Slope stability will be further enhanced by constructing slopes with a cut slope orientation ratio of two to one vertical to horizontal (2H:1V) which is considered stable with the material types present at the site. Finally, retaining walls will be developed for many of the structures, including the

picnic area and amphitheater. As a result, hillside stability will not be a significant issue; therefore, this impact is considered less than significant.

b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Less than Significant. It is estimated that the grading efforts in the development of this park will yield a balanced amount of excavation and embankment materials equaling approximately 70,000 cubic yards. According to the 2004 geotechnical engineering study conducted by Youngdahl Consulting Group Inc., surface soils on site are relatively soft to varying depths across the site and will need to be processed and compacted to provide adequate support for the proposed improvements.

All grading that would occur as part of project construction would be subject to El Dorado County Air Quality Management District's current Fugitive Dust Rule 223- General Requirements (amended July 19, 2005) and Rule 223.1-Construction Activities (adopted July 19, 2005), which would serve to minimize dust and the loss of topsoil from project construction. The project site plans will also include Best Management Practices (BMPs) designed to reduce soil erosion such as utilizing appropriate drainage and vegetation measures to minimize the erosion of soils. The project is subject to the requirements of the County's Grading, Erosion and Sediment control ordinance, which requires the use of Best Management Practices (BMPs) to minimize erosion impacts from construction projects. BMPs applicable to the project shall be included in the project site plans. Required BMPs related to grading includes, but is not limited to:

- All cuts and fills will have maximum slopes of 2:1. If cuts expose subsurface rock, the project engineer should identify stabilization measures that will be required.

- Areas involving extensive grading and shaping will require stockpiling and re-use of topsoil to provide adequate re-vegetation.

- Erosive velocities in water conveyance structures will be identified by the project engineer. Where necessary, rip rap or similar practices will be required.

Permanent drainage swales shall comprise of grassy swales to further reduce topsoil erosion. The project must also comply with the regulations identified in the Storm Water Management Plan for Western El Dorado County. Because the project must comply with all County best management practices and policies, the project's contribution to erosion and loss of topsoil would be considered less than significant.

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

Less than Significant with Mitigation Incorporated. The project is not located on a geologic unit or soil that is unstable. The project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. In addition, project grading would be subject to County standards associated with ground and slope stability.

The project would require the removal of several hundred trees to allow for construction of the proposed improvements. The trees would be removed from the project site and the stumps would be buried on-site in an area of the project site without improvements. Burying the stumps on-site would result in changes to the sub-surface soil conditions where the

stumps are buried. Over time the stumps would decay and the decaying wood materials may result in soft or unstable soils. This is considered a potentially significant impact.

Mitigation Measures

MM 3.6.1 All stumps that are buried on the project site shall be located in an area where no improvements are proposed above the buried stump locations. Stumps shall not be buried on slopes greater than 20 percent and shall not be buried within 50 feet down-slope of any proposed structures.

The County may also opt to grind the stumps and distribute the wood chips throughout the surface of the project site.

Timing/Implementation: *Throughout tree and stump removal activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

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

Less than Significant. Expansive soils are soils that increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise during each wet season and fall during each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows, which may result in structural hazards.

Expansive soils are directly related to areas with a high shrink-swell potential. Soil surveys typically rate shrink-swell potential in soils on a low, medium, and high basis. Generally, soils in western El Dorado County have a low to moderate shrink-swell potential. Data from the digital soil survey indicate that 68% of soils in western El Dorado County have a low or moderate shrink-swell rating, but only 0.01% has a high rating; the remaining areas are typically rock formations and are not rated (NRCS 2002). The project area is not identified as being in an area of expansive soils. This is a less than significant impact.

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

Less than Significant. Project plans include installation of a septic system for planned restrooms. Soils on site include; Cohasset loam of 15 to 30 percent slopes (CmD) and Cohasset loam of 9 to 15 percent slopes (CmC). These types of soil are generally considered less than ideal for supporting septic tanks or wastewater disposal systems due to their relatively soft structural integrity.

At the request of the El Dorado County General Services, Youngdahl Consulting inc., reviewed their geotechnical engineering study conducted in 2004 in order to determine the feasibility of the site for a septic system. After review of the geotechnical soil logs, data indicate that site conditions within the vicinity of test pits No. 6 and No. 7 would be suitable for the installation of a septic system (Youngdahl 2006).

The on-site septic system shall be designed and constructed in compliance with the requirements of the El Dorado County Department of Environmental Management as detailed in County Ordinance 15.32, Resolution No. 259-99, Sewage Design Standards.

Accordance with these standards would ensure that impacts related to an on-site septic system are **less than significant**.

CONCLUSION REGARDING GEOLOGY AND SOILS

Through adherence to adopted County policies and ordinances and with the implementation of mitigation measure MM 3.6.1, the project would not result in significant impacts to geology and soils.

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

ENVIRONMENTAL SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a Federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible,*

> *or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.* (California Code of Regulations, Title 22, Section 66261.10)

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity. CCR, Title 22, Sections 66261.20-66261.24 define the aforementioned properties. The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies.

Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese List", includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. In addition, the El Dorado County Environmental Management Department maintains records of toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) keeps files on hazardous material sites.

Most hazardous materials regulation and enforcement in El Dorado County is overseen by the El Dorado County Environmental Management Department. However, large cases of hazardous materials contamination or violations are reported to the Central Valley Regional Water Quality Control Board (RWQCB) and the California State Department of Toxic Substances Control (DTSC). It is not at all uncommon for other agencies such as the Air Pollution Control District and both the Federal and State Occupational Safety and Health Administrations (OSHA) to become involved when issues related to hazardous materials arise.

A Phase I Site Assessment was prepared by AEI Consultants in July 2001 in order to identify potential environmental liabilities associated with the presence, use, storage, and disposal of hazardous materials that may have occurred on the subject property. Site assessment activities included; a hazardous materials databases search, a site and adjacent properties reconnaissance, and a review of historical land use sources. The database search included regulatory agency lists of known or potential hazardous waste sites, landfills, hazardous waste generators, and disposal facilities in addition to sites under investigation. The Phase I Site Assessment revealed no evidence of recognized environmental conditions or hazardous waste sites on the proposed park site or adjacent properties.

NATURALLY OCCURRING ASBESTOS:

As discussed above in Section 3.3 Air Quality, serpentine rock, which may contain Naturally Occurring Asbestos (NOA) is known to be present in the County. Serpentine rock containing NOA can release NOA into the air when the rock is broken or crushed. However, the project site is not located within an area known to contain NOA as shown on the *Asbestos Area Review Map*.

DISCUSSION OF IMPACTS

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

Less than Significant. The proposed project is a community park that will be controlled and operated by the El Dorado County Parks Department. Although the project would not

produce hazardous materials, there would be the occasional use of fertilizers and pesticides. Their use would be limited to only that which is necessary to maintain the park and would be housed within a controlled maintenance facility and utilized consistent with applicable local, state and federal requirements. As such, the small amount of pesticides and fertilizers would not pose a health risk to surrounding land uses; and therefore, is considered less than significant.

Small amounts of hazardous materials would be used during constructions activities (i.e., equipment maintenance, fuel, and solvents). As indicated above, hazardous materials would primarily be used during construction of the project and would not result in any adverse health or environmental impacts to people in the vicinity of the project site. As a result, the risks associated with the transport of hazardous materials are considered less than significant.

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

Less Than Significant. Refer to discussion a) above. Additionally, the El Dorado County Department of Environmental Management visited the project site and determined that there were no hazardous materials present. This impact is less than significant.

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

Less Than Significant. The nearest school to the project site is Pinewood Elementary, located approximately 0.5 mile to the northeast of the project site. Construction and operation of the proposed project would not emit hazardous emissions or involve the handling of hazardous materials. This impact is considered less than significant and no mitigation is required.

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

Less Than Significant. AEI Consultants completed a hazardous material list database search on July 21, 2005. The search found no hazardous materials sites within the project area, and it is unlikely that the project would be affected by contamination from hazardous materials outside of the project boundary. The project site is not included on a list of hazardous materials sites. This impact is considered less than significant.

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

No Impact. Airports in El Dorado County subject to a comprehensive land use plan (CLUP) are located in Placerville, Cameron Park, and Georgetown.

Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport.

The proposed project does not fall within the land use plan of any airport. Furthermore, construction and operation of the proposed project would not place any structures within navigable airspace that may pose a threat to aircraft operations. There is no impact.

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

No Impact. There are no private airstrips within the vicinity of the project area. There is no impact.

g) *Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

No Impact. Construction and operation of the proposed park will not affect the ability of local agencies to respond in case of emergency, or impact the implementation of any emergency response plan. Area roadways will not be significantly impacted be vehicles traveling to or from the project site. The access roads and parking lots within the project area have been designed in compliance with El Dorado County Department of Transportation (DOT) roadway design requirements in order to ensure adequate emergency vehicle access to the site. Therefore, there is no impact.

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

Less Than Significant. The project site is located in a heavily wooded area north of the community of Pollock Pines. Construction of the proposed project would result in the removal of approximately 15 acres of mixed coniferous woodlands. The project does not include any residential structures that would place residents at risk of a wildland fire.

The proposed park includes picnic areas that would include raised and partially enclosed barbeque pits as typically found in picnic areas. The picnic areas will be cleared of detritus, overhead timber and other combustible materials in the vicinity of the designated barbeque areas.

The removal of approximately 15 acres of woodlands would reduce the amount of combustible fuel on the project site. Additionally, the project includes several acres of landscaping and irrigated ball fields, which would reduce the risk of wildland fires within the project boundaries. The nearest fire station is located approximately one mile from the project site. The proximity of this station would allow for a rapid response from emergency personnel in the event of a fire on the project site. Based on the conditions described above, the risk from wildland fires in considered less than significant and no mitigation is required.

CONCLUSION REGARDING HAZARDS AND HAZARDOUS MATERIALS

Implementation of the proposed project would not result in significant impacts related to hazards or hazardous materials.

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

ENVIRONMENTAL SETTING

The approximately 26-acre project site slopes naturally downward to the north. There are no surface waterways located on the project site. The El Dorado Irrigation District Main Canal runs along the northern and portions of the western property line. The project site is traversed by numerous small natural drainages that carry runoff from higher elevations on the southern end of the property towards the EID canal at the lower elevations at the northern edge of the property. Site drainage discharges directly into the EID Canal, mostly as sheet flow. There is a

depression roughly 500 feet west of the site's eastern boundary where there is some concentrated drainage from the site that enters the Main Canal.

DISCUSSION OF IMPACTS

a) *Would the project violate any water quality standards or waste discharge requirements?*

Less Than Significant with Mitigation. Construction activities associated with development of the proposed park will alter the ground surface conditions on the project site. When ground cover such as grasses, trees, shrubs and natural detritus is removed, the exposed soil is more susceptible to erosion during a storm event. Without proper mitigation techniques in place, the storm water that is discharged into local streams and rivers can carry excess amounts of sediment and toxins, which can negatively impact surface water quality.

Construction-Related Impacts

Construction and site grading activities associated with the proposed project would be subject to the provisions of El Dorado County's National Pollution Discharge Elimination System (NPDES) permit, the County's Grading, Erosion and Sediment control ordinance, which is Title 15, Chapter 15.14 of the County code, and the Minimum Construction Site Storm Water Management Practices for El Dorado County dated March 31, 2004, all of which require the use of Best Management Practices (BMPs) to minimize water quality impacts from construction projects. BMPs applicable to the project shall be included in the project site plans. The project site plans shall include a series of required BMPs to ensure that water quality standards are not violated during construction and site grading activities. Required BMPs related to grading and drainage includes, but is not limited to:

- All cuts and fills will have maximum slopes of 2:1. If cuts expose subsurface rock, the project engineer should identify stabilization measures that will be required.
- Adequate erosion control practices will be installed to ensure that sediment in excess of pre-project site conditions will not leave the project site [Storm Drain Outlet Protection, Overside Drains, Rip Rap, Lined Ditch and Vegetation Practices].
- Areas involving extensive grading and shaping will require stockpiling and re-use of topsoil to provide adequate re-vegetation.
- Erosive velocities in water conveyance structures will be identified by the project engineer. Where necessary, rip rap or similar practices will be required.

The use BMPs as required by El Dorado County and the NPDES permit would ensure that construction activities associated with the site improvements would cause less than significant impacts to water quality and would not violate any existing waste discharge requirements.

Operational Impacts

Development of the project site will increase local runoff production, and will introduce constituents into storm water that are typically associated with urban runoff. These constituents include sediments, heavy metals (such as lead, zinc, and copper), petroleum hydrocarbons, pesticides and fertilizers. Structural Best Management Practices (BMPs) are available that may

be applied to the proposed project to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels.

Development of the project site will increase the flow rates and velocities of storm runoff conveyed through the project site. The increase in site runoff production and velocities of drainage flow produced by the site development will increase the corresponding sediment discharge capacity and conveyance of sediments through the site during storm events. Pollutants associated with urban development are generally components of the sediment discharge associated with drainage flows.

The project site naturally drains south to north and discharges into the EID canal along the northern edge of the project site. Site drainage discharges directly into the EID Canal, mostly as sheet flow. There is a depression roughly 500 feet west of the site's eastern boundary where there is some concentrated drainage from the site that will enter the Canal. During the preparation of this MND, the El Dorado Irrigation District was consulted regarding the disposition of stormwater from the project site that currently discharges naturally into the EID Canal along the northern boundary of the project site. As the EID canal is a source of drinking water for EID customers, it was determined that any direct discharge of stormwater from the project site into the Canal would be prohibited.

Stormwater Consulting Inc. was retained to prepare manual runoff calculations for the proposed project. Using procedures outlined in the El Dorado County Drainage Manual (1995), the 10-year storm event runoff volume generated by the site was calculated to be 4.39 acre-feet (AF) under existing conditions and 5.155 AF under proposed conditions. The difference between these volumes is the increase in runoff volume resulting from site development, which is 0.785 AF.

The following mitigation measures would ensure that stormwater runoff from the project site does not enter the EID canal directly.

Mitigation Measures

MM 3.8.1a Drainage and water quality facilities shall be constructed concurrent with site development activities. The drainage and water quality facilities shall comply with the standards established in the El Dorado County Drainage Manual and shall meet County requirements to ensure no increase in existing run-off volumes.

Timing/Implementation: *Prior to completion of site improvements.*

Enforcement/Monitoring: *El Dorado County Department of Environmental Management.*

MM 3.8.1b A stormwater conveyance system (over-chute) shall be constructed by the County concurrent with site preparation activities. The over-chute shall be designed in coordination with the drainage improvements for the entire site, and shall convey site runoff over the top of the EID canal, with ultimate discharge to the north of the canal. The County shall coordinate the design and construction of the over-chute with the owner of the property to the north of the Canal. The over-chute shall not be constructed within the banks of the EID canal. The exact location and alignment of the over-chute shall be developed in consultation with EID staff and shall avoid any riparian or

other sensitive biological habitat adjacent to the canal, as determined by a qualified biologist.

The over-chute shall be sized and designed to comply with the standards established in the El Dorado County Drainage Manual. The County shall enter into an agreement with EID to provide a plan for on-going maintenance and monitoring of the over-chute.

The final design, location and operational plan for the over-chute shall be developed in consultation with EID, and EID shall have the authority to approve or reject final plans. The final designs and plans shall be developed by a qualified engineer.

Timing/Implementation: *Prior to completion of site improvements.*

Enforcement/Monitoring: *El Dorado County Department of Environmental Management and EID.*

The project is required to comply with the provisions of the Storm Water Management Plan for Western El Dorado County. In addition to the mitigation listed above, which requires the project site to be designed so that all stormwater runoff is conveyed to the north of the EID canal, this plan includes requirements for natural biofiltration of surface runoff prior to discharge into area waterways. The project will need to meet or exceed storm water quality mitigation requirements set forth in County Standards pertaining to regional storm water quality control. Compliance with the County's regulatory requirements for storm water quality and the implementation of **MMs 3.8.1a and 3.8.1b** would ensure that operational impacts associated with surface water quality are **less than significant**.

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

Less than Significant. Proposed project improvements would add approximately 121,805 square feet of impervious surfaces to the project site. Storm water that falls onto the newly introduced impervious surfaces will flow towards the northern portion of the project site and be conveyed over the EID canal, as required by MM 3.8.1b.

According to the Hydrologic Group Rating for the El Dorado Area, prepared by the Natural Resources Conservation Service (NRCS), the hydrologic soils on site fall within Group B. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. Group B is defined as:

> *Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately well to well-drained sandy-loam with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.*

Due to the slopes onsite, which range from 5% to 20%, there is minimal opportunity for water to pool and slowly percolate into the soil. During a storm event, water on the ground flows in a northerly direction through the natural on-site drainage features until it discharges into the EID canal. Additionally, the Group B hydrologic soils on site have only moderate infiltration rates. Based on the natural drainage conditions on site (slopes and soil type), it is unlikely that the project site currently contributes a significant amount of surface rainwater into the groundwater system. Additionally, the project area does not overlay an underground regional aquifer. Therefore, implementation of the proposed project would not result in significant impacts to groundwater levels or groundwater recharge rates. This impact is less than significant and no mitigation is required.

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

Less than Significant. As discussed above under Impact a), the site will be designed to utilize County-approved biofiltration features prior to conveyance over the EID canal and discharge into the project site north of the EID Canal. The implementation of BMPs will effectively reduce sediment levels and pollutant concentrations from site run-off to acceptable levels prior to discharge. The drainage pattern of the surrounding area will not be altered as a result of project construction and operation. As discussed in Impact a), BMPs and NPDES and MM 3.8.1 requirements will ensure that any run-off from the project site will not result in substantial erosion or on- or off-site siltation. The course of the EID Canal will not be altered or impacted as a result of project construction or implementation. This impact is less than significant and no mitigation is required.

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

Less than Significant with Mitigation. Construction and operation of the proposed project will not result in on- or off-site flooding. Run-off from the site will discharge over the EID Canal to the north of the site. The course of the EID Canal will not be altered by the proposed project, and no cut or fill activities will occur within the canal bed.

Implementation of mitigation measure MM 3.8.1 would reduce drainage impacts to less than significant.

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

Less than Significant. Refer to discussions in Impact a), c) and d) above. This impact is less than significant.

f) *Would the project otherwise substantially degrade water quality?*

Less than Significant. Refer to questions a) through e) above. This impact is less than significant.

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

Less than Significant. No housing structures are planned as part of this project, nor is the project site located within the 100-year flood hazard area. Therefore, this impact is less than significant.

h) *Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

Less than Significant. According to the Federal Emergency Management Agency (FEMA) Flood Hazard Mapping Program, the project site is located within an area designated as Flood Zone C. These areas have been identified in the FEMA Community Flood Insurance Study as "Areas of Minimal Flooding". As discussed above, the project's on-site drainage system will be constructed in accordance with El Dorado County guidelines, will follow the natural topography of the site to the greatest degree feasible and will implement BMPs as appropriate. This impact is considered less than significant.

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

No Impact. See response to d), g) and h) above. The project would not be subject to natural flooding or flooding due to the failure of a levee or dam; therefore, no impact to floods or flooding is expected from this project.

j) *Would the project be subject to inundation by seiche, tsunami or mudflow?*

No Impact. The project is not located near any ocean coast or seiche hazard area and would not involve the development of residential or other sensitive land uses and no potential for mudflow is anticipated; therefore, the project would not be subject to potential impacts involving seiche, tsunami, or mudflows.

CONCLUSION REGARDING HYDROLOGY AND WATER QUALITY

Implementation of mitigation measure MM 3.8.1a and 3.8.1b would ensure that impacts to hydrology and water quality are reduced to less than significant levels.

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

ENVIRONMENTAL SETTING

The project site is owned by El Dorado County and is adjacent to privately held lands. An EID irrigation ditch borders the northern end of the site, while the remaining surrounding land uses are primarily estate residences. The General Plan land use designation for the subject property is Low Density Residential (LDR). The site is zoned Estate Residential 10 acre, as are the adjacent properties to the south, north, and portions of the west. A portion of the land west of the site is designated as a Timberland Preserve Zone and a portion of the land to the east is zoned Single-Family Residential. Land uses within the vicinity of the project site include a bowling alley, post office and library (0.33 mile south), Pinewood School (approximately 0.5 mile northeast), and various other community facilities and private residences.

DISCUSSION OF IMPACTS

a) *Would the project physically divide an established community?*

No Impact. Surrounding land uses are primarily rural residential single-family parcels. As shown in **Figure 3.11-1**, there are rural residences located primarily to the northwest and to the east of the proposed park site. Construction and operation of the proposed park would not physically divide an established community and would not block or obstruct existing ingress or egress routes to any of the existing residences in the project area. The development of a community park in the project area would compliment the existing land uses, and would not physically divide an established community. There is no impact.

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

Less Than Significant. According to the 2004 El Dorado County General Plan, the project site's land use designation is Low Density Residential (LDR). The construction and operation of the proposed park is allowed within this land use, as specified under policy 2.2.5.9 of the General Plan. Policy 2.2.5.9 specifies that the proposed use may be allowed if a finding is

made that the operation of the park will have no significant adverse effect on the surrounding properties. The analysis contained in this document supports the conclusion that, after incorporation of mitigation measures, the project will not result in significant adverse effects on surrounding properties.

The project site is zoned Residential Estate – 10 acres (RE 10). Park facilities are permissible within the zoning designation. No significant impacts resulting from inconsistencies with the Zoning Code or General Plan would occur. This is considered a **less than significant** impact.

c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. No habitat conservation plans or natural community conservation plans are in place now or applicable to the project area. The project would have no impact with regard to these types of plans.

CONCLUSION REGARDING LAND USE

Implementation of the proposed project would not result in significant impacts to land use or conflict with any applicable land use or habitat conservation plans.

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

ENVIRONMENTAL SETTING

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 within or in the vicinity of the project site. The project area is not within an area of known mineral resources as identified in the 2004 El Dorado County General Plan. In addition, the nature of the project (i.e., a community park) would not preclude any future extraction of minerals resources.

DISCUSSION OF IMPACTS

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

No Impact. The proposed project would not use or extract any mineral or energy resources and would not restrict access to known mineral resource areas. The proposed project would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner or result in the loss of availability of a known mineral resource; therefore, there would be no impact created from the implementation of the proposed project.

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

No Impact. See response to a) above. The project would have no impact on mineral resources.

CONCLUSION REGARDING MINERAL RESOURCES

Implementation of the proposed project would not result in any significant impacts to mineral resources.

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

ENVIRONMENTAL SETTING

COMMON NOISE DESCRIPTORS

Community noise levels are measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates sound pressure levels with the frequency response of the human ear.

Additional units of measurement, such as L_{eq}, L_{max}, L_{min}, L_{dn}, and CNEL, have been developed to evaluate the long-term characteristics of sound. The equivalent noise level (Leq) is a single-number representation of the fluctuating sound level in decibels over a period of time. It is a sound-energy average of the fluctuating level. The Leq of a time-varying sound is equivalent or equal to the level of a constant unchanging sound. The Leq is frequently described in terms of the period of time for which noise measurements are taken (e.g., hourly L_{eq}). Maximum noise level (L_{max}) is the loudest noise level measured within a given period; whereas the L_{min} is the minimum measured noise level.

Many communities use 24-hour descriptors of noise levels, such as L_{dn} or CNEL, to evaluate noise impacts. These noise descriptors are typically time-weighted in that noise occurring during sensitive time periods is penalized. For example, the day-night average noise level (L_{dn}) is the 24-

hour average of the noise intensity, with a 10 dBA penalty added for nighttime noise (10:00 p.m. to 7:00 a.m.) to account for the greater sensitivity to noise during this period. Similarly, the community noise equivalent level (CNEL) includes a 10 dBA penalty added for nighttime noise (10:00 p.m. to 7:00 a.m.), but also includes an additional 5 dBA penalty for evening noise (7 p.m. to 10 p.m.). Typically, L_{dn} and CNEL are used interchangeably, because the difference between these noise scales is usually less than 1 dBA.

NOISE-SENSITIVE LAND USES

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The proposed park site is located on 26.4 acres, generally located northwest of the existing Community Center. Surrounding land uses consist of estate residential dwellings, the nearest of which are located adjacent to the project site along the northwestern and eastern boundaries of the project site. Nearby residential dwellings are depicted in **Figure 3.11-1**, Existing Noise Environment.

AMBIENT NOISE SURVEY

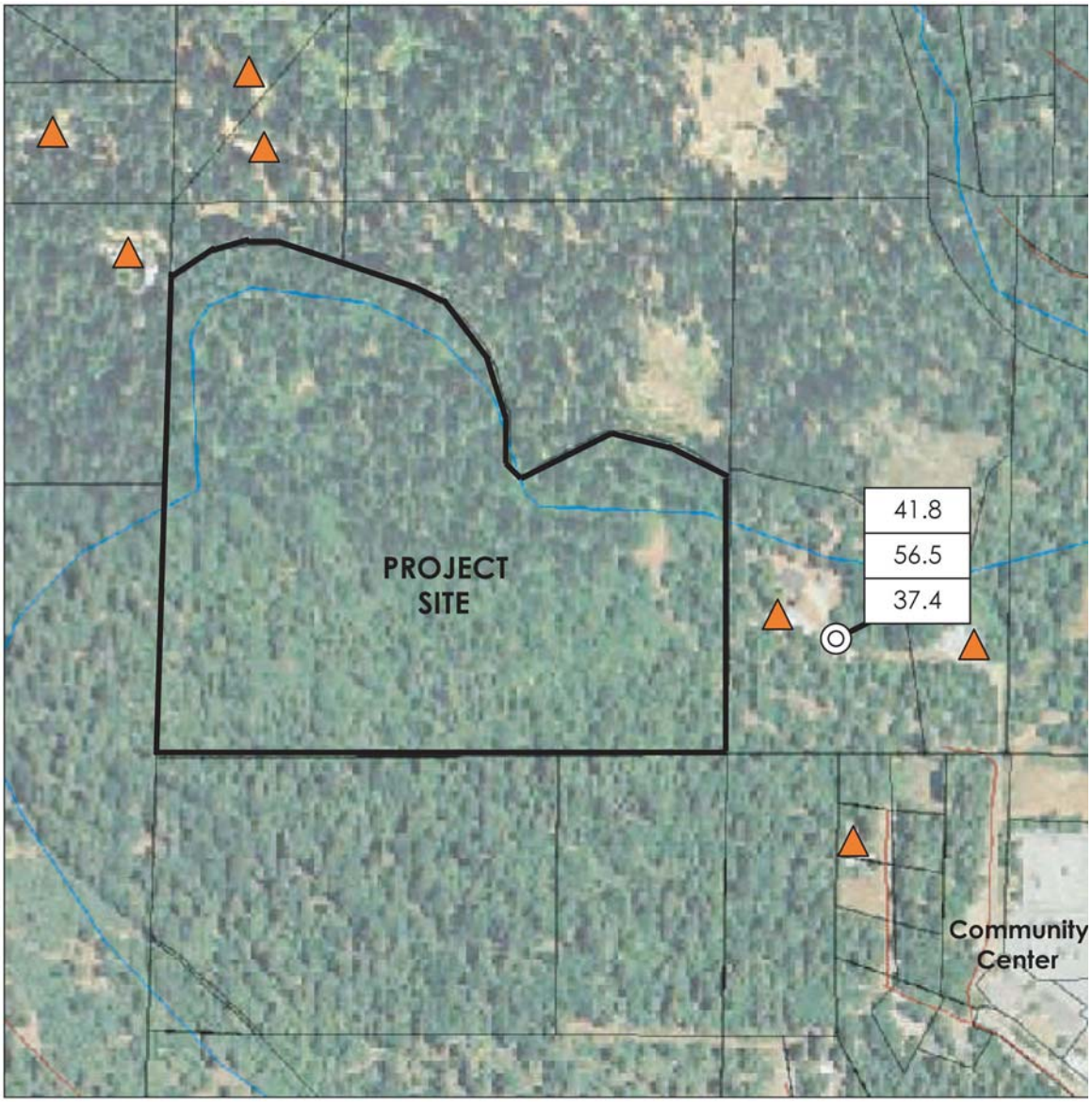
The existing noise environment in the project area is primarily influenced by the noise produced from vehicles traveling on nearby roadways. To a somewhat lesser extent, noise generated by activities at the nearby Community Center, such as vehicle noise and voices of individuals in parking lot areas, also contributes to ambient noise levels at the project site.

To document the existing noise environment, an ambient noise survey was conducted on April 6, 2006. The daytime A-weighted sound levels measured during the survey are summarized in **Figure 3.11-1**. Based on the measurements conducted, average daytime noise levels (in dBA L_{eq}) within the project area generally range from the low to mid 40's, with maximum intermittent noise levels in the mid to high 50's.

APPLICABLE NOISE CRITERIA

El Dorado County

The Public Health, Safety, and Noise Element of the El Dorado General Plan (2004) provides goals, objectives, and policies designed to ensure that County residents are not subjected to noise beyond acceptable levels. The General Plan provides maximum allowable noise exposure for transportation noise sources (**Table 3.11-1**) and noise performance standards for noise-sensitive land uses (e.g., residences, schools, hospitals) affected by non-transportation noise (**Table 3.11-2**). The noise element also established maximum allowable noise levels for construction-related activities within various areas of the county, including urban and rural areas. Noise standards for construction activities in rural areas are summarized in **Table 3.11-3**. General Plan policies applicable to the proposed project are presented, as follows:



Source: AMBIENT Air Quality & Noise Consulting, 2006

T:\El Dorado County\Pollock Pines Park MND\Figures\AI Files

NOT TO SCALE

N

FIGURE 3.11-1
EXISTING NOISE ENVIRONMENT

PMC

Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 (**Table 3.11-1** of this report) or the performance standards of Table 6-2 (**Table 3.11-2** of this report), an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.3 Where noise mitigation measures are required to achieve the standards of Tables 6-1 (**Table 3.11-1** of this report) and 6-2 (**Table 3.11-2** of this report), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

Policy 6.5.1.6 New noise-sensitive uses shall not be allowed where the noise level, due to non-transportation noise sources, will exceed the noise level standards of Table 6-2 (**Table 3.11-2** of this report) unless effective noise mitigation measures have been incorporated into the development design to achieve those standards.

Policy 6.5.1.8 New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 6-1 (**Table 3.11-1** of this report) unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 6-1.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 (**Table 3.11-3** of this report) shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;

B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant; and

C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

Policy 6.5.1.13 When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

A. In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 5 dBA shall be considered significant; and

B. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 3 dBA shall be considered significant.

TABLE 3.11-1
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES
(EL DORADO COUNTY GENERAL PLAN TABLE 6-1)

Land Use	Outdoor Activity Areas[1] Ldn/CNEL, dB	Interior Spaces	
		Ldn/CNEL, dB	Leq, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60[3]	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

[1] *In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.*

[2] *As determined for a typical worst-case hour during periods of use.*

[3] *Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.*

Source: El Dorado County General Plan, 2004

TABLE 3.11-2
NOISE LEVEL PERFORMANCE PROTECTION STANDARDS FOR NOISE SENSITIVE LAND USES AFFECTED BY NON-TRANSPORTATION* SOURCES (EL DORADO COUNTY GENERAL PLAN TABLE 6-2)

Noise Level Descriptor	Daytime (7 a.m. - 7 p.m.)		Evening (7 p.m. - 10 p.m.)		Night (10 p.m. - 7 a.m.)	
	Community	Rural	Community	Rural	Community	Rural
Hourly L_{eq}, dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	50

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

**Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.*

Source: El Dorado County General Plan, 2004

TABLE 3.11-3
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN RURAL AREAS–CONSTRUCTION NOISE (EL DORADO COUNTY GENERAL PLAN TABLES 6-3, 6-4 AND 6-5 [CONSOLIDATED])

Land Use Designation[1]	Time Period	Noise Level (dB)	
		L_{eq}	L_{max}
Higher-Density Residential (MFR, HDR, MDR)	7 am–7 pm	50	60
	7 pm–10 pm	45	55
	10 pm–7 am	40	50
Commercial, Recreation, and Public Facilities (C, TR, PF)	7 am–7 pm	65	75
	7 pm–7 am	60	70
Rural Land, Natural Resources, Open Space, and Agricultural Lands (RR, NR, OS, AL)	7 am–7 pm	65	75
	7 pm–7 am	60	70

Source: El Dorado County General Plan, 2004

ENVIRONMENTAL IMPACTS

STANDARDS OF SIGNIFICANCE

For the purposes of this analysis, the El Dorado County General Plan standards and community ambient noise degradation guidelines are used to determine significance. An impact would be considered significant if one or more of the following would occur with project implementation:

- Short-term construction noise that results in noise exposure in excess of the County's non-transportation noise standards, as presented in **Table 3.11-3** (Tables 6-3, 6-4 and 6-5 [consolidated] of the General Plan), at noise-sensitive land uses;
- Long-term operational noise that exceeds the County's exterior noise standards, as presented in **Tables 3.11-1** and **3.11-2** (Table 6-1 and 6-2 of the General Plan) or results in an increase in ambient noise levels of more than 5 dBA at noise-sensitive land uses.
- Exposure of individuals to excessive groundborne vibration or aircraft noise in excess of applicable noise standards.

DISCUSSION OF IMPACTS

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

Less Than Significant with Mitigation Incorporated. Exposure of persons to noise levels attributable to the proposed project would occur during both construction and operation of the proposed project. Noise-related impacts associated with short-term construction and long-term operation of proposed park facilities are discussed separately, as follows:

SHORT-TERM CONSTRUCTION NOISE

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, erection) of construction. Noise generated by construction equipment, including earthmovers, material handlers, and portable generators, can reach high levels. Although noise ranges were found to be similar for all construction phases, the grading phase tended to involve the most equipment. The U.S. Environmental Protection Agency (EPA) has found that the noisiest equipment types operating at construction sites typically range from 88 dBA to 91 dBA at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings.

Ground-clearing activities associated with the proposed project are anticipated to generate the loudest noise levels. Average-hourly noise levels associated with ground-clearing activities can reach levels of approximately 84 dBA L_{eq} at 50 feet, depending on the activities performed (EPA 1971). Based on this construction noise level, maximum predicted noise levels at the nearest residential dwelling could reach levels of approximately 70 dBA L_{eq} and 77 dBA L_{max}. Predicted construction-generated noise levels at the nearest residential dwelling would exceed the County's noise standards for construction activities (**Table 3.11-3** of this report). In addition, the proposed project does not include hourly restrictions for construction activities. Activities occurring during the more noise-sensitive periods of the day (i.e., 7 p.m. to 7 a.m.) could result in increased levels of annoyance and sleep disruption for occupants of nearby existing residential

dwellings. The short-tern noise impact associated with noise-generating construction activities is considered ***less than significant with mitigation incorporated*.**

LONG-TERM OPERATIONAL NOISE

Long-term noise-generating activities associated with the proposed park would be primarily associated with the use of onsite recreational and play areas (e.g., ball fields and courts), amphitheater, as well as intermittent noise from motor vehicles at the parking lot. Hours of operation for the proposed park would typically be limited to the daytime hours (i.e., 6:00 a.m. to one-half hour after sunset), with the exceptions for extending lighted evening play through advance arrangement with County Parks staff. Anticipated peak-use times for the park would be from 3:00 p.m. to 7 p.m. on weekdays, and from 9:00 a.m. to 7:00 p.m. on weekends and summer holidays. Noise impacts associated with primary noise sources attributable to the proposed project are summarized in **Table 3.11-4** and discussed separately, as follows:

TABLE 3.11-4
PREDICTED OPERATIONAL NOISE LEVELS (DBA) AT NEARBY RESIDENCES WITHOUT MITIGATION

	Distance to Nearest Residence [1]	Average Hourly (L_{eq})	Maximum (L_{max})
Soccer Field	560	39	55
Baseball Field	900	35	51
Vehicle Parking Lots	225	33	63
Amphitheater	160	**51**	**80**
El Dorado County Noise Standards [2]:		50	65

Bold Text *= Predicted Noise Levels Exceed County Noise Standard*

[1] *Distances are measured in feet from the center of the source to the adjoining property line of the nearest residential dwelling.*

[2] *The County's maximum allowable noise standard of 70 dBA Lmax is to be lowered by five dB to account for noises consisting primarily of speech or music, or for recurring impulsive noises.*

Ball Fields & Courts

Less Than Significant. The proposed project includes construction of various recreational facilities, including soccer and ball fields, hard-surface courts, and volleyball courts, generally located within the western and central areas of the project site. The noise-generation potential of onsite recreational uses would be primarily associated with the larger ball fields (i.e., soccer field and baseball field). Noise is primarily associated with the cheering and yelling of spectator crowds. Based on noise measurements conducted for similar projects, average hourly exterior noise levels typically associated with day-use soccer fields, basketball and volleyball courts, typically average less than 60 dBA L_{eq} at approximately 50 feet, with maximum intermittent noise levels of up to approximately 90 dBA L_{max} at 10 feet. Noise levels associated with smaller recreational uses, such as volleyball courts and basketball courts, do not typically involve large numbers of spectators and, as a result, are typically considered minor sources of noise. Given that these small recreational uses are more centrally located on the project site, noise from these sources would not be anticipated to exceed the County's noise standards.

The nearest residential land use with relation to the proposed soccer and baseball fields is located adjacent to and northwest of the project site, approximately 560 feet from the soccer field and 900 feet from the baseball field. Based on the above discussed noise levels and

assuming an average noise attenuation rate of 6 dBA per doubling of distance from the source, predicted maximum noise levels at the property line of this nearest residential land use would be approximately 39 dBA L_{eq} and 55 dBA L_{max}. Predicted noise levels at this same residence associated with major events conducted at the proposed baseball field would be slightly less, resulting in noise levels of approximately 35 dBA L_{eq} and 51 dBA L_{max}. These predicted noise levels would typically occur when larger competitive events are held at these locations. Noise levels associated with smaller events, such as practices or scrimmages, would typically generate lower noise levels due to decreases in spectator participation.

As depicted in **Table 3.11-4**, predicted noise levels associated with the proposed soccer and baseball fields would not exceed the County's noise standards. Furthermore, in comparison to ambient noise levels measured in the project area, predicted noise levels would not result in a substantial increase (i.e., 5 dBA or greater) in daytime ambient noise levels at nearby residences. Because use of proposed ball fields and courts would primarily occur during the daytime hours, increases in nighttime ambient noise levels would not be anticipated. For the reasons noted above, noise associated with onsite recreational facilities would be considered less than significant.

Vehicle Parking Lots

Less Than Significant. Two vehicle parking lots are proposed, located within the central and southeastern portions of the project site. Combined onsite parking spaces would total approximately 140 parking spaces. The parking lot located nearest the existing residential dwellings, approximately 225 feet from the eastern property line, consists of approximately 88 parking spaces; whereas, the more centrally located parking lot consists of approximately 52 parking spaces.

Noise levels commonly associated with parking lots are often sporadic and typically include noise associated with the starting of vehicles, the opening and closing of vehicle doors, playing of amplified music, and the occasional sound of vehicle alarms and horns. Intermittent noise events associated with the operation of automobiles, such as the sounding of car alarms and the opening and closing of vehicle doors, typically generate maximum noise levels of up to approximately 90 dBA L_{max}, or less, at 10 feet (FTA 1995).

Noise levels from parking lots are typically greatest during periods of high vehicle activity in which vehicles accessing or departing from the area would occur over a short period of time (e.g., one hour). For this reason, the predicted maximum average-hourly noise level associated with onsite parking lots were calculated assuming maximum vehicle use at the nearest parking lot (i.e., 88 vehicles) would occur over a one-hour period. Based on the modeling conducted, predicted maximum average-hourly noise levels at the property line of the nearest residential dwelling, located along the eastern boundary of the project site, would be approximately 33 dBA L_{eq}. Assuming a maximum intermittent noise level of 90 dBA L_{max}, predicted intermittent noise levels at the property line of the nearest residential dwelling would be approximately 63 dBA L_{max}.

As depicted in **Table 3.11-4**, predicted noise levels associated with the proposed parking lots would not exceed El Dorado County noise standards. Furthermore, in comparison to ambient noise levels, the proposed parking facilities would not result in noticeable increases in ambient average-hourly noise levels at nearby receptors. Because use of parking facilities would primarily occur during the daytime hours, increases in nighttime ambient noise levels would not

be anticipated. For these reasons, noise impacts associated with the proposed parking lots would be considered less than significant.

Amphitheater

Less Than Significant with Mitigation Incorporated. The proposed amphitheater would be located in the northeastern portion of the project site. The amphitheater would be available for scheduled outdoor events, such as non-amplified live music, theater, or other performances and activities, but would be primarily used as an outdoor classroom. The nearest residential land use is located approximately 160 feet to the east, along the eastern boundary of the project site.

As noted above, the proposed amphitheater would not involve the use of amplified sound systems. Non-amplified noise levels resulting from small musical presentations or bands could potentially occur. Noise from such activities can vary substantially depending on the specific activities conducted, music performed, and instruments being used. For instance, average on-stage noise levels associated with small piano recitals and music performances, such as chamber music performances, typically average between 60 and 85 dBA L_{eq}. Intermittent maximum noise levels associated with various instruments typically range from approximately 90 to 114 dBA at distances within approximately 3 feet of the performer (OHRCTC 2005). Because noise associated with such events is typically directional, noise levels at equivalent distances to the rear and sides of the amphitheater would likely be lower than levels at areas directly in front of the stage.

Assuming maximum noise levels of 85 dBA L_{eq} and 114 dBA L_{max} at a distance of 3 feet and an average noise attenuation rate of 6 dBA per doubling of distance from the source, predicted noise levels at the property line of the nearest residential land uses would be approximately 51 dBA L_{eq} and 80 dBA L_{max}, associated with musical events held at the facility. As depicted in **Table 3.11-4**, predicted average-hourly and maximum intermittent noise levels associated with the proposed amphitheater could exceed the County's noise standards at the nearest residence located along the eastern property line. Furthermore, in comparison to ambient noise levels, musical events conducted at the proposed amphitheater could also result in a substantial increase in ambient noise levels at this residential dwelling. Predicted noise levels at other residences generally located to the northwest and southeast of the project site would not be predicted to exceed the County's noise standards. In addition, it is important to note that predicted noise levels associated with other uses at the amphitheater, such as outdoor classroom uses, would be substantially less than the modeled noise levels presented in **Table 3.11-4** and would not be anticipated to exceed the County's noise standards. However, because predicted noise levels associated with other uses, particularly those involving the use of musical instruments, could potentially exceed the County's noise standards, noise impacts associated with the proposed amphitheater would be considered potentially significant and subject to mitigation.

LONG-TERM INCREASES IN TRAFFIC NOISE

Less Than Significant. Implementation of the proposed project would generate approximately 89 average-daily trips (El Dorado County 2005). As a result, long-term operation of the proposed project is not anticipated to contribute substantially to existing traffic volumes along existing area roadways (i.e., Sanders Drive, Pony Express Trail), which typically average several hundred average-daily vehicle trips. Typically, a doubling of vehicle traffic would be required before a substantial increase in ambient noise levels would occur. Assuming a maximum of 89 one-way

daily trips (178 two-way vehicles trips), predicted traffic noise levels along Red Hook Trail would be less than 45 dBA L_{dn}/CNEL at 50 feet from the near travel-lane centerline. Predicted traffic noise levels would not exceed El Dorado County noise standard of 60 dBA L_{dn}/CNEL (**Table 3.11-1**) nor result in a substantial increase in ambient noise levels at residential dwellings located near Red Hook Trail. Increases in traffic noise attributable to the proposed project would, therefore, be considered less than significant.

Mitigation Measures

Short-term Construction Noise

MM 3.11.1 The following measures are required in order to reduce short-term construction-related noise impacts to nearby land uses to a less than significant level:

- Construction equipment shall be properly maintained and equipped with noise control devices, such as mufflers and shrouds, in accordance with manufactures' specifications;
- Stationary construction equipment (e.g., portable generators, compressors, etc.) shall be located at the furthest practical distance from nearby existing noise-sensitive land uses;
- Noise-generating construction activities shall be limited to between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. Construction activities shall be prohibited on Sundays and federal/State-recognized holidays.

Timing/Implementation: *Throughout site grading and construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

Significance After Mitigation

With implementation of the above mitigation measures, construction activities would be limited to the less noise-sensitive daytime hours of operations. Additional measures have also been incorporated to further reduce potential daytime construction-generated noise levels. For instance, use of mufflers and engine shrouds, in accordance with manufacturers' specifications, would reduce construction-generated noise levels by approximately 10 dBA (EPA 1971). With mitigation, predicted construction-generated noise levels would not exceed applicable County noise standards. As a result, this impact would be considered less than significant, with mitigation incorporated.

Long-term Operational Noise

MM 3.11.2a The following measure shall be incorporated into the final project improvement plans:

- The fence proposed for construction along the eastern boundary of the project site, adjacent to residential land uses, shall be constructed of a solid material (e.g., wood, masonry block, etc.) with no visible air gaps at the base or between construction materials. If wood materials are used, material shall be overlapped or tightly fitted (e.g., tongue and groove) to ensure that visible air gaps do not occur due to material shrinkage resulting from changes in moisture content. The fence shall be constructed to a minimum height of 6 feet;

Timing/Implementation: *Prior to completion of construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

MM 3.11.2b The following measure shall be incorporated into the final project improvement plans:

- The amphitheater shall be relocated to a minimum distance of 285 feet from adjacent property lines and oriented so that the stage faces away from the nearest residential land uses. The rear of the stage shall be shielded either by construction of a solid physical barrier or earthen berm, sufficient to interrupt the line-of-sight between the stage area and the nearest residential dwellings located along the eastern boundary of the project site.

Timing/Implementation: *Prior to completion of construction activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

Significance After Mitigation

Implementation of the above mitigation measures would reduce predicted maximum noise levels associated with non-amplified musical events conducted at the proposed amphitheater to approximately 35 dBA L_{eq} and 64 dBA L_{max} at the property line of the nearest residential land use. Mitigated noise levels would not exceed applicable County noise standards. In comparison to ambient noise levels, mitigated operational noise levels would not result in a substantial increase in average-daily or average-hourly noise levels (i.e., 5 dBA or greater). This impact would, therefore, be considered less than significant, with mitigation incorporated.

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

Less Than Significant. Ground vibration spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely result in structural damage. For most structures, a peak particle velocity (ppv) threshold of 0.5 inches per second (in/sec) is sufficient to avoid structure

damage, with the exception of fragile historic structures or ruins. At the request of the U.S. Environmental Protection Agency the Committee of Hearing, Bio-Acoustics, and Bio-Mechanics (CHABA) have developed guidelines for safe vibration limits for ruins and ancient and/or historic buildings. For fragile structures, the CHABA recommends a maximum limit of 0.25 inches per second ppv (U.S. Department of Transportation 1995). For the protection of fragile, historic, and residential structures, the California Department of Transportation recommends a more conservative threshold of 0.2 inches per second ppv. This same threshold would represent the level at which vibrations would be potentially annoying to people in buildings (Caltrans 1996).

Long-term operational activities associated with the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction-related activities. Groundborne vibration levels associated with construction equipment are summarized in **Table 3.11-5**. Construction activities associated with the proposed improvements would likely require the use of various tractors, trucks, and jackhammers. The use of pile drivers is not anticipated to be required for this project.

Based on the vibration levels presented in **Table 3.11-5**, ground vibration generated by construction equipment would be less than 0.09 inches per second ppv at 25 feet. Predicted vibration levels at the nearest onsite and offsite structures would, therefore, not be anticipated to exceed the most conservative threshold of 0.2 inches per second ppv. Short-term groundborne vibration impacts would be considered less than significant. No mitigation is required.

TABLE 3.11-5
REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 feet (in/sec ppv)
Large Tractors	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Tractors	0.003

Source: Caltrans 1996, FTA 1995

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

Less Than Significant with Mitigation Incorporated. In accordance with El Dorado County General Plan noise standards, substantial increases in ambient noise levels would be defined as an increase in average noise levels of greater than 5 dBA.

As noted in discussion of impact a), long-term operation of the proposed project is not anticipated to contribute substantially to existing traffic volumes on area roadways and, therefore, would not result in a substantial increase in ambient traffic noise levels along area roadways. Furthermore, because operation of the proposed land uses would be limited to

daytime hours, substantial increases (i.e., greater than 5 dBA) in average-daily noise would not be anticipated. However, substantial increases in daytime average-hourly noise levels at the nearest residential dwelling could occur, associated with musical events conducted at the proposed amphitheater. Because the proposed project could result in a substantial increases in daytime noise levels at the nearest residential dwelling, this impact is considered potentially significant. (Refer to discussion of impact a) above for a more detailed discussion of long-term noise impacts and recommended mitigation measures.)

Mitigation Measures

Implementation of **MM 3.11.2a** and **MM 3.11.2b**

Significance After Mitigation

Implementation of Mitigation Measures **MM 3.11.2a and MM 3.11.2b** would reduce maximum operational noise levels associated with the proposed amphitheater to below the County's applicable daytime noise standards. In comparison, to ambient noise levels, mitigated noise levels would not result in a substantial increase (i.e., 5 dBA or greater) in average-hourly or average-daily ambient noise levels. This impact is considered less than significant with mitigation incorporated. (Refer to discussion of impact a) above for a more detailed discussion of long-term noise impacts and recommended mitigation measures.)

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

Less Than Significant with Mitigation Incorporated. Short-term construction and long-term operational noise impacts are discussed separately, as follows:

Short-term Construction

Less Than Significant with Mitigation Incorporated. As discussed previously in impact a,) construction activities associated with the project could temporarily increase ambient noise levels in the vicinity of the project site. Activities occurring during the more noise-sensitive nighttime hours could result in increased levels of annoyance and potential sleep disruption to occupants of nearby existing or proposed residential dwellings. Construction-generated noise would, therefore, be considered to result in a potentially significant short-term noise impact to nearby noise-sensitive land uses. (Refer to discussion of impact a) above for a more detailed discussion of long-term noise impacts and recommended mitigation measures.)

Long-term Operation

Less Than Significant with Mitigation Incorporated. Periodic increases in ambient noise levels at nearby noise-sensitive land uses may occur, associated with musical events conducted at the proposed amphitheater. Predicted intermittent noise levels at the nearest noise-sensitive land use could potentially exceed the County's maximum allowable noise standards. As a result, this impact is considered potentially significant. (Refer to discussion of impact a) above for a more detailed discussion of long-term noise impacts and recommended mitigation measures.)

Mitigation Measures

Implement Mitigation Measures MM 3.11.1 and MM 3.11.2a and b.

Significance After Mitigation

Implementation of Mitigation Measures MM 3.11.1 and MM 3.11.2a and b would reduce short-term and long-term noise levels attributable to the proposed project to below applicable El Dorado County noise standards. Mitigated noise levels would not result in a substantial increase (i.e., 5 dBA or greater) in ambient average-hourly or average-daily noise levels. This impact is considered less than significant with mitigation incorporated.

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

Less Than Significant. The project site is not located within two miles of a public airport. The nearest public airport, Placerville Airport, is located approximately 9 miles west of the project site. Due to the distance to the airport, the project site would not be subject to high levels of aircraft noise and would, therefore, not result in a safety hazard for people at the project site. This impact would be less than significant. No mitigation is necessary.

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

Less Than Significant. No private airstrips were identified within approximately two miles of the project site. As a result, the project site would not be subject to high levels of aircraft noise and would, therefore, not result in a safety hazard for people at the project site. This impact would be less than significant. No mitigation is necessary.

CONCLUSION REGARDING NOISE

Implementation of mitigation measures MM 3.11.1 and 3.11.2a and b would reduce noise impacts to less than significant levels.

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

ENVIRONMENTAL SETTING

The proposed project consists of the construction and operation of a community park. The project site is surrounded by low-density residential estate properties. The project site is located on undeveloped land owned by El Dorado County. There are no residences proposed as part of the project.

DISCUSSION OF IMPACTS

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

No Impact. The project does not include any residential structures that could directly lead to population growth. Although recreation infrastructure would be developed, the park would serve the needs of the existing community. There is no impact.

b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. No structures or residences would be displaced or removed as a result of the proposed project, and the project would have no impact on existing housing.

c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. As discussed in b) above, the project would not involve the removal or relocation of any housing, and would, therefore, not displace any people or necessitate the construction of any replacement housing.

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

ENVIRONMENTAL SETTING

The project is located within the community of Pollock Pines and is served by County, State, and Federal services. The El Dorado County Fire Protection District Station 17, located on Pony Express Trail approximately 0.75 miles from the project site, provides fire protection for the area and may receive assistance from the CDF during severe fire events. The El Dorado County Sheriff's Department provides law enforcement protection to the County with 150 patrol deputies covering 1,800 square miles. The Pollock Pines Substation is located within a mile of the park site on Pony Express Trail. Since the site is on County public land, the Sheriff would provide primary response.

The project is located within the Pollock Pines School District. Schools within this District include Sierra Ridge Middle School, Emigrant Trail Elementary School, and Pinewood Elementary School, which is located approximately 0.5 mile northeast of the proposed park site. The site is surrounded by Federal land in the El Dorado National Forest. The El Dorado Irrigation District operates Sly Park approximately five miles from the project site, which provides opportunities for camping, boating, swimming, and picnicking.

DISCUSSION OF IMPACTS

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

a) *Fire protection?*

No Impact. Development and maintenance of the site would reduce fire danger by clearing and/or thinning dense vegetation, maintaining open, irrigated fields, and reducing illegal trespass and dumping on site. Grills would be located on cemented areas and all building structures would be equipped with sprinklers and/or fire extinguishers. Fire hydrants will be located in accordance with County building and fire safety requirements.

b) *Police protection?*

No Impact. The County Sheriff's Department would continue to provide law enforcement in the area. A fence will be erected around the site to prevent park-user trespass onto adjacent private properties and to prevent unauthorized park use. Closure of the park at night would also reduce potential offsite conflicts associated with activity in the park. Development of the park would eliminate existing squatting activities that have been evident from the shanty observed on the site.

c) *Schools?*

No Impact. Development of the park would not result in an increased need for schools because the park would serve the existing community. Schools would benefit from the park's facilities, particularly the outdoor classroom and educational facility. Pinewood Elementary School is within 0.5 miles of the park site but would not be adversely affected by day use of the park, as they are not connected.

d) *Parks?*

No Impact. As there are few parks in the region, the Pollock Pines area would benefit from the development of a community park that offers a variety of recreational facilities. Members of the community would no longer have to travel to Placerville or other regional areas with park facilities.

e) *Other public facilities?*

No Impact. Development of the park would not adversely affect other public services, as the park would not contribute to an increase in population. Although the County would need to provide park maintenance services for the facility, it would not significantly affect County staff. There is no impact.

CONCLUSION REGARDING PUBLIC SERVICES

Implementation of the proposed project would not result in significant impacts to public services.

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

ENVIRONMENTAL SETTING

The project is located within the community of Pollock Pines. Pollock Pines contains few parks to serve the community. Although there are recreational facilities at the local schools, these facilities are fully utilized and limited in their range of facilities provided. The El Dorado Irrigation District operates Sly Park, which provides camping, boating, picnicking, and swimming; however, does not include traditional sport fields or organized sport facilities. There is an existing need for public parks in the Pollock Pines area.

DISCUSSION OF IMPACTS

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No Impact. The proposed project would result in a positive impact on recreation by providing more facilities to accommodate existing recreational use in the region.

b) *Does the project include recreational facilities, or require the construction or expansion of existing facilities, which might have an adverse physical effect on the environment?*

Less than Significant. The proposed project is a community park with recreational facilities for Pollock Pines and the surrounding area. Development of the park on currently undeveloped land would result in environmental impacts as discussed throughout this IS/MND. These environmental impacts, however, are either considered less than significant or will be mitigated to a less than significant level. Please refer to the other checklist areas of this document.

CONCLUSION REGARDING RECREATION

Implementation of the proposed project would not result in significant impacts to recreation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.15 TRANSPORTATION/TRAFFIC Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The circulation systems 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. The project site is located to the north of US 50, which is a major east/west transportation route traversing El Dorado County.

The site is accessed by Red Hook Trail and Sanders Drive from Pony Express Trail, a minor two-lane roadway. Red Hook Trail and Sanders Drive are for residential access. Although Sanders Drive is adequately paved and sized, Red Hook Trail is unpaved, narrower, and receives less traffic, serving only the few residences adjacent to the park. Pony Express Trail is a two lane paved road that serves as the primary route through Pollock Pines north of Highway 50, and it connects Pollock Pines to Camino. Pony Express Trail is accessed via Highway 50, which is a four-lane (between Camino and Pollock Pines) divided freeway. Both Highway 50 and Pony Express Trail operate at LOS C or better in the area of the project site (EDAW, 2003).

METHODOLOGY

The analysis in this section is based on a technical memorandum prepared by Chuck Collins from the El Dorado County Department of Transportation (DOT) and from information contained in the 2004 El Dorado County General Plan.

DISCUSSION OF IMPACTS

a) *Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?*

Less than Significant. The Trip Generation Manual published by the Institute of Transportation Engineers establishes a trip generation rate of 2.99 weekday trips per acre for County parks. Therefore, the approximately 26-acre proposed park would generate approximately 79 average daily vehicle trips (ADT). The generation of an additional 79 ADT is below the project trip count that would "worsen" traffic on the County road system, as defined by the 2004 General Plan, therefore, no traffic impact study is required per the El Dorado County DOT Traffic Impact Study Protocols and Procedures.

According to the 2004 General Plan EIR (EDAW 2003), Pony Express Trail and US 50 both operate at LOS C or better in the vicinity of the project site. The addition of 79 ADT to project area roadways would not result in a decreased LOS for area roadways. Therefore, the project is not required to construct roads in order to maintain Levels of Service standards as required by the Transportation and Circulation Element of the General Plan. This impact is less than significant and no mitigation is required.

b) *Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Less than Significant. Refer to Impact a), above. The project would not result in substantial increase in vehicles trips in the area, and the addition of project-generated traffic would not exceed a County LOS standard. This impact is considered less than significant and no mitigation is required.

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

No Impact. The proposed project would not result in a change in air traffic patterns or increase traffic levels that would result in a substantial safety risk. The project does not propose any structures that would impede a height limitation in close proximity to an airport. Therefore, no impacts on air traffic patterns would occur as a result of this project.

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

Less than Significant with Mitigation. The proposed project includes plans to install a park access roadway from Red Hook Trail to the interior of the park site. From the connection at Red Hook Trail, the park access roadway would follow the existing dirt road alignment on the

park site. Three turnaround area would be provided at the park site; one at the entry, another between the two sports fields, serving as a pedestrian drop off, and one at the end of the roadway. Crosswalks would be located on the park roadway as needed. The access road will be a minimum of 24 feet wide in order to comply with the requirements of the County Design and Improvement Standards Manual and the State Fire Safe Standards.

Vehicles traveling at speeds in excess of 15 miles per hour (MPH) within the park site boundary could pose a safety risk to park users, particularly children. Children are more difficult for drivers to see and it is common for children to run excitedly around a park, which increases the risk of being struck by a vehicle. This is considered a potentially significant impact.

Mitigation Measures

MM 3.15.1 The County shall install "15 MPH" speed limit signs and "Caution Children at Play" signs adjacent to the park access roadway. These signs shall be designed and located consistent with the specifications identified in Article 3 of the El Dorado County Design and Improvement Standards Manual.

Timing/Implementation: *Prior to completion of site improvement activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

Significance After Mitigation

Implementation of **MM 3.15.1** would reduce roadway design hazards to a less than significant level.

e) *Would the project result in inadequate emergency access?*

Less than Significant with Mitigation Incorporated. The construction and operation of the proposed project would not interfere with emergency access to the site or the surrounding project area. As stated under Impact d) the project's access road shall be constructed in compliance with DOT standards, which will ensure adequate emergency vehicle access to the site. In order to ensure that there is sufficient space within the project site for large emergency vehicles (fire trucks) to enter the site, and then turn around, the parking lot must have an area with a minimum 50-foot turning radius (see **Figure 2-3**).

Mitigation Measures

MM 3.15.2 The onsite parking lot shall include a turnabout area within a minimum 50-foot radius to accommodate emergency vehicles.

Timing/Implementation: *Prior to completion of site improvement activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

MM 3.15.3 The final site plans for the park site shall be submitted to the El Dorado County Fire Protection District for review and approval. If a secondary fire access road is required, the County shall amend the site plans to include a secondary access roadway acceptable to the El Dorado County Fire Protection District. The emergency access roadway shall avoid all of the oak trees identified in Figure 3.4.1. If the secondary roadway crosses over the EID canal on the northern edge of the project site, EID shall be consulted to ensure that roadway and bridge operation and construction does not impair EID operations or impact water quality within the canal. All bridge and roadway improvements must occur outside of the banks of the EID canal and must avoid impacts to jurisdictional waters of the U.S.

Timing/Implementation: *Prior to completion of site improvement activities.*

Enforcement/Monitoring: *El Dorado County General Services Department, Division of Airports, Parks & Grounds.*

f) *Would the project result in inadequate parking capacity?*

No Impact. Approximately ten disabled parking spaces and 136 standard parking spaces would be located in the designated on-site parking areas. As stated under Impact a), the project may generate up to 78 peak-hour vehicle trips per day. The installation of approximately 146 on-site parking spaces will ensure that there is adequate parking to accommodate park users and County staff during peak-hour operations. There is no impact.

g) *Would the project conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. Due to the remote rural location and nature of the proposed project, bicycle transportation to and from the facility is not considered feasible, however bicycle racks will be installed at various locations throughout the park. The project will include a parking lot that is large enough to accommodate buses and vans. Construction and implementation of the proposed project will not conflict with or impact any alternative transportation plans. There is no impact.

CONCLUSION REGARDING TRANSPORTATION

Implementation of MM 3.15.1 would reduce traffic and circulation related impacts to a less than significant level.

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

ENVIRONMENTAL SETTING

The Pollock Pines Community Park site is owned and maintained by El Dorado County. According to the County Assessor's Office data, the proposed park site has never been developed and no improvements to the property are on record. As a result, there are no utility services on the site. The Pollock Pines area is served by onsite wastewater treatment systems. The El Dorado Irrigation District provides water service and the El Dorado Disposal Service conducts solid waste collection, and delivers waste to the Lockwood landfill located near Sparks, Nevada. The Lockwood Regional landfill has over 100 years of capacity available according to the landfill manager, Mark Franchi (RGJ 2002). El Dorado County Parks staff would provide garbage pickup to the site.

DISCUSSION OF IMPACTS

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

Less Than Significant. Wastewater generated at the project site will be handled by a septic wastewater treatment system still to be developed. However, wastewater uses at the site would not require additional or special types of treatment and would be treated in the same manner as other domestic wastewater in the area. The on-site septic system would collect and handle wastewater generated by restroom and concession use. The septic system would be in accordance with state and local requirements as well as be constructed according to the projected capacity demand. The addition of project-generated wastewater will not exceed or violate any wastewater treatment requirements and would be required to meet County standards as identified in Mitigation Measure MM 3.6.1. This is a less than significant impact.

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

Less than Significant. No new water or wastewater treatment facilities will result from implementation of the proposed project. Water will be provided to the project site by connecting to an existing 6-inch water main located on Red Hook Trail. The water conveyance infrastructure in the project area is operated by the EID. Connecting the project site to the existing 6-inch water main would require the installation of approximately 985 linear feet of water conveyance pipe to reach the eastern boundary of the project site (McCurry 2006). Trenching for the new water conveyance pipe would follow the roadway alignment of Red Hook Trail, within the existing right of way. Impacts related to ground disturbance from trenching activities would be minimized by following the roadway. Additionally, after the utility trench is filled, the ground cover shall be restored to its original condition to the greatest extent feasible. This impact is considered less than significant.

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

Less than Significant. Refer to Section 3.8, Hydrology and Water Quality for a full discussion of storm water drainage facilities. The project will implement County-approved BMPs to minimize impacts to hydrology and water quality. The BMPs that will be used for the proposed project include the creation of natural bio-filtration systems and detention basins. The construction of natural bio-filtration detention basins will not result in significant impacts to the environment. This is considered a less than significant impact.

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

Less than Significant. The proposed project would utilize existing County water supplies provided by EID. The EID has indicated that there is sufficient water supply available in the area to serve the anticipated project demand. The proposed project would not generate a significant new demand for water and would not require additional or expanded entitlements. This impact is less than significant.

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

No Impact. Wastewater generated at the project site will be disposed of in the proposed on-site septic system. The impacts associated with the installation and operation of the

septic system are fully addressed in Section 3.8, Hydrology and Water Quality. There is no impact to a wastewater treatment provider.

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

No Impact. Construction and operation of the proposed project would not result in the generation of significant volumes of solid waste. The landfill's capacity would not be exceeded by the amount of solid waste generated at the project site. There is no impact.

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

No Impact. The proposed project would conform to all applicable state and federal solid waste regulations, therefore, there would be no impact.

CONCLUSION REGARDING UTILITIES

Implementation of the proposed project would not result in significant impacts to utilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.17 MANDATORY FINDINGS OF SIGNIFICANCE	Would the project:			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☐	☒	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION OF IMPACTS

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?*

Less than Significant. As discussed in Section 3.4 of this Initial Study, the project has the potential to result in adverse impacts to natural and biological resources within the project vicinity. Potential impacts to sensitive natural habitat, special-status species (including raptors) and wetlands would be reduced to less than significant levels through implementation of MM 3.4.1 through MM 3.4.7.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*

Less Than Significant. The project would not involve development or changes in land use that would result in increased population growth, or any additional requirements for public services associated with population growth. The project would not contribute substantially to increased traffic in the area and the project would not increase the wastewater

treatment capacity of the County, which could lead indirectly to population growth. As discussed throughout this environmental document, the project would not contribute to a substantial decline in water quality, air quality, noise, biological resources, agricultural resources, or cultural resources under cumulative conditions. Cumulatively considerable impacts associated with the project are less than significant.

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

Less Than Significant. As discussed in Section 3.11 of this Initial Study, the project has the potential to generate noise levels in excess of County noise standards that may result in adverse effects on human beings. The implementation of MM 3.11.1 and 3.11.2 would reduce short-term and long-term exterior noise levels in the project vicinity to less than significant levels. The project will not otherwise result in substantial adverse impacts to human beings.

4.0 CUMULATIVE IMPACT

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

This analysis is based on planned growth assumptions under the 2004 El Dorado County General Plan and its associated EIR. The 2004 General Plan EIR was used as the basis for the setting considered in the cumulative impact assessment for the proposed project.

CUMULATIVE IMPACT ANALYSIS

Aesthetics

Implementation of the proposed project is not expected to contribute to cumulative visual resource impacts associated with adding a community park to the area. The project has been designed to retain a significant number of trees, particularly around the perimeter of the project site. The retention of trees will provide natural visual screening of the project site, and the park will not be highly visible from the surrounding areas. The project does not propose any two-story facilities that would be highly visible from the surrounding areas. As explained in greater detail in Section 3.1 of this document, the proposed light poles will be directed downward, used only sporadically, and light spillage from the fixtures during times of field illumination will not significantly impact the surrounding land uses or result in significant increases in illumination of night skies. Thus, the project would result in a less than significant contribution to aesthetic impacts under cumulative conditions.

Air Quality

The proposed project has the potential to result in temporary impacts to air quality related to construction activities. Compliance with El Dorado County APCD Rule 223, Rule 223-1 and mitigation measure MM 3.3.1 would ensure that construction PM_{10} emissions don't exceed the AAQS. Construction related air quality impacts would be short-term in nature, and compliance with the mitigation measures included in this document would ensure that these short-term impacts are less than significant. The project would not result in operational air quality impacts that would be cumulatively considerable. The project would result in a less than significant contribution to air quality impacts under cumulative conditions.

Biological Resources

Construction of the proposed community park would result in site-specific impacts to biological resource impacts (special-status plant and wildlife species as well as habitat conditions) that would be fully mitigated with the implementation of mitigation measures identified in Section 3.4. These mitigation measures would also reduce the project's contribution to cumulative impacts to these resources to less than significant.

Cultural Resources

No cultural resources have been identified within the project site. This proposed project would not contribute to potential cumulative impacts associated with the destruction of undiscovered cultural resources.

Geology and Soils

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. Cumulative water quality impacts associated with soil erosion by the proposed project would be mitigated to a less than significant level by adherence to regulatory requirements including: the El Dorado County Grading Ordinance, El Dorado County BMPs, NPDES, Statewide General Permit for Small Municipalities, and Statewide General Permit for Construction Discharges (all requiring revegetation of disturbed areas, and implementation of BMP's [e.g., Storm Drain Outlet Protection, Overside Drains, Rip Rap, Lined Ditch and Vegetation Practices in accordance with RCD Recommendations] for Erosion and Sediment Control), as well as the measures identified in the project construction plans. Therefore, the project would result in a less than significant contribution to geologic impacts under cumulative conditions.

Hazards and Hazardous Materials

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.

Hydrology and Water Quality

The proposed project would negligibly contribute to increased storm drainage flows in the project area as well as surface water quality impacts. Adherence to the Statewide General Permit for Construction Discharges and the County's NPDES General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems, would mitigate the project's contribution to a less than significant level under cumulative conditions. The proposed project would not contribute to cumulative groundwater impacts.

Land Use and Planning

As described in this Initial Study, the proposed project consists of construction and operation of a community park in Pollock Pines. Land use impacts identified for this project are site-specific and would not contribute to cumulative impacts associated with land use that were identified in the 2004 El Dorado County General Plan EIR. The project has been designed to reduce impacts to adjacent land uses, and implementation of mitigation measures included in this environmental document would ensure that the project would not result in cumulative impacts to adjacent land uses or land uses in the project vicinity. The proposed project is anticipated to have a less than significant impact on cumulative land use conditions in the region.

Mineral Resources

The proposed intersection improvement is not expected to result in any site-specific significant impacts to mineral resources. Additionally, the project is expected to have no impact on mineral resources under cumulative conditions.

Noise

The proposed project would not contribute to significant increases in traffic noise levels expected in the project area by year 2025. The noise analysis for the project indicates that future noise conditions will not exceed the levels established in the El Dorado General Plan Noise Element. The project would result in a less than significant contribution to noise impacts under cumulative conditions.

Population and Housing

As described in this Initial Study, the proposed project consists of construction and operation of a community park. No housing is proposed as part of the project, and no housing will be removed or displaced as a result of the project. The construction and operation of the proposed park will improve recreation opportunities in the project area, and will not contribute to population growth beyond what was identified in the 2004 El Dorado County General Plan EIR. The proposed project would have no cumulative impact to population and housing.

Public Services

The project is not expected to contribute to cumulative public service impacts. The EID has indicated that there is adequate water supply available for the project. 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.

Recreation

The project includes the construction and operation of a new community park. The addition of a community park to the project area would serve to alleviate a previously identified deficiency in recreational opportunities in the project area. Thus, no impact to recreation is anticipated.

Transportation/Circulation

The proposed project is not anticipated to result in significant increases in traffic that would impact area roadways under cumulative conditions. The project's cumulative contribution to traffic on area roadways would not result in decreases LOS conditions. Thus, transportation and circulation impacts would be less than significant under cumulative conditions.

Utilities and Service Systems

Adherence to the California Streets and Highways Code and the Public Utility Code would reduce cumulative impacts to less than considerable.

5.0 DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that although the proposed project is subject to CEQA, the project is exempt because the project will not have a significant effect on the environment (based on the attached Initial Study) pursuant to State CEQA Guidelines Section 15061(b)(3).

- ☐ 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 _____ Date: _____

Printed name: _____

6.0 REFERENCES

6.1 REFERENCES

AEI Consultants. 2001. Phase I Environmental Site Assessment. July 26, 2001.

Bancroft, H.H. 1888. History of California, Volume 23. Published by The History Company. San Francisco, CA.

California Air Resources Board, Aerometric Data Division (CARB). 1994. California Surface Wind Climatology.

California Department of Fish and Game (DFG). California Interagency Wildlife Task Group. 2002. CWHR version 8.0 personal computer program. Sacramento, CA.

California Department of Health Services (DHS). Website url: http://www.http://www.dhs.ca.gov. Accessed: September 8, 2005.

California Department of Transportation (Caltrans). June 1996. Transportation Related Earthborne Vibrations.

El Dorado County. 2004. The El Dorado County General Plan. July.

El Dorado County. May 2003. El Dorado County General Plan Draft Environmental Impact Report. Sacramento, CA.

El Dorado, County of. July 2004. El Dorado County General Plan, Public Health, Safety, and Noise Element.

El Dorado County Air Pollution Control District. February 2002. Guide to Air Quality Assessment. Placerville, CA.

El Dorado County Department of Environmental Management. November 1999. *Design Standards for the Site Evaluation and Design of Sewage Disposal Systems. Placerville, CA.*

El Dorado County. August 2003. *Outdoor Lighting Ordinance 17.14.170.* Placerville, CA.

International Dark-Sky Association (IDA). April 1999. *International Dark-Sky Association-Information Sheet 93.* http://www.darksky.org/infoshts/is093.html

Levy, Richard. 1978. *Eastern Miwok*. In R.F. Heizer (ed.), *Handbook of North American Indians, Volume 8, California*. Smithsonian Institution (8): 398-413, Washington D.C.

Moratto, M.J. 1984. *California Archaeology*. Academic Press. San Diego, California.

State of California, Department of Conservation, Division of Mines and Geology. March 2000. Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County, California.

Supernowicz, D.E. 1983. Historical Overview of the Eldorado National Forest. MA thesis in History. California State University, Sacramento, CA.

U.S. Department of Transportation, Federal Transit Administration (FTA). April 1995. Transit Noise and Vibration Impact Assessment.

U.S. Environmental Protection Agency. December 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.

United States Environmental Protection Agency (U.S. EPA) Website url: http://www.epa.gov/region09/toxic/noa/localreg.html . Accessed: September 13, 2005.

Vegna, Jon- El Dorado County Department of General Services. December 2005. Personal Communication. Placerville, CA.

Youngdahl Consulting Group, Inc. 2004. Geotechnical Engineering Study for Pollock Pines Park, Red Hook Trail, Pollock Pines, California. May 2001.

Youngdahl Consulting Group, Inc. 2006. Review and Addendum of Previous Geotechnical Engineering Study for Pollock Pines Park, Red Hook Trail, Pollock Pines, California. May 25, 2004.

California Department of Transportation (Caltrans). June 1996. Transportation Related Earthborne Vibrations.

El Dorado, County of. July 2004. El Dorado County General Plan, Public Health, Safety, and Noise Element.

Oregon Hearing Research Center Tinnitus Clinic (OHRCTC). Accessed: November 2005. url: http://www.ohsu.edu/ohrc/tinnitusclinic

U.S. Environmental Protection Agency. December 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.

U.S. Army, Construction Engineering Research Laboratory. October 1978. Predicting Noise Impact in the Vicinity of Small Arms Ranges, Interim Report N-61.

U.S. Department of Transportation, Federal Transit Administration (FTA). April 1995. Transit Noise and Vibration Impact Assessment.

7.0 MITIGATION MONITORING PROGRAM

7.1 INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Pollock pines Community Park project. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." A MMRP is required for the proposed project because the Initial Study/Mitigated Negative Declaration has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

The numbering of the individual mitigation measures follows the numbering sequence as found in the Initial Study/Mitigated Negative Declaration.

7.2 MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Initial Study/Mitigated Negative Declaration.

The El Dorado County Department of General Services will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, the County Planning Department or other public agencies will implement measures. In other cases, the construction contractor will be required to implement specific mitigation measures prior to and/or during construction. The County Department of General Services will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

- **Mitigation Measures:** The mitigation measures are taken from the Initial Study/Mitigated Negative Declaration, in the same order that they appear in the document.
- **Mitigation Timing:** Identifies at which stage of the project mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department within the County, or other public agency responsible for mitigation monitoring.
- **Verification:** Identifies that a mitigation measure has been adequately implemented or completed to the satisfaction of the appointed monitor or responsible County department.

TABLE 7.0-1
MITIGATION MONITORING AND REPORTING PROGRAM

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
Air Quality				
MM 3.3.1	The County shall require the project contractor to adhere to one of the following mitigation measures: • Require the prime 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 15 percent NOx reduction compared to the most recent CARB fleet average. Successful implementation of this measure requires the prime contractor to 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. Usually the inventory includes the horsepower rating, engine production year, and hours of use of fuel throughput for each piece of equipment. In addition, the inventory list is updated and submitted monthly throughout the duration of when the construction activity occurs. • Obligate the prime contractor to use an alternative fuel, other than diesel, verified by the California Air Resources Board or otherwise documented through emissions testing to have the greatest NOx and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent. • Obligate the prime contractor to use aqueous emulsified fuel verified by the California Air Resources Board or otherwise documented through emissions testing to have the greatest NOx and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to and throughout construction activities.	
Biological Resources				
MM 3.4.1	Focused surveys to determine the presence of the two special-status plant species with potential to occur at the project site (identified above) shall be conducted in accordance with California Department of Fish & Game's Natural Diversity Database guidelines for conducting field surveys. Specifically, the guidelines are outlined in: Guidelines for Assessing Effects of Proposed Developments on Rare Plants and Plant Communities, James R. Nelson, California Native Plant Society's INVENTORY of Rare and Endangered	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to construction activities	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	Vascular Plants of California, February 1994, Special Publication No. 1, Fifth Edition. These guidelines require rare plant surveys to be: Conducted at the proper time of year when rare or endangered species are both "evident" and identifiable. Field surveys shall be scheduled to coincide with known flowering periods (June-July), and/or during periods of phonological development that are necessary to identify the plant species of concern.			
MM 3.4.2	If any of the species are found on-site from the implementation of MM 3.4.1, and cannot be avoided, a transplanting program will be undertaken (if feasible) to move the plant to suitable alternative habitat location. If transplanting is determined to be infeasible, replacement credits may be purchased by the County at an approved mitigation bank.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to construction activities.	
MM 3.4.3	Special-status plant species that are identified adjacent to the project site, but not proposed to be disturbed by the project, shall be protected by barrier fencing to ensure that construction activities and material stockpiles do not impact any special-status plant species. These avoidance areas shall be identified on site improvement plans.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to construction activities.	
MM 3.4.4	If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the County shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or DFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or DFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through February 28th).	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to any site disturbance.	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 3.4.5	The County shall implement one of the following options to reduce impacts to native black oak trees: 1) The proposed layout of the park site shall be amended so that all 11 black oaks identified on the project site are retained. This would require relocation of the maintenance building and the soccer field. 2 If avoidance of the existing on-site black oaks is deemed infeasible, the County shall mitigate the removal of black oaks consistent with the requirements specified in Policy 7.4.5.2 (A) of the County General Plan. The replacement requirement shall be calculated based upon an inch for inch replacement of removed oaks. The total of replacement trees shall have a combined diameter of the tree(s) removed. Replacement trees may be planted onsite or in other areas to the satisfaction of the County Planning Department.	El Dorado County General Services Department, Division of Airports, Parks & Grounds and the El Dorado County Planning Department.	Prior to on-site tree removal.	
Geology and Soils				
MM 3.6.1	All stumps that are buried on the project site shall be located in an area where no improvements are proposed above the buried stump locations. Stumps shall not be buried on slopes greater than 20 percent and shall not be buried within 50 feet down-slope of any proposed structures. The County may also opt to grind the stumps and distribute the wood chips throughout the surface of the project site.	El Dorado County General Services Department, Division of Airports, Parks & Grounds	Throughout tree and stump removal activities.	
Hydrology and Water Quality				
MM 3.8.1	Drainage and water quality facilities shall be constructed concurrent with site development activities. The drainage and water quality facilities shall comply with the standards established in the El Dorado County Drainage Manual and shall meet County requirements to ensure no increase in existing run-off volumes.	El Dorado County Department of Environmental Management.	Prior to completion of site improvements.	
MM 3.8.1b	A stormwater conveyance system (over-chute) shall be constructed by the County concurrent with site preparation activities. The over-chute shall be designed in coordination with the drainage improvements for the entire site, and shall convey site runoff over the top of the EID canal, with ultimate discharge to the north of the canal. The County shall coordinate the design and construction of the over-chute with the owner of the property to the north of the Canal. The over-chute shall not be constructed within the banks of the EID canal. The exact location and alignment of the over-chute shall be	El Dorado County Department of Environmental Management and EID.	Prior to completion of site improvements.	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	developed in consultation with EID staff and shall avoid any riparian or other sensitive biological habitat adjacent to the canal, as determined by a qualified biologist. The over-chute shall be sized and designed to comply with the standards established in the El Dorado County Drainage Manual. The County shall enter into an agreement with EID to provide a plan for on-going maintenance and monitoring of the over-chute. The final design, location and operational plan for the over-chute shall be developed in consultation with EID, and EID shall have the authority to approve or reject final plans. The final designs and plans shall be developed by a qualified engineer.			
Noise				
MM 3.11.1	The following measures are required in order to reduce short-term construction-related noise impacts to nearby land uses to a less than significant level: • Construction equipment shall be properly maintained and equipped with noise control devices, such as mufflers and shrouds, in accordance with manufactures' specifications; • Stationary construction equipment (e.g., portable generators, compressors, etc.) shall be located at the furthest practical distance from nearby existing noise-sensitive land uses; • Noise-generating construction activities shall be limited to between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. Construction activities shall be prohibited on Sundays and federal/State-recognized holidays.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Throughout site grading and construction activities.	
MM 3.11.2	The following measures shall be incorporated into the final project improvement plans: • The fence proposed for construction along the eastern boundary of the project site, adjacent to residential land uses, shall be constructed of a solid material (e.g., wood, masonry block, etc.) with no visible air gaps at the base or between construction materials. If wood materials are used, material shall be overlapped or tightly fitted (e.g., tongue and groove) to ensure that visible air gaps do not occur due to material shrinkage resulting from changes in moisture content. The fence shall be constructed to a minimum height of 6 feet; • The amphitheater shall be relocated to a minimum distance of 285 feet	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to completion of construction activities.	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	from adjacent property lines and oriented so that the stage faces away from the nearest residential land uses. The rear of the stage shall be shielded either by construction of a solid physical barrier or earthen berm, sufficient to interrupt the line-of-sight between the stage area and the nearest residential dwellings located along the eastern boundary of the project site.			
Transportation				
MM 3.15.1	The County shall install "15 MPH" speed limit signs and "Caution Children at Play" signs adjacent to the park access roadway. These signs shall be designed and located consistent with the specifications identified in Article 3 of the El Dorado County Design and Improvement Standards Manual.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to completion of site improvement activities.	
MM 3.15.2	The onsite parking lot shall include a turnabout area within a minimum 50-foot radius to accommodate emergency vehicles.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	Prior to completion of site improvement activities.	
MM 3.15.3	The final site plans for the park site shall be submitted to the El Dorado County Fire Protection District for review and approval. If a secondary fire access road is required, the County shall amend the site plans to include a secondary access roadway acceptable to the El Dorado County Fire Protection District. The emergency access roadway shall avoid all of the oak trees identified in Figure 3.4.1. If the secondary roadway crosses over the EID canal on the northern edge of the project site, EID shall be consulted to ensure that roadway and bridge operation and construction does not impair EID operations or impact water quality within the canal. All bridge and roadway improvements must occur outside of the banks of the EID canal and must avoid impacts to jurisdictional waters of the U.S.	Prior to completion of site improvement activities.	El Dorado County General Services Department, Division of Airports, Parks & Grounds.	